



RESPONSIBLE INVESTMENT
2021

RESPONSIBILITY FOR INVESTMENTS

Keval's responsible investment highlights in 2021



66.8

bn EUR
investment assets at 31 Dec 2021



6.6%

return on investments over 10 years
(real return excluding capital weighting)

5.5%

return on investments since funding
began in 1988 (real return without capital
weighting)



Attendance at
9,164
general meetings

99%

attendance rate at general meetings

125,125

votes cast in general meetings



1,500

goal-oriented engagement projects in
equity and corporate bond investments

489

engagement projects relating
the environment (E) theme

281

engagement projects relating
the social (S) theme

754

engagement projects relating
the governance (G) theme



-51%

in CO₂ emissions derived from energy
use in our direct real estate investments
compared to 2018

Chief Investment Officer's message

The multigenerational pension liability is the foundation for responsible investments at Keva. The return on pension assets is important for safeguarding future pensions. As a long-term investor, we assess the risks and opportunities by integrating environmental, social and governance (ESG) criteria in our investment decisions.

Responsible investment at Keva has evolved over the past twenty years from inclusion in the investment strategy by the Board of Directors to an integrated element in investment decisions and the development of expertise across the investment teams. Responsible investment is demanding work, the success of which can only be assessed in the long term.

In addition to our own investment professionals, Keva's assets are managed by a global network of asset managers to whom just over 70% of our assets have been outsourced. Our network consists of more than a hundred asset managers, each with an expertise in their own various geographies and industries. We have been carefully building this network for years and it has proved to be a successful solution. The asset manager's in-depth understanding of the investment objects and their ability to operate profitably in the long term lies at the heart of our responsible investment. Active dialogue with the asset managers allows us to systematically ensure that Keva's long-term interests are carried out and

to continuously educate ourselves in the area of responsible investment.

For a decade now, we have been systematically surveying the views of asset managers in our portfolio on the development and implementation of ESG themes of our investments. The survey has expanded and deepened every year and helped us focus on relevant issues for our portfolio as well as understand the often highly complex phenomena underlying investment decisions.

Active ownership requires engagement

As a signatory to the UN Principles for Responsible Investment (PRI), Keva is committed to integrating ESG criteria in the investment process and exercising active ownership.

Our goal is to promote the sustainability of the investee companies by engaging actively with them in different ways.

Regular contact and discussions with the asset managers form a comprehensive and practical way to influence both the investee company and the asset manager. In fund investments engagement can also take place through advisory committees (LPAC).

The equity owner is in the best position to engage with a company. This is a way to take a stand on strategic decisions such as the election of board members.

Active ownership is carried out both directly by our asset managers and in collaboration with other



CIO Ari Huotari

investors. Voting at general meetings is one of the most important means of engagement. In 2021, voting coverage was nearly 100%, which means more than 125,000 individual votes in approximately 9,000 meetings globally.

In addition to voting, Keva has carried out goal-oriented engagements with investee companies. These engagements can occasionally take years to reach the desired outcome. In 2021 Keva had over 1500 ongoing engagements with investee companies. About one-third of these engagements concerned environmental themes such as carbon emissions and other environmental impacts during a product's entire life cycle as well as sustainability reporting

Keva has sought to collaborate engagement efforts with other investors in a number of projects, where investor groups seek to influence companies. The most relevant of these are CDP, which encourages increased reporting, Climate Action 100+, which drives emissions reductions, and IIGCC, which seeks to influence governments among other things.

Climate change constitutes a challenge for investors

In 2021, Keva formed our investment beliefs on climate change. In them we outline that Keva is a strong supporter of an orderly transition in line with

the Paris Agreement to limit global warming preferably to below 1.5 degrees Celsius, compared to pre-industrial levels. Signatory countries aim for a climate-neutral world, where greenhouse gas emissions and carbon sinks are in balance by mid-century to achieve this long-term temperature goal.

According to scientific data, the uncontrolled progress of climate change will endanger the growth of the global economy. Climate change may be a risk that an investor cannot mitigate with increased diversification or by disposing of individual investments.

The potential speed and scale of climate change may in many ways affect the operational environment of corporations and industries. Entire industries can be revalued due to e.g., emissions, and may highlight the divide between the winner and loser companies.

In 2021, we carried out a climate scenario analysis for our investment portfolio. Its most important contribution was an understanding of how climate science can be linked to investment through scenarios in a way that harmonises assumptions about climate change and its impacts and mitigation. In climate scenario modelling our intention is to seek to expand the strategic asset-class level scenario modelling with a climate dimension.

Keva seeks to be aware of the improving

methodologies for analysing climate change to make well-founded investment decisions considering climate change in the future. Keva is committed to continually developing the analysis of climate change, tools, indicators, and understanding of the opportunities and risks of climate change for our investments. In Keva's opinion, climate change will represent both investment opportunities and risks in the long term.

Our systematic work continues

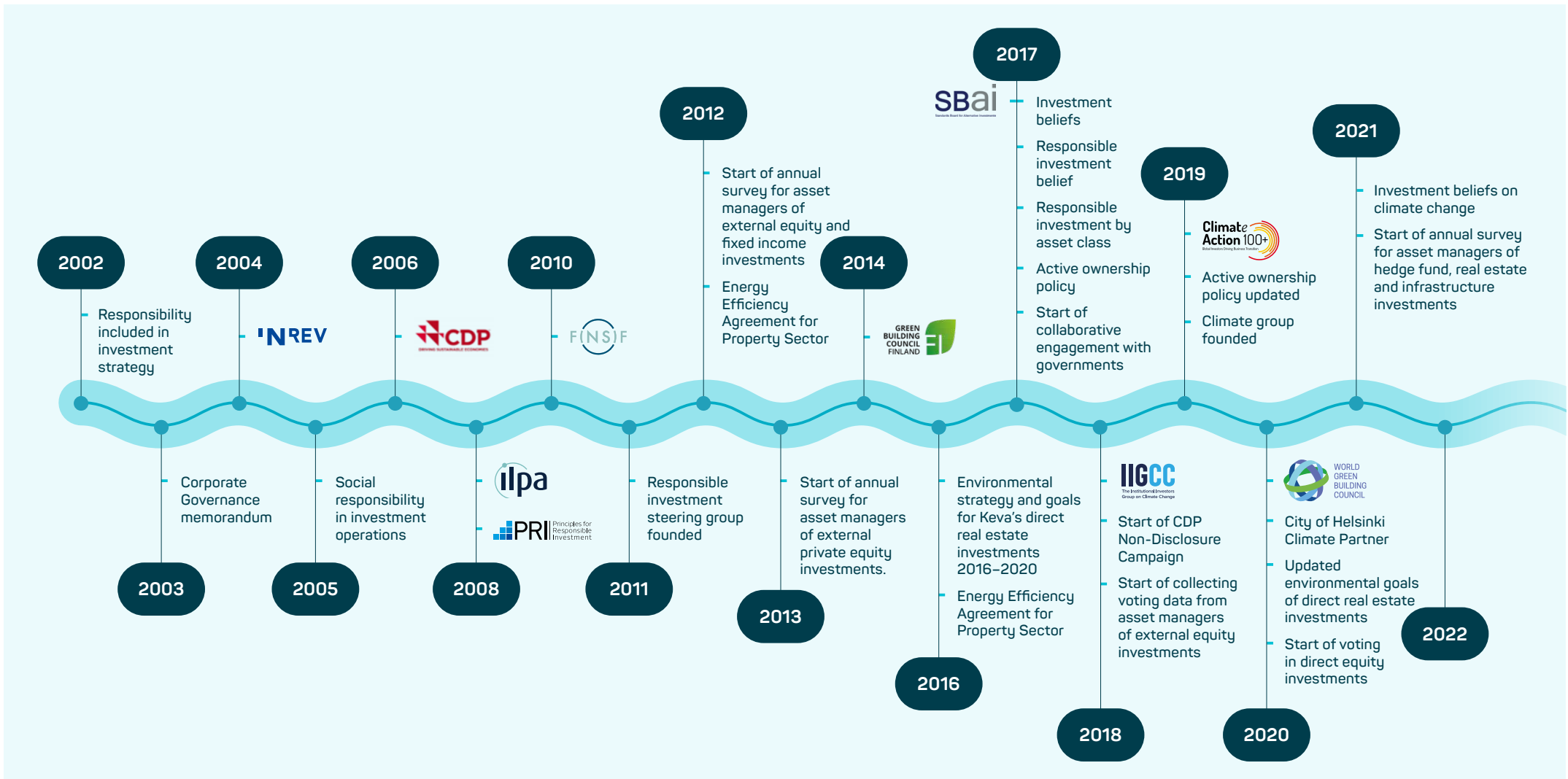
We are constantly aspiring to better understand the different aspects of responsible investments and how they are developing.

The annual survey for our asset managers has become a key source of information for Keva. Analysing the results and discussing them with our asset managers continues and enables a deeper understanding of different themes.

As we are developing our processes, emphasis is placed on enhancing reporting and the flow of information. Improving the quality of data used in investment decisions is a common challenge in the industry.

The regulation of responsible investment is constantly evolving and we monitor its global development with our asset managers.

Progress in responsible investment at Keva



Interview with Kirsi Keskitalo, Head of Responsible Investment: Identifying relevant information is a challenge within responsible investment

Investment decision-making requires screening a large amount of data and the ability to focus on information relevant to your objective. Within the constantly increasing field of ESG information the challenge is the same.

Kirsi Keskitalo, Head of Responsible Investment at Keva, says that the challenge is applying the large amount of the latest international data from different sectors to the investment process. This requires our investment professionals to continuously develop and educate themselves in the field of ESG. For our investment professionals to be able to focus on relevant issues requires an effective work- and information flow within the organisation.

The Responsible Investment Steering Group drives the practical development of responsible investing at Keva. The Steering Group is composed of a representative from each of Keva's investment teams and Kirsi Keskitalo acts the convener of the Group.

– We actively monitor the international development of responsible investment and provide relevant information for the use of our investment professionals. The group makes development proposals to investment teams and to the Chief Investment Officer, distributes information internally, and prepares and presents questions relating to responsible investing to the Chief

Investment Officer for decisions, Keskitalo says.

Kirsi Keskitalo heads the responsible investment research and coordination team at Keva. The team supports the investment teams in their projects related to ESG and brings to their attention the latest developments in the industry. The team is also responsible for the annual ESG survey of Keva's more than 100 asset managers in cooperation with the investment teams.

The team is also responsible for the exclusion process at Keva. Keva excludes investments in companies that manufacture so-called controversial weapons prohibited under international agreements from its listed equity and corporate bond investments, including assets managed by external asset managers. Excluded weapons include nuclear weapons, cluster bombs, land mines, and biological and chemical weapons.

– The aim is to ensure that excluded investee companies are neither purchased nor owned. The screening is done biannually and its implementation is systematically monitored. At year-end 2021, Keva excluded 51 equity investments and 69 corporate bond investments, Keskitalo says.

We also monitor the implementation of international norms in the companies we invest in. Keva obtains regularly reports on norm violations for the companies held in the portfolio. For direct investments, we have outlined a process where the primary aim is to engage with the company where norm violations are found.

The norms-based screening covers 50% of Keva's total investment portfolio. The coverage of norms-



Head of Responsible Investment Kirsi Keskitalo

based screening is 97% in listed equity investments and 54% in corporate bonds.

The assessment of climate impact is evolving

The means used to assess the effects of climate change on investment portfolios are constantly developing. Still, it proves a challenge to analyse the long-term impacts of climate change for a global investor like Keva, with thousands of investments.

– A forward-looking analysis of the economic effects of climate change relies on a multitude of assumptions spanning decades into the future. The assumptions entail, among others, how different scenarios for climate change and their effects channel through to socio-economic pathways, how corporations change during the period in question, as well as pricing of financial assets and emissions, to name a few, Keskitalo explains.

Some companies providing solutions to climate change may prove successful, whereas others may fail and be replaced. Some of today's perceived losers may become winners in the long term. The different outcomes and their interaction are not a foregone conclusion as the changes may simultaneously impact a corporation or industry positively and negatively.

- The effects of climate change will ultimately unfold to the investor as asset value changes, Keskitalo says.

According to Keskitalo, investors carry a great deal of responsibility in assessing the credibility of the methods used, whether it concerns data comprehensiveness, calculation methodologies, or various analysis provided by service providers. The phenomenon can appear very different depending on the method used. As time passes, the outcome may change, although the same method is used. Relying solely on one approach can prove precarious, favouring several calculation methods.

Learning from climate scenario analysis

Scenario analysis on the climate is used to illustrate different future outcomes for climate risk and to better understand climate risk in the portfolio over long time periods. The scenarios provide projections of so-called socio-economic pathways in different warming scenarios over the following decades, even a hundred years.

- Climate scenarios require making assumptions on factors that are often subject to considerable

uncertainty, such as climate models, expected technological progress and potential regulatory changes as well as consumer reactions. The scenarios result in a number of potential development paths which are used to assess the impact at the individual company level. Climate scenarios are, however, not predictions of the future and do not assign probabilities on the development paths, Keskitalo reminds us.

Interpreting the scenario analysis is challenging due to the large number of assumptions, as well as the issues related to data coverage and quality, and modelling. Different scenario models have been found to generate even conflicting end results.

- Last year, we commissioned climate scenario modelling of our investments. Our aim was to obtain information about the impacts of climate change as well as an understanding of how climate analysis can be done today. The analysis included both the physical risks of climate change – rising sea levels and extreme weather – as well as the risks relating to the transition to a low-carbon society.

- However, we faced challenges related to the usefulness of the information, Kirsi Keskitalo adds.

Keva formed an internal climate group in 2019 with representatives from portfolio management, the strategy team, and the responsible investment team to keep ourselves aware of new research.

- The climate group's primary purpose is to increase knowledge on investment-related research on climate change and share best practices. In 2019,

we initiated a project to produce a climate scenario analysis of our investment portfolio. We had extensive carbon intensity data and tools, but they were not a good fit for the forward-looking scenario modelling and were thus inadequate in content to be used.

In 2022, the climate group will focus on strengthening expertise in the technologies needed to mitigate climate change. These include new technologies needed for the energy transition.

We rely also on our asset managers expertise and networks when learning about climate issues. In addition to the regular discussions and deeper understanding brought by our annual survey, we regularly attend for example, the company meetings and seminars with our asset managers. In 2021, Keva's investment professionals representing different teams participated in a training on climate change organised by one of our asset managers in cooperation with Columbia University.

Keskitalo highlights the importance of an investment professional's review of their own approach as one of the main challenges in responsible investments at the moment. It is particularly important in responsible investment to have a long term horizon.

- Corporations have, through time, been founded and evolved to provide solutions for the individual's and society's challenges. This will continue in the future. It is imperative for an investor to look past the daily headlines and look for longer term solutions, Kirsi Keskitalo says.

Listed equities

Keva's listed equity investment programme offers a diversified exposure to the global stock market. At year-end 2021, the portfolio was valued at EUR 26.7 billion, comprising a total of 46 separate investment strategies and around 7,000 stocks. External asset managers manage a significant part of the portfolio.

Shareholders often have the best possibilities to influence a company's operations. The most important ways of implementing responsible investment are voting in annual general meetings, targeted discussions with corporate management and ESG analysis incorporated into the investment process.

Voting in general meetings

In 2021, Keva voted in more than 9,000 general meetings globally. This equates to a participation rate of 99%. Keva voted on more than 125,000 proposals of which 79% were in favour, 16% against and in 2% of the votes Keva abstained or did not vote on an individual proposal.

The annual ESG survey and goal-oriented engagements

Besides voting, we use discussions and other contact to engage with companies in which we invest. Our asset managers have an important role to play in this.

In 2021, our asset managers performed around 1,300 goal-oriented engagements targeting some 800 companies, according to our annual ESG survey. The key themes raised at the overall portfolio level

were carbon dioxide emissions (reporting, net-zero goals, and actions to reduce emissions), the independence and diversity of the company's Board of Directors and the development of sustainability reporting. Compared to earlier years, themes related to the environment in particular increased.

The results are based on Keva's annual ESG survey to our internal investment teams and external asset managers. The figures relate to the reported engagements.

CASE

Engagement is not solely about questioning poor decisions or pinpointing mistakes. One of the asset managers of our sustainability portfolio defines engagement as follows: "An exceptional company is not a perfect company however, and we view our role as crucial in helping to steer companies to make good decisions over the long term."

There are regional differences in engagement themes. Globally, and especially in the developing markets, carbon dioxide emissions emerged as the main topic of engagement. In Japan, it was the development of general sustainability reporting and in Europe and the United States governance issues.

CASE

One of our managers investing in Chinese equities suggested to a household tissue manufacturer that it could partly replace virgin pulp with recycled raw

material. This would reduce carbon dioxide emissions originating in production and reduce the use of forest resources. A member of the company's Board of Directors has experience of a similar process and reacted positively to the proposal.

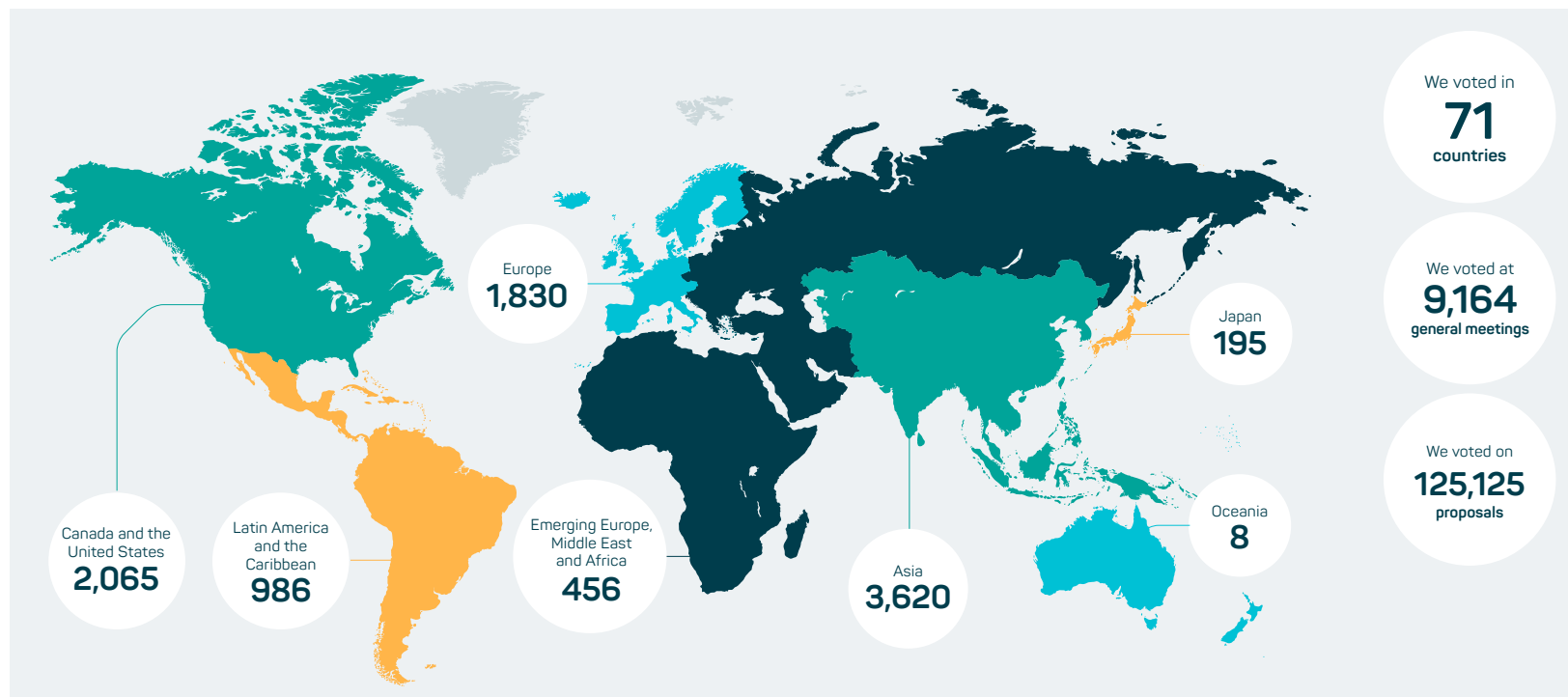
Since Chinese legislation does not currently allow wastepaper imports, the company is exploring the possibility to produce the raw material for tissue paper in overseas factories, so that only cutting and packaging would be done in China.

Around half of the engagement processes have lasted for less than a year and a third from one to three years. A small number of cases have, however, already continued for more than five years. Environmental issues and reporting on them as well as a company's long-term strategy are often topics of long engagement processes.

CASE

At times, engagement may last a very long time. One of our asset managers in developing countries first discussed the diversity of the Board and the number of independent Board members in a family-owned Philippine food company back in 2007. Over the years, the asset manager has had numerous discussions with the company, approached it in writing and voted against the re-election of Board members. Many years of work were finally rewarded when two independent female members were appointed to the Board.

General meetings by geographical location

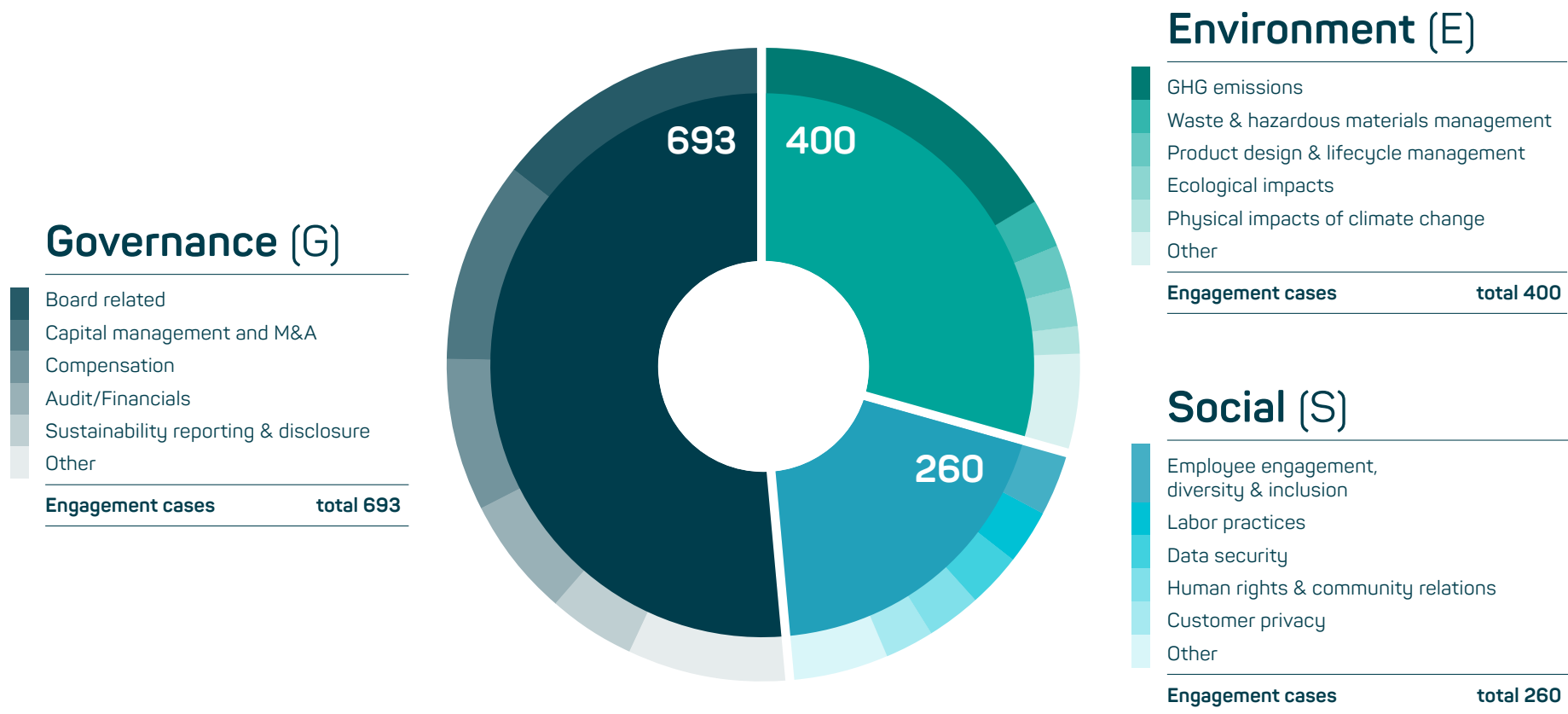


General meetings by region and distribution of votes given

Region	Number of general meetings	Number of general meetings attended	Attendance rate %	Number of proposals	For %	Against %	Not voted %	Other* %
Asia excl. Japan	3 637	3 620	100	36 312	81	18	1	0
Africa	89	88	99	2 582	84	16	0	0
Canada and United States	2 090	2 065	99	23 722	72	18	1	9
Europe	2 000	1 950	98	45 081	84	14	1	0
Japan	196	195	99	2 262	95	5	0	0
Latin America and the Caribbean	1 009	986	98	11 011	73	20	5	1
Middle East and North Africa	252	252	100	4 118	68	10	22	0
Oceania	8	8	100	37	86	11	0	3
All	9 281	9 164	99	125 125	79	16	2	3

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

Main themes of engagement in equity investments 2021



Climate change and carbon intensity

We are committed to developing our own climate analyses and tools and indicators to model the impacts of climate change.

Taking the impacts of climate change into account when making investment decisions and in portfolio risk management has become more widespread, based on our annual survey's results. Almost half of Keva's equity strategies already report in line with TCFD (Task Force on Climate-Related Financial Disclosures) recommendations, have set an emission goal for their portfolio or have carried out risk analysis relating to the physical impacts of climate change.

We currently use Weighted Average Carbon Intensity (WACI) as the carbon metric of the equity portfolio, which is also the metric recommended by TCFD. The metric seeks to describe the portfolio's exposure to carbon-intensive companies using information from the latest financial statements but does not consider any future development. It is conceivable that the figure roughly measures the risk posed to the portfolio at a particular time by emissions trading and other regulation.

During 2018-2021, the carbon intensity of all our listed equity investments decreased by 30% and was at year-end 2021 18% lower than the benchmark index. The trend during the monitoring period was significantly affected by the strategy change in our internal equity investments, which reduced investments in resource-intensive sectors in the portfolio.

The calculations have taken into account companies' own operations and the emissions of the energy bought, i.e. Scope 1 and 2 emissions.

When examining the development of carbon intensity of the portfolio over time, it is worth acknowledging that changes in country and sector weightings, share prices and the coverage of companies' emissions reporting give rise to variations between measurement times. Carbon intensity must be followed over the long term.

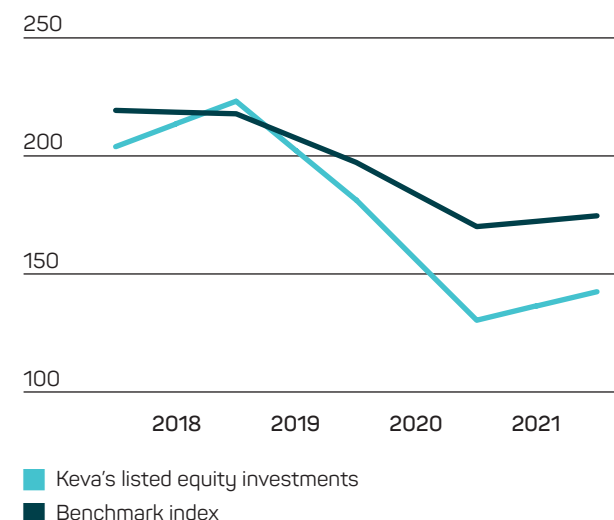
We monitor the development of accounting and reporting standards – such as TCFD and PCAF (Partnership for Carbon Accounting Financials) for measuring carbon footprints.

Internal equities

Responsible investment is integrated into the investment process, and we assess the responsibility of companies as part of industry-dependent evaluation criteria. Sources of information we use include research reports produced by an external ESG service provider and securities brokers, companies' own reports and publications.

¹ MSCI data is used to calculate the carbon footprint of listed equity investments. Of the data, 70% is reported by the companies themselves. Besides the direct emissions of investment entities, it is also important to take into account the indirect, Scope 3 emissions, from subcontractor chains and products, but so far there have been major challenges in reporting these. Keva follows the development of Scope 3 data.

Development of the portfolio-weighted carbon intensity in Keva's listed equity investments 2018–2021 compared to the benchmark index



tCO₂/revenue USDm, scope 1+2

During the monitoring period (2018-2021) the portfolio-weighted carbon intensity of all our listed equity investments decreased by 30% and at year-end 2021 was 18% 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:

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

We met all portfolio companies in 2021. We also attended several capital markets days of companies in the portfolio and listened to company management in conjunction with interim results and seminars.

We also often raise ESG issues in meetings and discussions with management. There has been a clear increase in companies' awareness of the importance of ESG issues to investors. These issues are already better taken into account in business operations and companies are able to report on them.

In 2020, we initiated voting at general meetings in line with our Active Ownership Policy. In 2021, we voted in 87% of general meetings. The figures are included in total figures reported earlier.

We apply norm-based screening to existing and new companies in the portfolio. We automatically receive information about all companies that have been found to be in breach of UN Global Compact norms. In 2021, no companies in the internal equity portfolio were found to have breached Global Compact norms.

Cooperation with asset managers

Cooperation with asset managers is based on a long-lasting partnership, trust and transparency. The strategies in Keva's external equity portfolio represent various investment styles and invest in different markets. However, all active strategies share a long investment horizon and focus on their proprietary company research and analysis. Our asset managers

are selected through a careful process. We consider it important that our asset managers share Keva's investment beliefs.

At year-end 2021, the external equity portfolio contained 43 active investment strategies and five passive index strategies. Some of the passive investment strategies track ESG indices in Europe and in the emerging markets.

We discuss with our asset managers on a regular basis, more than 60 times in 2021, and responsibility issues are almost invariably raised in these discussions. In 2021, the main responsibility themes in discussions were the EU's taxonomy, the Sustainable Finance Disclosure Regulation (SFDR) and carbon neutrality analysis. Over the years, we have come to know several of our asset managers extremely well and they also serve as a source of information and learning in the area of responsible investment.

In the external equity portfolio, we follow the implementation of international norms regularly.

Private equity investments

Private equity investments are investments in unlisted companies. 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 the foundation for value creation. The company can be developed by streamlining business, investment, recruiting

key personnel, acquisitions and by financial means. 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 where the investor commits for multiple years. Keva's private equity portfolio is diversified by investment strategy, industry, geography and vintage. At year-end 2021, the portfolio was valued at EUR 8.9 billion and contained 52 asset managers. 60% of the portfolio was allocated to 10 asset managers through several dozen investment strategies. In total, the portfolio has investments in more than 1,000 companies.

Limited partner advisory committees (LPAC) are the most important means of engagement for investors. The advisory committees are typically composed of the largest fund investors and meet between two and four times a year. An advisory committee not only engages with the investee company but also the asset manager and bring issues concerning responsible investment for discussion more generally.

In 2021, Keva held seats on advisory committees of 86 funds and almost invariably holds a seat on the advisory committee in the largest fund investments. During the year, we attended around 100 advisory committee meetings. At the meetings, asset managers presented ESG development projects and how they integrate ESG issues into the investment and value creation process. In addition, asset

managers reported on the ESG projects carried out or under way in portfolio companies as well as the outcomes of these projects.

Other forms of engagement include regular meetings with asset managers. In 2021, these meetings almost invariably discussed various ESG issues, such as employee wellbeing, diversity, and equality, as well as environmental issues and how these are taken into account in the asset manager's own business and investee companies. Keva had around 70 meetings with asset managers last year.

We carry out an ESG survey to our asset manager on a regular basis. The 2021 survey highlights that more than 80% of our asset managers are signatories of UN Principles for Responsible Investment (PRI). The use of sustainability and climate-related risk reporting frameworks e.g., SASB and TCFD has also increased and over half of our asset managers report in line with the recommendations by- SASB and TCFD.

Keva is a member of the Institutional Limited Partners Association (ILPA), which is the international umbrella organisation for limited partners (LP) and has by nature influence over LPs. ILPA strives to develop and promote processes, corporate governance, and transparency.

Corporate bonds

Direct corporate bond investments

Our direct 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 2021, the portfolio was valued at EUR 3.9 billion and held bonds from 130 companies in the portfolio.

ESG aspects are an integral part of our investment decisions, and we use industry-specific assessments for the evaluation. In general, our typical sources of information include analysis and data provided by the ESG service suppliers, securities brokerage firms and the companies themselves.

ESG aspects are invariably discussed in our meetings with the corporate management. We meet companies in conjunction with new bond issues as well as on a routine basis. During 2021, we met with around 50 companies. It is increasingly typical that the events and materials provided for investors include ESG aspects.

The fixed income market is experiencing growing importance and volume of so-called green bonds. These are instruments earmarked for climate-related or environmental projects. Green bonds have to demonstrate their credentials in order to be properly classified under certain protocols. Due to their growing significance in the market, they play

an important role in our portfolio as well. Similarly, so-called social bonds are increasing in awareness and volume. Social bonds are targeted to finance projects with positive societal outcomes.

Issuing green or social bonds alone doesn't make a company responsible corporate citizen. Issuers of these bonds are subject to the same stringent investment criteria we use for any other company. At year-end 2021, our investments in green and social bonds totalled EUR 900 million.

Norms-based UN Global Compact screening is applied both to companies held in our portfolio and to ones under consideration to be included. We receive information of the possible breaches in an automated form. During 2021, no breaches were evidenced.

Cooperation with asset managers

Cooperation with our asset managers is based on a long-lasting partnership, trust and transparency. Asset managers are selected into our portfolio through a profound process, and they are expected to share and act according to the same investment beliefs as Keva.

Corporate bonds in our externally managed portfolio are focused on the higher-risk, lower-rated spectrum – also known as high yield bonds. These are typically debt financing instruments with a specified use of proceeds. The buyer base is mostly professional investors. By assuming a lender's position, high yield bond investors exercise their

active investorship by influencing on the borrowing terms as well as by steering funding towards suitable purposes.

As the high yield market closely reflects the real-world phenomena, ESG is not an exception to this. In 2021, e.g., the issuance of high yield bonds categorized as sustainable financing by the rating agencies, was greater in volume than the total amount witnessed between 2014 and 2020. This trend was particularly pronounced in Europe.

At year-end 2021, our high yield corporate bond exposure was managed by 16 asset managers, through 18 different investment strategies. These assets totalled EUR 5.0 billion, and there were approximately 1000 individual companies in our portfolio, with a broad geographical and sectoral diversification. We follow the implementation of international norms regularly.

The annual ESG survey and goal-oriented engagements

During 2021, we carried out two ESG-related surveys with our external corporate bond managers. The first survey focused thematically on climate change in general and the second one specifically on the energy transition. Similar to previous years, we also monitored carefully the goal-oriented engagement work that our asset managers have undertaken.

As market structures and regulation vary by geography, this also impacts on how our asset

managers engage and the challenges and opportunities they see.

For example, the subset of our portfolio that focuses on high yield companies in the United States, has a significant weight in the energy and capital goods sectors. Hence, energy transition is a pronounced theme in this portfolio. In 2021, our asset managers developed e.g., their own frameworks to identify the potential leaders, adapters, and laggards in the energy transition, among their local and international peers.

The EU's sustainable development goals are also gaining a foothold. In 2021 we evidenced a move from principles into practice in our portfolio with e.g., reporting in line with TCFD recommendations, green transition target-setting and assessments of the physical risks related to climate change were more common among our European asset managers than in the US.

The growing importance and volume of green bond market has its pitfalls as well. The market is lacking standards as to what issuance has sufficient credentials for the green label. During the year, Keva's asset managers developed their own frameworks in order to ensure the consistency of the green bond analysis.

The use of different climate indicators varies in scope and metrics among our corporate bond managers. At the moment, carbon intensity continues to be the most frequently used metric.

Our external corporate bond managers had roughly 200 goal-oriented engagement cases with the portfolio companies during the year. Half of these cases were focused on environmental issues, especially in the energy and capital goods sectors. Among our US managers, these engagements were quite straightforwardly tackling carbon dioxide emissions. Among our European asset managers, the engagements had a more multidimensional nature, addressing e.g., air quality and energy efficiency.

It is also worth highlighting that our asset managers investing in the US market had several engagement cases requesting for higher-quality, transparent ESG-reporting from the investee companies. The United States is still lacking similar sustainability reporting directives as what Europe has in place.

Lastly, the third engagement theme worth noticing was the quality and composition of investee companies' Board of Directors. Many of the engagements in this topic came after debt restructurings.

Investments in emerging market sovereign bonds

Cooperation with asset managers

Cooperation with our asset managers is based on a long-lasting partnership, trust, and transparency. The Asset managers are selected into our portfolio through a profound process, and they are expected

to share and act according to the same investment beliefs as Keva.

Emerging market sovereign bonds are debt financing instruments issued by low and middle rank GDP economies. The buyer base is mostly professional investors. Sovereign debt financing is typically targeted to fund wide-range economic, political, and social reforms.

Our EM sovereign bond portfolio focuses geographically on Latin America, Asia, Eastern Europe, Africa, and the Middle East. The total number of individual countries in this portfolio is around 60. By number, there are more countries in the less developed end, however, money wise, there is greater weight in the more developed spectrum. At year-end 2021, our EM sovereign bond exposure was managed by 3 asset managers, through 3 different investment strategies. The portfolio was valued at EUR 2.0 billion.

Our emerging market sovereign bond managers monitor their portfolios in accordance with the international norms on a regular basis.

The annual ESG survey and goal-oriented engagements

In 2021, our emerging markets sovereign bond managers took part in our thematic climate change survey. Similar to other asset classes, their goal-oriented engagement work was carefully monitored throughout the year.

There were around 200 engagement cases in

our emerging market sovereign bond portfolio during the year. The high number of cases – compared to the number of countries in the portfolio – is due to multidimensional engagements in this asset class. Our asset managers are not only engaging directly with the sovereigns but also with supranational agencies, development banks, central banks and the countries’ ministries. Unsurprisingly, climate change was a common denominator in many engagement cases, as was more transparent reporting.

Emerging market countries are indeed on the frontline of climate change challenges and play a pivotal role in the efforts to find solutions to it. This is a role they share with several other market participants as shown in the table.

All our emerging market sovereign bond asset managers have carried out – or are in the process of carrying out – assessment of the physical risks related to climate change. With respect to the portfolio’s climate indicators, the most used ones at the moment are absolute emissions and carbon intensity.

Real estate and infrastructure investments

Direct real estate investments

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

At year-end 2021, the market value of real estate

Examples of the roles of different actors in engagement in climate change on emerging markets

Market participant	Way of engagement in climate change
Supranational agencies	Regulation
Governments	Direct impact: regulation, taxation, subventions, loan guarantees Indirect impact: via state-owned energy and infrastructure companies
Multinational development banks	Loan guarantees
Central banks	Targeted asset purchase programs
Companies	Innovations, investments and risk-taking

portfolio was around EUR 2.9 billion. Keva’s direct real estate investments consists of around 130 properties with a net lettable surface area of around 970,000m² at year-end 2021. The properties are concentrated in the capital Helsinki region and in other growth centres in Finland. The portfolio consists of, in terms of value, offices (33%), residential (27%), retail (24%), hotels (10%) and other (6%).

Minimising the climate impacts caused by energy use in the properties is a key element in environmental responsibility. Keva’s ambition is to halve the carbon dioxide emissions arising from energy use in these properties by 2025 and to reach carbon neutrality by 2030. Our target to reach carbon neutrality is in accordance with the content of the Green Building Council’s (GBC) Net Zero Carbon Buildings Commitment, which we signed in 2020.

Our action programme for carbon neutrality in energy use has three main objectives:

- to improve the energy efficiency in 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
- to secure that the remaining energy is purchased from low-carbon energy sources.

Improving energy efficiency calls for long-term, systematic work. In its direct real estate investments, Keva uses Motiva’s ETJ+ energy management

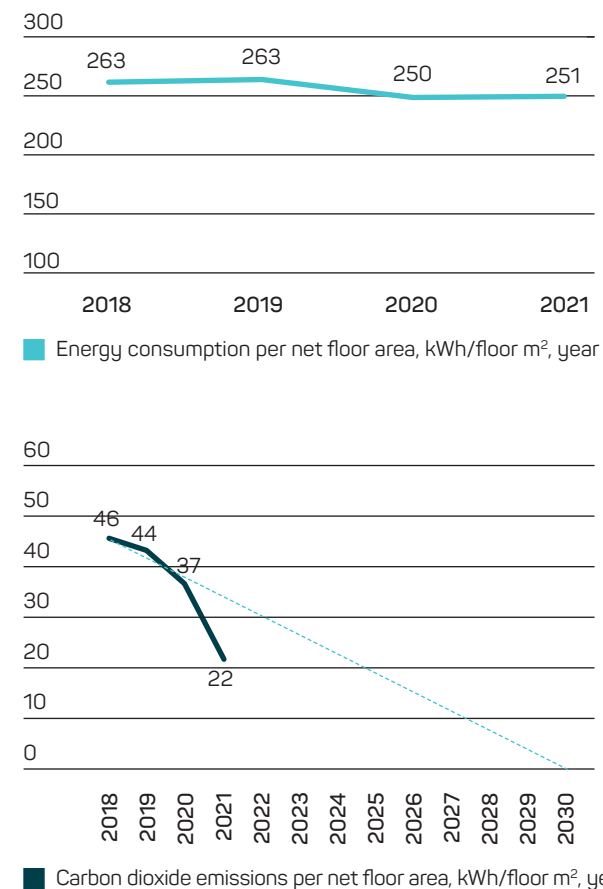
system which is specifically designed for Finnish conditions.

In 2021, Keva carried out more than 80 individual efficiency actions in energy use or in actions to produce renewable energy on-site. These delivered more than 1.5% of energy savings imputed and verified by measurement. Slightly more than half the energy savings in 2021 were achieved through traditional HVAC system control measures and by smart heating control of the housing stock. By year-end 2021, more than half of our rental housing stock had already smart heating control and renewable heat supply projects. Just under half of the savings in 2021 were achieved by investments in heat pumps and solar panel investments. A total of 13 such projects were completed.

Active measures have improved the energy efficiency of properties by more than 7,200 MWh/year or roughly 4% between 2019 and 2021. Own property-specific energy production reached 1% share of final consumption.

Similar to the year before, 2021 was an exceptional year. The widespread recommendations to work from home continued to impact the occupancy rates of commercial premises, particularly in office properties. The continued crisis period was naturally reflected also in the consumption of energy and water, and especially in the need of electrical energy in offices compared to the years preceding the pandemic. All this means that the calendar years

Trend in energy use and CO₂ emissions in internal real estate investments 2018–2020. The indicators have been presented as numerical characteristics relative to the net floor area of the investment properties



2020 and 2021 are comparable in terms of facilities use and energy consumption.

All in all, weather-adjusted energy consumption decreased in Keva's real estate stock by 0.6% compared to a year earlier. As the active energy savings measures led to more than 1.5% energy savings, the consumption resulting from the changes in the occupancy rates of premises has risen slightly compared to the previous year.

Water consumption was only slightly, less than 3%, down in comparable properties. The changes in energy and water consumption measured in 2021 thus reflect very broadly the active efficiency measures in energy use specified above.

Monitoring carbon dioxide emissions in real estate investments is based – not on weather-adjusted – but on measured energy consumption in line with international reporting guidance. Comparable carbon dioxide emissions attributable to energy use in investment properties decreased by more than 40% compared to a year earlier. Carbon dioxide emissions have decreased by more than 51% since the start of our investment programme (year 2018 as the reference year). This means we reached the interim carbon dioxide emissions goal for 2025 already during 2021, well ahead of time. Major cuts in carbon dioxide emissions are the result of the energy savings and property-specific energy production measures as well as in particular the procurement of renewable electricity.

CASE

We signed a 10-year power purchase agreement on renewable Finnish energy, to be provided from a wind farm due to be completed in Northern Ostrobothnia in 2022. This agreement is our largest single action to deliver real emissions reductions. Wind power will cover 70% of the electricity need of Keva's real estate investments.

Carbon dioxide emissions have already fallen significantly compared to the 2018 reference year as we started to buy electricity from 100% renewable sources already before the start of the wind power agreement. These actions led to the major reduction in emissions in energy use compared to the start of our environmental programme in 2018.

Within direct real estate investments, Keva has committed to the Property and Building Sector's Energy Efficiency Agreement coordinated by the Ministry of Economic Affairs and Employment and by the Energy Authority for the years 2017–2025. Additionally, we have committed to the climate commitment of Climate Partners, a collaboration network between the City of Helsinki and businesses, as well as to the World Green Building Council Network's Net Zero Carbon Buildings commitment.

Investments in real estate investment fund

The real estate investment funds in Keva's portfolio are diversified geographically, chronologically, by

investment style and 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 2021, the portfolio was valued at around 1.2 billion and the portfolio consists of investments in approx. 500 individual properties.

The real estate investment funds in Keva's portfolio almost invariably own the entire property, which means asset managers are able to engage directly with the properties. On the responsibility side, Keva's asset managers focus particularly on energy and water consumption of the properties as well as on safety, the environmental classification (such as BREEAM and LEED) of the buildings and construction projects, Global Real Estate Sustainability Benchmark (GRESB) reporting at the fund level and carbon footprint. ESG analysis has been integrated in the investment analysis.

Keva's investments are primarily made 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 largest fund investors and meet between two and four times a year. The advisory committee not only influences the property investment but also the asset manager and is able to bring ESG related issues for discussion more generally.

Last year, Keva had a seat on the advisory committee of 37 funds and attended around 70

committee meetings. Other forms of engagement include regular meetings with asset managers. In 2021, these meetings almost invariably discussed various ESG issues. Keva had around 50 meetings with asset managers last year.

We carry out an ESG survey to our asset manager on a regular basis. The 2021 survey highlights that more than 90% of our asset managers are signatories of UN Principles for Responsible Investment (PRI).

Around 70% of Keva's real estate investment funds take part in GRESB, (Global Real Estate Sustainability Benchmark, the ESG Benchmark for Real Assets). The GRESB reporting can help with comparing ESG perspectives internationally and screening for potential investment objects. GRESB covers a property's energy management, environmental and responsibility management perspectives. Several different systems, such as the Finnish RTS environmental classification and international BREEAM and LEED are in use in the environmental classifications of buildings and construction projects. Environmental classifications provide consistent methods for investors, the authorities, and occupiers of premises to compare the energy performance of properties using common criteria set by a third party.

Keva is a member of INREV (the European Investors in Non-Listed Real Estate). INREV serves as a joint forum for fund investors and seeks to diversely develop industry practices and standards, including with regard to responsible investment.

Infrastructure investments

Infrastructure traditionally refers to structures and facilities of importance to the functioning of society and include energy production and distribution, transport infrastructure, and social and digital infrastructure. Infrastructure will play a key role in the transition toward a more carbon-neutral society.

The majority of our infrastructure investments are in infrastructure funds, but we have also made direct investments in unlisted infrastructure projects. ESG issues are integrated into the investment analysis. The portfolio is in a build-up phase. The portfolio will in the coming years be diversified geographically, by vintage, style and infrastructure sector.

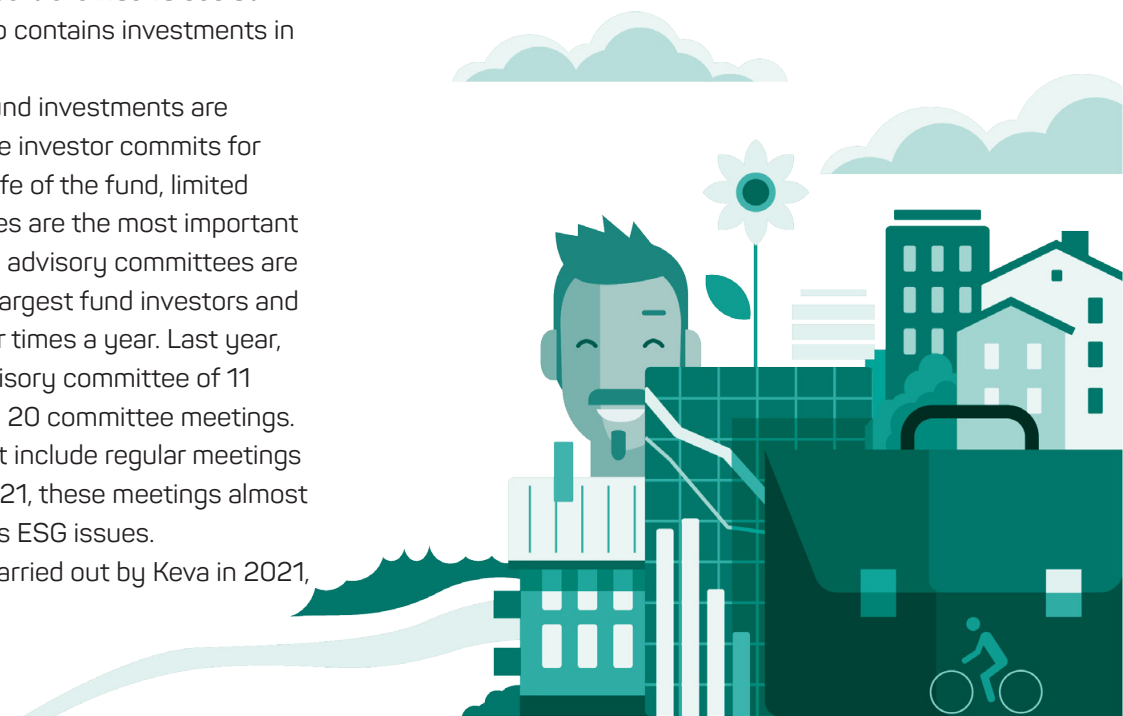
At year-end 2021, the portfolio was valued at EUR 1.3 billion. The portfolio contains investments in around 80 companies.

Keva's infrastructure fund investments are 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 largest fund investors and meet between two and four times a year. Last year, Keva had a seat on the advisory committee of 11 funds and attended around 20 committee meetings. Other forms of engagement include regular meetings with asset managers. In 2021, these meetings almost invariably discussed various ESG issues.

From the ESG survey carried out by Keva in 2021,

most asset managers of infrastructure funds were, for example, signatories to the UN Principles for Responsible Investment (PRI).

The Global Real Estate Sustainability Benchmarking (GRESB) has become somewhat of a standard for infrastructure funds to apply for. GRESB reporting can help to compare the ESG perspectives internationally and to find potential investment objects. GRESB covers a property's energy management, environmental and responsibility management perspectives. A third of Keva's asset managers use GRESB classification.



CASE

In 2021, Keva and an international investor consortium acquired a 50% holding in the Swedish district heating and cooling company Stockholm Exergi AB. The City of Stockholm owns the remaining 50% of the company. The company is the largest district heating company in the Nordics, with more than 10,000 real estate and limited liability housing company customers and around 800,000 end-users in the Stockholm Region.

Stockholm Exergi has successfully integrated responsibility and sustainability in their operations with the development of carbon capture and storage. The company has an important role in the City of Stockholm's ambition to be carbon neutral by 2040. Stockholm Exergi has a goal of becoming climate positive by 2025. The company has in the last few years significantly reduced its carbon footprint, which is down by 72% between 2010 and 2020.

Stockholm Exergi's energy production is based almost exclusively on renewable and recycled energy such as waste combustion. As a responsible investor, Keva considers the sustainability perspective in its investments and strives to increase the use of renewable energy sources and reduce carbon dioxide emissions.

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 the 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 geographically and by style. In 2021, the portfolio consisted of 30 fund investments managed by 15 asset managers. At year-end 2021, the portfolio was valued at EUR 4.3 billion. For our hedge fund investments we use an independent service providers classification. The classification integrates also ESG issues.

In 2021, we carried out an ESG survey for our hedge fund investments. The survey shows among other things that commitment to the UN principles for responsible investment (PRI) has become more widespread and more than 70% of our asset managers are signatories of PRI.

We strive to promote responsibility in hedge funds. Engagement includes regular meetings with asset managers as well as advisory committee seats. Last year, Keva had a seat on the advisory committee of 21 funds and attended around 30 committee meetings. These meetings almost invariably discussed various ESG issues.

Keva is a member of the Standards Board for Alternative Investments (SBAI), which focuses among other things on promoting good governance, transparency, and processes. SBAI also provides a good

channel for discussions with other investors. Asset managers of Keva's hedge funds are typically SBAI members and act in accordance with SBAI rules and recommendations.

Collaborative engagement

Memberships in various investor networks provide Keva with information about responsible investment. In addition, engagement with companies and governments in collaboration with other investors is more effective. The objectives have e.g., been to increase transparency, mitigate climate change and promote a longer-term focus among investors and companies.

CDP

CDP is a global non-profit organisation that focuses on reporting environmental data and increasing company disclosure about the impacts of their business on climate change, clean water and use of forest resources on behalf of investors. The CDP reporting platform offers investors comparable environmental data disclosed by the companies themselves. Reporting on environmental impacts promotes both the companies' own understanding of the risks and opportunities of their businesses and above all investors' understanding of the companies. In 2021, more than 13,000 companies, representing around 65% of the world's stock market, reported their environment impacts to CDP.

Keva has been a signatory of CDP since 2006 (the

climate initiative since 2006, the water initiative since 2011 and the forest initiative since 2014) and draws on CDP's information when assessing the responsibility of investee companies. In 2021, 62% of the companies in Keva's equity portfolio and 32% in the corporate bond portfolio reported on their environmental impacts to CDP.

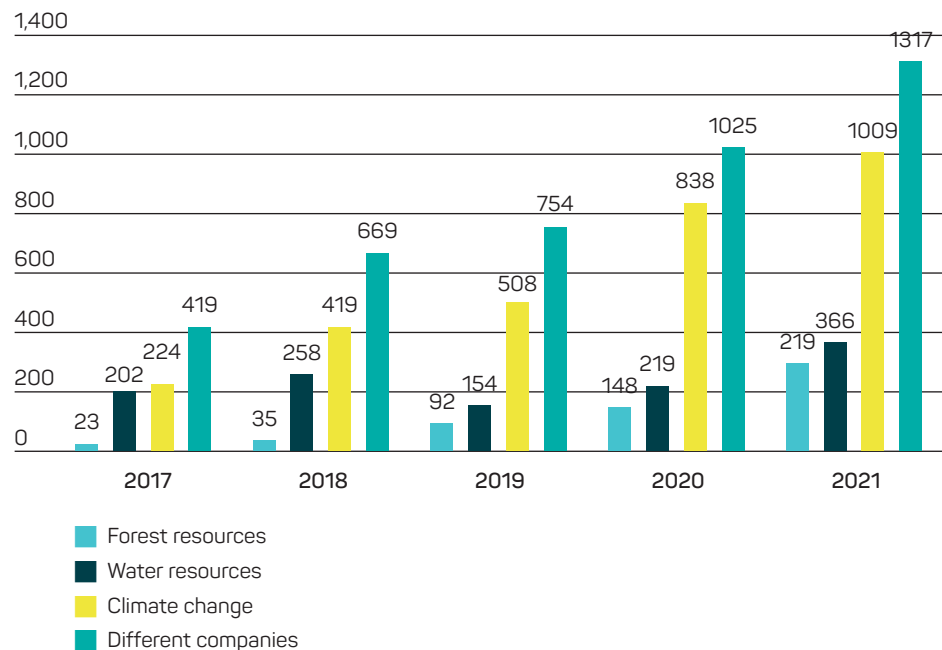
CDP Non-Disclosure Campaign 2021

In 2021, Keva took part in [the CDP's Non-Disclosure project](#) similar to previous years.

As a signatory to CDP's Non-Disclosure Campaign, Keva along with other co-signatories calls for improved disclosure from companies on climate, forestry, and water resources. A total of 168 investors representing investment assets totaling USD 17 trillion were involved in the project in 2021. A total of 1,317 companies emitting a total of almost 5 billion tCO2e were requested to report.

In 2021, Keva was involved in a total of 270 requests for disclosure (125 climate, 17 forest and 128 water), which targeted 238 different companies. Keva has targeted its requests for disclosure to companies whose environmental impacts were assessed as being material to the business. The requests included both companies Keva is invested with as well as companies not found in Keva's portfolio. The engagement efforts were proven effective, with the start of reporting in 65 cases in 60 different companies (33 climate, 2 forest and 30 water).

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



Highlights in the 2021 campaign:

- 56% more investors and 28% more targeted companies involved than in 2020.
- Of the 1,317 companies receiving a request, 328 began to report to CDP (249 climate change, 44 forest and 65 water).
- Companies are 2.3 times more likely to report to CDP than without a request from investors to import, more than 3 times more likely in respect of forests.

Climate Action 100+

Keva continued as a signatory to the Climate Action 100+ -project. In 2021, the project included 615 investors, responsible for over USD 53 trillion in assets under management. The project targeted over 167 companies globally, with an important role in achieving the goal set by the Paris Agreement as they represent 80% of global industrial emissions. At year-end 2021, the project had come to a promising start with 52% of the targeted companies setting a net zero-emission target for 2050.

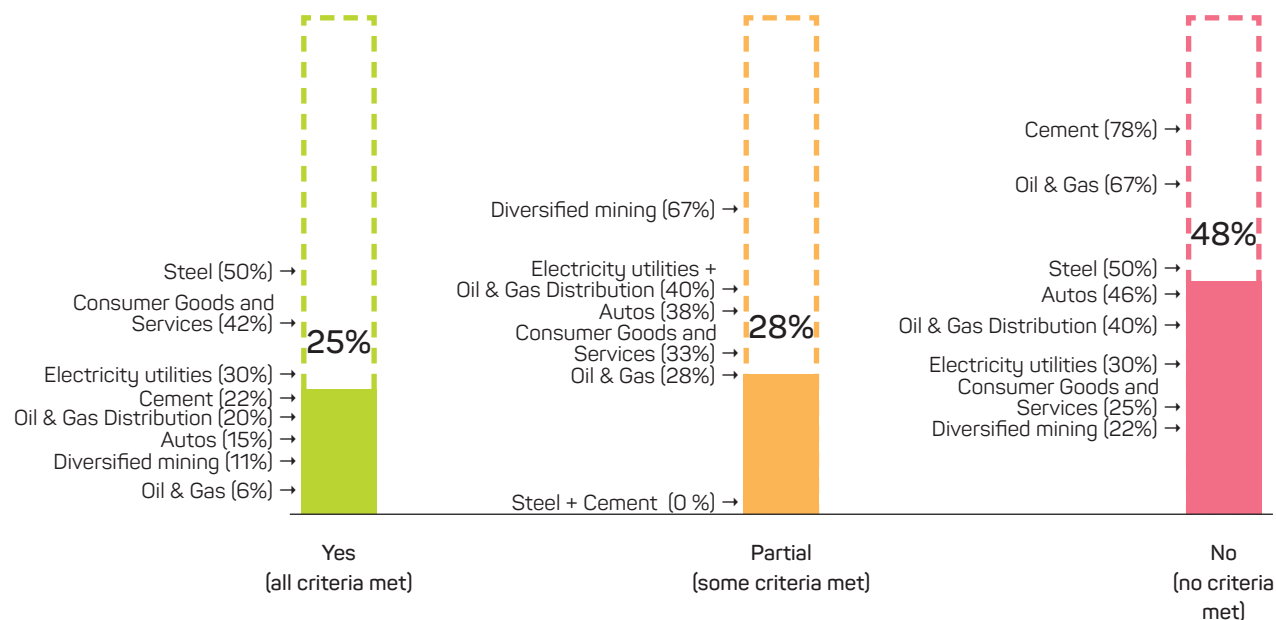
Engagement with governments

Keva continued engagement efforts with governments with the 'Global Investor Statement to Governments on the Climate Crisis'. Investor expectations for government actions have tightened over the years as the urgency of climate actions has increased.

In 2021, more than 700 investors responsible for USD 52 trillion assets under management were involved in the project. The plea is considered to be the strongest unified call to date to mitigate climate change (IIGCC). The call was directed to all governments and was announced at the G7 summit in Great Britain and was addressed to the UN Climate Change Conference (COP 26) in Glasgow.

As a result of investor demands during the Climate Change Conference in Glasgow, governments pledged to update nation-specific goals the following year and to supplement the Paris Agreement rulebook

Climate Action 100+ initiative companies' carbon neutrality commitments (covering all material GHG emissions)



Review of the zero emissions commitments of target companies in the Climate Action 100+ initiative:

- 52% of the companies had set a zero-emission commitment (covers at least Scope 1 and 2 emissions)
- 25% of the companies had set a commitment covering all material emissions (Scope 1+2+3)

How to read the diagram: E.g. 30% of electricity utilities have set a carbon neutrality commitment covering all material GHG emissions (green column), 40% of electricity utilities have set a carbon neutrality commitment covering partial material GHG emissions (orange column) and 30% of electricity utilities have not set a carbon neutrality commitment (red column).



Source: The Climate Action 100+ Net-Zero Company Benchmark

with rules on international emission market mechanisms. The outcome included the first reference to date regarding fossil fuels with a call for “a gradual phase-down” in the use of fossil fuels recorded by the UN Climate Change Conference.

IIGCC

IIGCC is Europe’s largest consortium of investors against climate change and aims, among other things, to develop long-term risk management, operating policies and investment practices related to mitigating climate change. IIGCC’s 370 investor community is responsible for more than EUR 50 trillion in assets under management. As a member of IIGCC, Keva seeks to engage with companies and regulators to reach climate goals.

Engagement with the industry and memberships

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

- founder member. In 2020–21, Keva’s representative served as chair of Finsif’s nomination committee. In 2021, Keva was involved with providing content for Finsif’s updated Responsible Investment Guide.

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

Participation in research projects

In 2021, Keva participated in the following research projects regarding responsible investment:

- Temmes, Heiskanen, Matschoss & Lovio: Mobilising mainstream finance for a future clean energy transition: The case of Finland. Journal of Cleaner Production.
- Väänänen: Two different paths to sustainability? A comparison of a Finnish and a Swedish public pension reserve fund. European Journal of Social Security.



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