

# 4D

**2023**  
Annual Report



FJÄRDE AP-FONDEN

# Contents

The Fourth Swedish National Pension Fund's (AP4's) report for 2023 includes, apart from the annual report, also a business review with sustainability reporting and a fund governance report. AP4's sustainability reporting is based on the AP Funds' joint guidelines for reporting how the goal of exemplary management has been achieved. AP4 strives to follow the guidelines for sustainability reporting set out in the Swedish Annual Accounts Act. Figures in parentheses pertain to the preceding year.

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# The Year 2023

**499.6**

SEK billion in fund capital.

**43.9**

SEK billion in net result.

**4.8**

SEK billion, net, transferred from AP4 to the pension system.

**7.6**

SEK billion in new thematic sustainability investments. Since 2020, SEK 36.8 billion has been invested on the basis of sustainability themes.

**9.6%**

return after costs. Over a ten-year measurement horizon, the return has averaged 8.5% per year.

**-3.4%**

active return. Over a five-year measurement horizon, the active return has averaged 0.3% per year.

**0.08%**

in total costs. Operating expenses amounted to 0.06% and commission expenses amounted to 0.02%.

**11%**

lower carbon footprint in 2023. Since 2010 the portfolio's carbon footprint has decreased by 65%.

**56**

nomination committees AP4 has worked in at listed Swedish companies.

**1,347**

annual general meetings of Swedish and foreign listed companies at which AP4 has voted.

## IN THIS SECTION:

- KEY FIGURES
- LETTER FROM THE CEO
- PORTFOLIO DEVELOPMENT
- MARKET COMMENTARY
- PORTFOLIO RETURN



Since its start in 1974, AP4 has delivered an average annual return of 13 per cent over 50 years, which is something that gives us great pride.

Niklas Ekvall, CEO

## Good return in uncertain times

AP4 reports a good return for the full year 2023 of 9.6 per cent after costs. With a net result of SEK 43.9 billion, the fund capital increased to SEK 499.6 billion at year-end. Taking into account net payments from AP4 to the pension system over the past two years of SEK 9.5 billion, this means that AP4 has now largely recovered the fall in value from the very weak year of 2022.

### A varied year and ongoing global turmoil

Following a very weak performance in 2022, the year began with a certain amount of optimism in the financial markets. Combined with an even stronger finish to the year, this meant that, overall, 2023 was a year of good returns in many financial assets. In the meantime, however, the unpredictable global situation led to major fluctuations in the global equity markets, and perhaps to an even greater extent on the fixed income and currency markets.

Although the year has generally seen a fall in the high rate of inflation, central banks are still facing a difficult balancing act between trying to avoid recession on the one hand and the need to contain and moreover stabilise

inflation on the other. We are also seeing growing geopolitical tensions and conflicts of interest, and when it comes to conflicts resulting in great human suffering, we must now sadly add the attack by Hamas on Israel and the subsequent military intervention in Gaza to Russia's invasion of Ukraine. This reflects a world that appears to be increasingly polarised, putting even greater focus on the many important elections taking place over the next few years, prominent among which are the upcoming US presidential elections.

Taking the above uncertainty and everything that is happening in the world around us into account in our everyday work as a pension fund manager, our conclusion is that 2024 is highly likely to be another intense year.

### The importance of a robust portfolio

One important lesson learned from the uncertain economic situation and the major fluctuations in the financial markets in recent years is the importance of taking a long-term view with the aim of building up a robust and diversified portfolio. The key to establishing a well-diversified portfolio is not the number of assets in the portfolio, but realising that diversification is achieved by the assets in the portfolio each having fundamentally different characteristics. On the one hand, this means that a good level of diversification can be achieved with relatively few assets. On the other, it also means that a portfolio with a large number of assets, which at first glance looks highly diversified, may contain

significant concentration risks. This is something I believe many investors have also realised, at their own great expense, during the turbulence of recent years.

As a basis for our strategic allocation, AP4 uses long-term economic scenario analysis, and we have been working for several years to gradually adapt and improve the portfolio based on this approach. Our aim is to maintain the portfolio's return potential as much as possible while also offering better characteristics, even in the more negative scenarios that we have identified in our economic analysis.

This year's significant movements in the financial markets have provided several good opportunities to make more tactical reallocations in the investment portfolio, as the pricing of financial assets has sometimes deviated considerably from the levels that we believe are justified in the longer term. The good return delivered by our portfolio is of course a result of the favourable financial markets and the ongoing management work during the year, but the good outcome is also due, to a significant extent, to the work we have done over many years to continuously improve the portfolio's return and risk characteristics.

### A successful half-century

AP4 was founded in 1974 and can now look back on a successful half-century in the service of Swedish pensioners. Until the 2001 pension reform, AP4 was in principle dedicated to asset management in Swedish equities and at times was the single largest institutional investor on the Stockholm Stock Exchange.



**I can say without any doubt that for many years AP4 has been an international role model when it comes to integrating sustainability into the investment process.**

Since 2001, AP4 has established a successful global management business in virtually all asset classes. Our strong and extensive history of managing Swedish equities remains very much alive in our culture, however, we contributed to a strong focus on corporate governance and on being a driving force to establish good rules, ethics and conduct in the Swedish stock market.

Since its start in 1974, AP4 has delivered an average annual

return of 13 per cent, which is something that gives us great pride. We are also proud of our sustainability work and how it has been developed over time. I can say without any doubt that for many years AP4 has been an international role model when it comes to integrating sustainability into the investment process. A more detailed description of AP4's first 50 years and the milestones reached along the way can be found in the Annual Report 2023 which will be available at our website in the beginning of March.

### COP28 – just a lot of talk?

There was plenty of scepticism ahead of the UN's COP28 climate summit hosted by oil-producing nation Dubai. The reasons for this included the overall failure of COP27 and the appointment of the CEO of UAE oil company Adnoc as president of the summit. For a long time, COP28 also looked like being a major disappointment. However, a last-minute agreement was reached to include the words "transitioning away from fossil fuels" in the 11,000-page final document. This generated optimism as it was the first time after thirty years of negotiations at climate summits that it had been possible to agree to explicitly state the need to transition away from

fossil fuels in order to enable a successful climate transition.

Despite this success, however, COP28 still left a lot to be desired in terms of specific actions. One positive aspect was the strong and growing commitment to the climate transition from the business and financial sectors. Another positive aspect is the increased understanding among politicians and industry alike of the need for rapid change to the current energy system. Over the coming decades, access to fossil-free electricity needs to be expanded severalfold in order to meet the ambitious but necessary climate targets of the Paris Agreement, while at the same time maintaining a satisfactory standard of living to make the transition socially acceptable and thereby also politically feasible. It is therefore pleasing to see that several important commitments were also made at COP28 to significantly increase the supply of fossil-free energy.

### Death of the Chair of the Board, Britta Burreau

In September, Britta Burreau, Chair of the Board, passed away too soon, following a short illness. Britta became Chair of AP4 in 2021. I knew Britta personally for much longer than that, as we were colleagues in the financial sector in various ways for many years. In

that time, I came to appreciate Britta more and more as a person, particularly her great courage and positive energy.

Britta made a very significant contribution to the development and success of AP4. For that I would like to thank Britta personally and also on behalf of the Board and employees of AP4, as well as the entire Swedish public pension system.

I would also like to take a moment to thank all the members of the Board of AP4. You are always a great source of support, and this was particularly evident on Britta's death.

### Awards for AP4

The year has certainly brought its challenges at times, but my main feeling as an employee of AP4 is that we have a lot to be pleased about. One reason for this is that we have managed to advance our positions in many key areas. I would particularly like to highlight the successful procurement of portfolio systems that was concluded in the autumn. Much work remains to be done throughout 2024 and into 2025, however, before the portfolio system is fully implemented and operational.

In 2023, we also launched a new fund strategy for the next few years and it is satisfying to see how well it has been received within the organisation. This new strategy has increased the momentum in our

development work by enhancing both the focus and the quality of our objectives.

As a result of our constant endeavour to "be at the forefront", AP4 was pleased to receive the "Sovereign Wealth Fund of the Year" award at the Sustainable Investment Awards for our work with climate strategies in the asset management. AP4 also received a total of three awards at the IPE Conference & Awards in the categories of "Portfolio Construction & Diversification", "Public Pension Fund" and "Long-Term Investment Strategy". In addition, AP4 was nominated in the categories "Commitment to Diversity" and "Pension Fund of the Year". These are awards that make us proud and which spur us on to continue to develop our business.

Finally, I would like to thank all the employees of AP4 for the determination and commitment that you always show and for the ambitious work you have contributed during the year. It is an honour to have you as colleagues and to manage money in the public pension system together with you. It's the best job in the world.

Stockholm, 22 February 2024  
**Niklas Ekvall**, CEO

# Portfolio development

## Contribution to the stability of the pension system

AP4 contributes to the strength of the pension system if the return over time exceeds the performance of the income index. AP4's Board of Directors has set a real return target based on an assessment of the pension system's long-term return requirement combined with medium-term market conditions. The aim is to achieve well-balanced risk-taking in asset management.

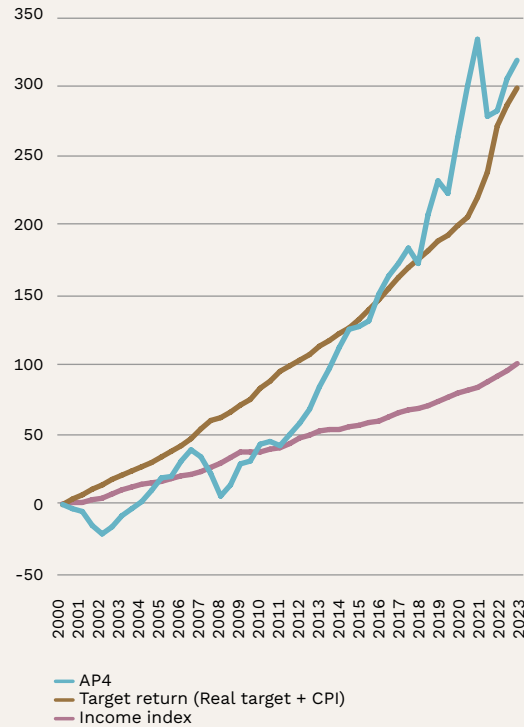
AP4's long-term return is evaluated over two time periods – since the start of the new pension system in 2001 and over the last ten-year period. The goal is to exceed both the performance of

the income index and the return target set by the Board of Directors.

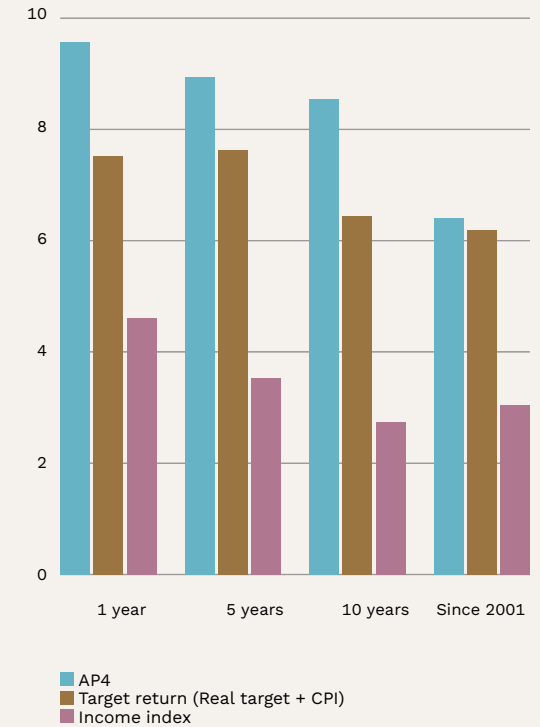
In 2023, the portfolio return of 9.6% after costs was higher than both the performance of the income index of 4.6% and the Board's return target of 7.5%. The continued high inflation rate of 4.4% in 2023 resulted in an increase in the Board's return target.

AP4 has exceeded both the performance of the income index and the return target over all time periods, meaning that AP4 has contributed to the funding and stability of the pension system.

Return after costs since start in 2001, %



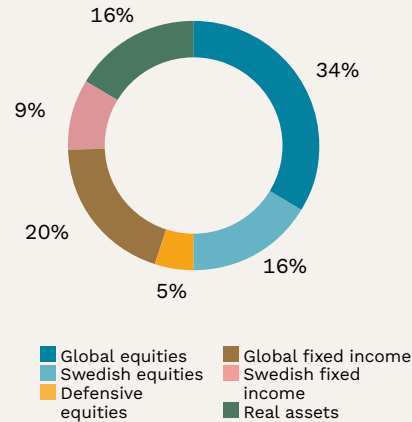
Annualised return after costs, %



## Asset allocation

Every three years, AP4 conducts an Asset Liability Management (ALM) analysis of the pension system's long-term need for a return over 40 years. The most recent was carried out in 2023 and its conclusions are described on page 23. The Board then decides on the Dynamic Normal Portfolio (DNP), the benchmark portfolio for operative asset management that defines the strategic weight and benchmark index for each asset class. Based on the DNP, AP4's organisation then manages the portfolio through various investments.

**Asset allocation as per 31/12/2023**



## Cost-efficient asset management

It is vitally important that AP4 conducts cost-efficient asset management that provides a good return after costs and also contributes to confidence in AP4 as an agency and a manager of public pension funds.

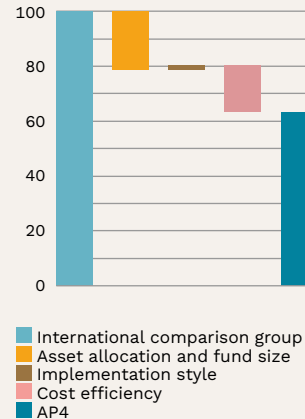
Evidence of AP4's cost-efficient management can be seen in the international comparison conducted annually by CEM Benchmarking. In the 2022 analysis, AP4's cost level was 37% lower than that of comparable pension funds.

The lower cost level can be credited to a number of factors. AP4 has sufficiently large fund capital to conduct cost-efficient asset management and has deliberately chosen an asset allocation with a focus on asset classes that are less cost-intensive to manage. The lower cost level is also attributable to AP4 choosing a larger share of cost-efficient internal asset management than the comparison group. AP4 also pays lower management fees for equivalent external management assignments than the comparison group does.

Collaboration with other AP Funds also contributes to cost efficiency and efficient resource use and provides an exchange of experience and knowledge. The AP Funds' Collaboration Council was established in 2016 to develop

cooperation and collaboration between the funds in areas other than investment operations. In 2023, AP4 also had collaborations with one or more of the other AP Funds for the procurement of a portfolio system, internal audit services, and physical and electronic archives, for example.

**International cost comparison, %**



## Multiple awards for AP4



Frida Olsson, portfolio manager in Alternative Investments at AP4, receives the award in the "Nordic Investor" category at the IPE Real Estate Global Awards 2023.



- AP4 received the "Sovereign Wealth Fund of the Year" award at the Sustainable Investment Awards for our work with climate strategies in management.
- AP4 also received a total of three awards at the IPE Conference & Awards in the categories of "Portfolio Construction & Diversification", "Public Pension Fund" and "Long-Term Investment Strategy".


**PER HAMMARLUND**

Investment strategist  
PhD in International Relations  
Bachelor's degree in Political  
Science.

Has worked at AP4 since 2023.

**AREA OF RESPONSIBILITY:**

Per is responsible for AP4's macroeconomic analyses and long-term forecasts that provide the basis for strategic allocation. An important part of this work involves analysing the market impact of changes in the global economy and proposing adjustments to the investment portfolio.

# The “Magnificent Seven” and large interest rate movements the hallmark of 2023

There was divergence in global economic growth in 2023. The US economy experienced a strong rise while the EU slowed and China failed to live up to expectations following the easing of the country's pandemic restrictions. Inflation fell, which had a positive impact on both the equity and fixed income markets towards the end of the year.

**Strong US economy offset weakness in the EU and China**

The global economic slowdown that we expected for 2023 partially materialised. Growth in the EU slowed to around 0.5% from 3.5% in 2022, but growth in the USA was resilient in the face of higher interest rates and reached 2.5%, compared with 1.9% in 2022. China relaxed its strict Covid-related restrictions at the end of 2022, but the economy was held back by an ongoing crisis in the property sector that dampened construction, consumption and the ability of local authorities to stimulate economic growth. Beijing gradually increased its support for the real estate sector in 2023, but cautiously so as to avoid speculative market behaviour and increasing debt.

The US economy was fuelled by strong growth in the service

sector, driven by pent-up demand for a return to pre-pandemic consumption patterns. This normalisation now appears to be complete as employment in the service sector has climbed above pre-pandemic levels. Fiscal stimulus measures also contributed to growth, as did private consumption, which benefited from a high proportion of mortgages having a long fixed-interest period, reducing the sensitivity of households to rising interest rates.

EU economies slowed significantly in 2023 due to reduced purchasing power and households being more sensitive to interest rates. This trend was particularly evident in Sweden, where a high proportion of variable-rate mortgages meant that the Riksbank's interest rate hikes had a rapid impact. Rising

interest rates also hit investment, while weakness in China and Asia dampened demand for EU exports.

**Tight monetary policy and falling inflation**

Overall, inflation at year-end was 3.4% year-on-year in the USA, 2.9% in the euro area and 4.4% in Sweden, which means the inflation rate has more than halved since December 2022. The fall in inflation was broad-based, but lower energy prices played a key role. The decline in inflation enabled the central banks to pause their interest rate hikes and so reduce the risk of pushing the economy into a deep recession. In light of the more rapid fall in inflation towards the end of the year, the market has begun to expect interest rate cuts as early as the first half of 2024.

**Increased risks in public finances**

One cause for concern that emerged in 2023 related to fiscal policy, mainly in the USA but also in Germany and the rest of the EU. If there are no changes to the agreed public spending and revenue, the US budget deficit looks set to be between 5.5% and 6% of GDP over the next few years. At the same time, the national debt is expected to rise to almost 120% of GDP. Weak growth, financial support given to consumers for high energy prices and a major need for investment in order to manage the green transition and the shift away from dependence on Russian energy have also increased pressure on public finances in the EU, including Germany. Large government borrowing requirements in the USA and the EU risk fuelling inflation and keeping interest rates high.

**Geopolitical tensions dampening international trade**

Russia's war of aggression against Ukraine continues and appears unlikely to end any time soon. The EU is less vulnerable to disruptions in Russian oil and gas supplies, however, having significantly reduced its energy imports from Russia, although dependence on Russian nuclear fuel still remains.

Relations between the USA and

China hit a new low in February 2023 after the US Air Force shot down a Chinese surveillance balloon travelling over the USA. A meeting between US President Joe Biden and his Chinese counterpart Xi Jinping in November led to the resumption of military communications between the two countries, but the strained relations between Beijing and Washington remain a source of concern for both the market and businesses. China has been a significant buyer of US government bonds and a reduced appetite would help keep US interest rates high, even if inflation were to fall.

An increased level of trade restrictions and the probable establishment of trading blocs centred around China and the USA will hamper growth. Geopolitical tensions are also putting pressure on public finances through increased defence spending and are contributing to inflation, as well as lower productivity growth due to regionalisation and the pursuit of greater self-sufficiency.

**Stock markets rose on the expectation of interest rate cuts**

The MSCI global equity index rose by almost 22% in 2023, which is a complete turnaround from 2022, when the index fell by almost 20%. The rise was driven predominantly



by large tech companies, more specifically those known as the “Magnificent Seven” in the USA (Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla). Small caps, which are more sensitive to higher interest rates, only began to rise towards the end of the year as market expectations of interest rate cuts in 2024 grew stronger. Stock markets in emerging economies as a group ended 7% higher, but the trend was lateral. Falls in China were offset by rises in other markets.

There was considerable volatility in the fixed income market, driven by the banking crisis in the USA and varied inflation expectations. As prices began to increase more rapidly in 2021, many, including central banks in developed economies, assumed that the price shock was a temporary effect of the pandemic. Firmly anchored long-term expectations of inflation being around its targets, combined with high near-term inflation, resulted in a sharply inverted yield curve. This view was substantially revised in the second half of the year, particularly in the USA, which experienced an increase in long-term interest rates on expectations that inflation and strict monetary policy were likely to last for a considerable period of time. As the yield on 10-year US Treasuries reached 5.0% – the

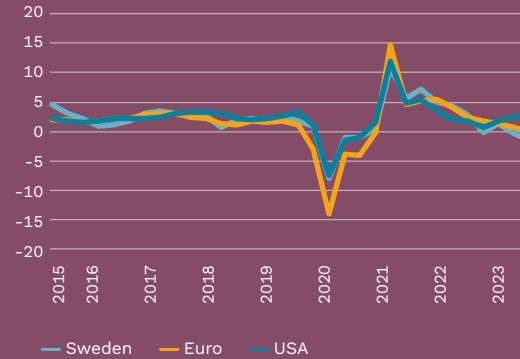
highest level since the global financial crisis, combined with lower-than-expected inflation – the appetite for long-term bonds increased again, helping to push down interest rates.

The currency market followed a similar pattern to the fixed income market. The US dollar strengthened as interest rates rose and this, together with weak Swedish growth, drove the krona down to record lows against the euro and close to record lows against the dollar. The krona subsequently recovered as interest rates fell in November and December. If inflation continues to fall, it would appear that the trend towards a weaker krona has been broken for the time being.

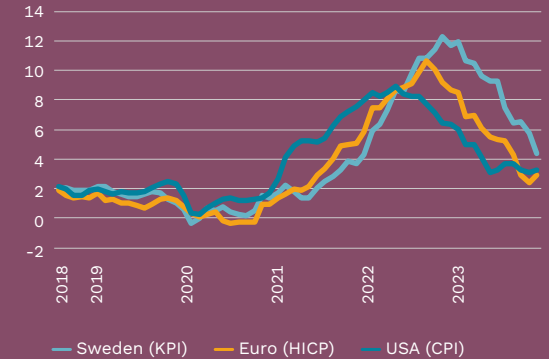
**Market conditions in 2024**

Inflation is likely to continue to fall, although strong labour markets, potentially high wage demands and rising energy prices all represent a risk. Given that the major central banks are likely to cut their key lending rates in 2024, the outlook for equity markets is favourable, particularly in the rich OECD economies. Increased risk appetite should also lead to a degree of weakening of the US dollar and a strengthening of the euro and smaller currencies such as the Swedish krona.

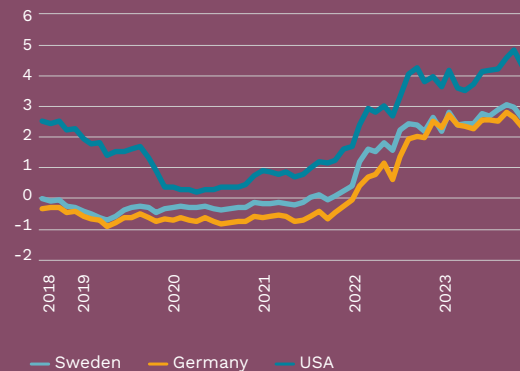
**GDP growth, %**



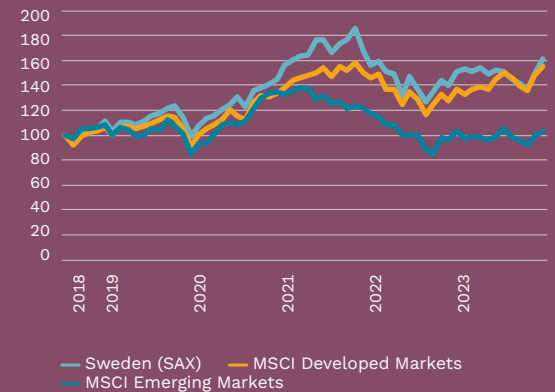
**Inflation rate, %**



**Government bond yields, five-year, %**



**Stock markets, local currency**





**MAGDALENA HÖGBERG**  
 Head of Strategic Allocation & Quantitative Analysis  
 M.Sc.in Engineering Physics  
 M.Sc.Econ.

Has worked at AP4 since 2013.

**AREA OF RESPONSIBILITY:**  
 Magdalena is Head of the Strategic Allocation & Quantitative Analysis unit, which is responsible for ALM analysis, strategic and tactical allocation and the management of the Global Equities asset class.

# Portfolio's total return performed well in 2023 despite volatility

The total return for AP4's portfolio performed well in 2023, with positive contributions from both equities and fixed income investments. The good annual return for the major asset classes in AP4's portfolio hides just how volatile 2023 was, however, with large movements in the fixed income market for example.

Magdalena Högberg, Head of Strategic Allocation & Quantitative Analysis at AP4, explains the changes that have been made in the allocation during the year and the reasons for the management result.

"During the year, we implemented changes in three main areas of AP4's total portfolio: we increased the interest rate risk in the portfolio, adjusted the currency exposure and placed greater focus on the tactical exploitation of market mispricing. We are also continuously working to make the portfolio more resilient, in times of high inflation and negative growth for example."

Since the pandemic, the global economy has changed from being a low interest rate environment to a more normalised interest rate environment in nominal terms, which has opened up more opportunities for both asset allocation and fixed income management. For many years, AP4's allocation has had a relatively low interest rate sensitivity, with

an expectation that interest rates would rise, or in other words that bond prices would fall. Last year, interest rate levels approached AP4's long-term forecasts in several markets, allowing the interest rate risk in the portfolio to be increased.

"During the year, the management organisation has focused strongly on the dynamic adjustment of AP4's exposure in various assets. We were able to capitalise on the large movements in interest rates to increase the interest rate risk when interest rates were at their highest and to reduce exposure when interest rates came closer to our long-term assumptions. We did the same with AP4's currency positions, taking positions when the Swedish krona weakened compared with what we consider reasonable in the long term. Just as in our fixed income management, we purchased additional kronor when mispricing was greater and then sold at levels that are closer to our long-term assumptions," explains Magdalena.

The market is currently pricing in a relatively synchronised interest rate cut scenario for many of the markets in which AP4 invests, while at the same time there is uncertainty about macroeconomic trends in 2024.

"In light of this, we believe we will have further opportunities to generate active returns from dynamic allocation on both the fixed income and currency markets over the coming year."

Interaction and exchange between teams is a key to success for many elements of asset management and is a focus area at AP4. On the property side, AP4 has been managing both listed and unlisted assets in the same team for many years.

"Our allocation to listed property equities recovered after a challenging 2022 and the portfolio achieved a return of almost 20% in 2023. We have benefited greatly from AP4's approach of managing listed and unlisted properties in the same team, as this has facilitated the exchange of information

between the managers of the different segments. In 2023, we began examining how we can increase cooperation between the groups that manage our equity and credit exposures within the property sector and we have initiated positions in credits to real estate companies that we believe in for the long term."

AP4's pension system analysis shows that AP4 should have a high proportion of equities in order to strengthen the system over the long term. At the same time, the value of having a well-diversified portfolio should not be underestimated as it provides opportunities to benefit from AP4's long investment horizon in the event of temporary price falls in the market.

"We believe that with higher interest rates and a less extreme inflation level, we can achieve greater diversification from the fixed income allocation going forward. The equity markets have become more concentrated in 2023, as a small number of large companies have increased their

share of the value of global equity markets, among other things affecting the diversification of AP4's broad equity allocation. The rise in the largest companies in the USA (the "Magnificent Seven") and the associated increase in index share intensifies the sensitivity to events at these individual companies. A lot of our time in asset management is spent assessing how we can position the portfolio in a way that ensures greater diversification, for example through allocation to similarly weighted indices or small caps.

Overall, the active return for AP4 was negative in 2023, which is largely because of the way in which AP4 measures the active return for real assets. It is generally difficult to find a good benchmark index for unlisted assets, and in AP4's benchmark portfolio DNP ("Dynamic Normal Portfolio"), real assets are represented by an inflation-adjusted return requirement.

"We believe that this kind of index works well over longer periods, but over shorter periods, and particularly those with rising inflation, the target is almost unattainable for investments such as our property investments. This naturally has major implications for our active returns over shorter periods but should even out over longer horizons," concludes Magdalena.

# This is AP4

IN THIS SECTION:

- AP4 AND THE PENSION SYSTEM
- STAKEHOLDER DIALOGUE
- 50 YEARS OF AP4
- STRATEGIC PLATFORM
- OUR EMPLOYEES

# AP4 and the pension system

AP4's mission is to manage part of the Swedish national pension system's buffer capital. With a good long-term return, AP4 contributes to the financial security of current and future Swedish pensioners.

AP4 is a government agency whose operations are governed by the Swedish National Pension Funds Act (Lagen (2000:192) om allmänna pensionsfonder). Upon its inception in 1974, AP4 invested only in Swedish equities, but since 2001 it invests in Swedish as well as foreign equities, fixed income securities and unlisted assets. Significant investments in unlisted assets include, for example, investments in real estate companies, infrastructure and private equity companies.

## Income pension and premium pension

Everyone who has worked in Sweden receives a national public pension, which is based on the income they earned during their working life. The pension system is built upon two parts, income pension and premium pension, and every year 18.5% of pensionable income is allocated to the system for those who have worked or

received other pensionable income. Payment is made in part through payroll taxes that are paid by the employer and in part through the national public pension tax that all wage-earners pay. 16 percentage points go towards the person's income pension and 2.5 percentage points towards the premium pension. In addition, outside of the public pension system, it is common for people to have occupational pensions, which are paid for by their employer, as well as private pension savings.

## AP4 is a buffer fund

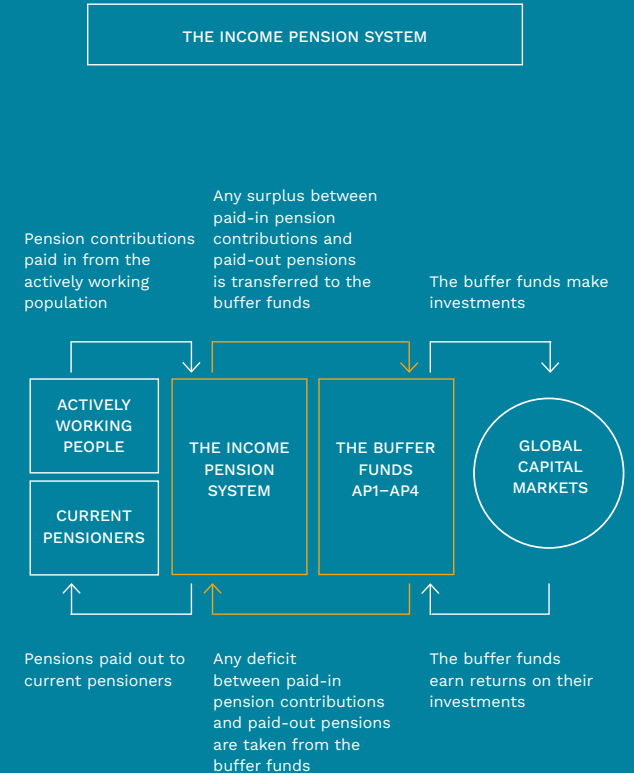
In the income pension system the pension contributions paid by people who have worked during the year are used to pay pensions to current pensioners. If payments to the system during a given year are less than what is needed to pay out pensions, a deficit arises. In such case, the AP Funds' managed capital is used as a buffer to cover the deficit, and

conversely, if payments in to the system are greater than what is needed to pay out, the money goes to the AP Funds for management. If the pension system for some reason comes into an imbalance, i.e. its obligations become greater than the assets on hand, a balancing mechanism is activated (the so-called brake). Through this balancing, income pensions are upwardly indexed at a slower pace until the pension system's assets are once again as large as its obligations, something that happened for example following the financial crisis in 2008. The system is designed to handle this so that no generation receives a higher pension at the expense of another.

## The AP Funds and the future

When the new pension system was launched in 2001, it was estimated that the AP Funds would be net contributors to the pension system for the period from around 2010 to

2050. In 2009, the four AP Funds began paying out money to the pension system and have now together paid almost SEK 330 billion to the pension system. The AP Funds have been net payers mainly because the large number of people born each year during the 1940s have now become pensioners. The pension system has gradually been strengthened, however, thanks to good returns from the AP Funds, improved demographics with a growing population and more people in gainful employment, along with changes to the pension system such as the introduction of the target age. This means that the AP Funds are now expected to be net payers only for around two more years. The large numbers of people born in the 1990s and 2000s are now actively working and paying in money to the system.



## Stakeholder dialogue and materiality analysis

Engaging in continuous dialogue with stakeholders provides important guidance for the AP Funds in their sustainability work. To learn about how stakeholders view the AP Funds' mission and operations in relation to sustainability and returns, AP1, AP2, AP3 and AP4 have jointly conducted stakeholder dialogues and materiality analyses on a number of occasions.

The AP Funds are currently developing a process for conducting materiality analyses and stakeholder dialogues in line with relevant frameworks. The aim of this is to gain a deeper understanding of how the outside world is affected by the activities of the AP Funds and vice versa. It is important that the AP Funds obtain feedback from all stakeholder groups and this can be done in various ways. A description of stakeholders and dialogues is provided on page 90. The structure for this work will be developed further in 2024.

In the stakeholder dialogues conducted, the stakeholder groups have prioritised different sustainability areas and have identified the following as being of particular importance:

- Return provided to the pension

- system
- Climate and environmental impact
- Human rights
- Business ethics and regulatory compliance, such as anti-corruption

Stakeholders consider themselves to have relatively good awareness about the AP Funds' operations and are highly confident that the AP Funds are living up to their mission to generate long-term returns and conduct responsible asset management. The results have also showed high confidence in the AP Funds' work with, and integration of, sustainability matters in their asset management.

### Risk analysis

To complement the stakeholder dialogue, AP4 also performs a risk analysis within asset management to identify and assess material sustainability risks in the investment portfolio. The risk analysis is based on double materiality – impact materiality, which is how the activities of the portfolio companies may have a negative impact on people and the environment, and financial materiality, which is how people and the environment may affect the financial position of the companies.

### Impact materiality

Risks relating to the portfolio's impact were assessed as being

greatest in the following areas:

- climate change
- business ethics
- labour in the value chain
- biodiversity

A concentration of sustainability risks was identified within certain sectors such as energy, raw materials, power and industry.

### Financial materiality

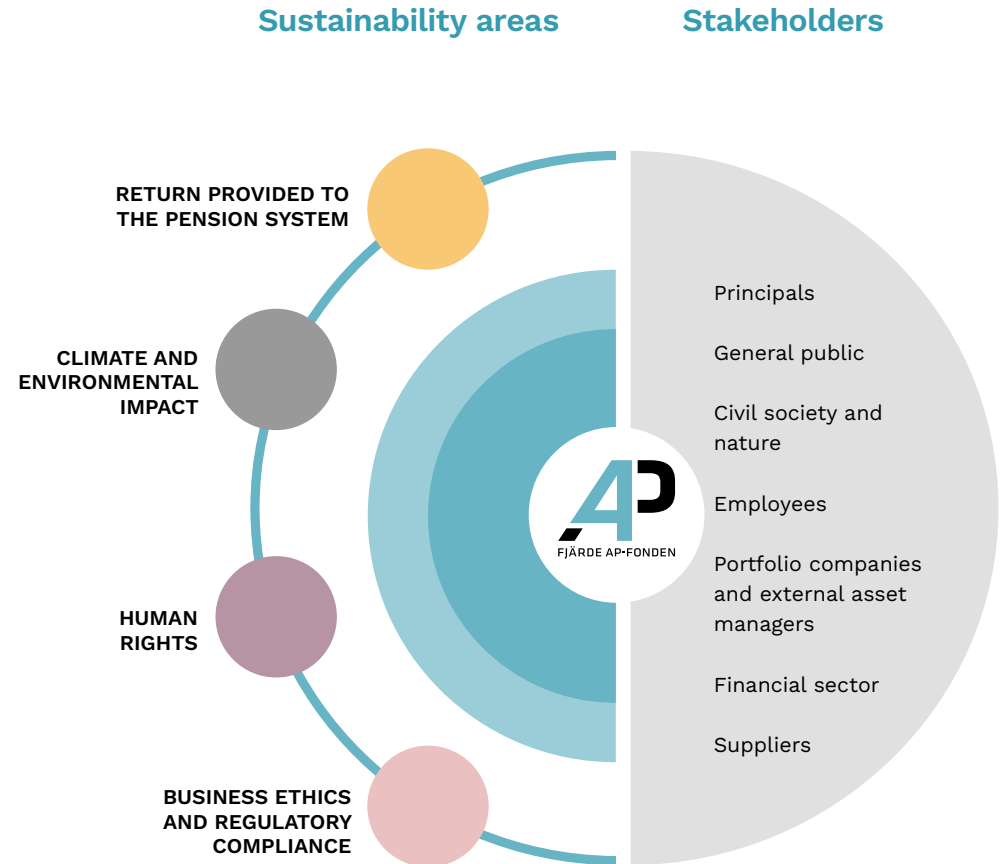
The main financial risks for the portfolio were assessed as being:

- climate change
- biodiversity
- consumer behaviour, and
- business ethics

A more detailed description of the sustainability risks in the portfolio is provided on pages 91–94.

### Sustainability reporting

AP4's sustainability reporting is based on the AP Funds' joint guidelines for reporting how the goal of exemplary management has been achieved. AP4 strives to adhere to the guidelines for sustainability reporting set out in the Annual Accounts Act. Together with the other AP Funds, AP4 is monitoring the rapid development taking place in the field of sustainability reporting. The aim is to be at the forefront of sustainability reporting with an open and factual report that is based on asset management operations and facilitates comparison between the AP Funds.





# AP4 celebrates its 50th anniversary – half a century of service to Sweden’s pensioners

After 50 years of operation, AP4 can report a return of SEK 557 billion in support of Swedish pensioners, all during half a century of fundamental change for the financial markets of Sweden and the world.

We are proud of our contribution to Sweden’s pensioners and how we have managed the public pensions of the Swedish people through economic ups and downs for half a century. Since operations began, with initial capital of SEK 500 million, we have contributed to and strengthened the pension system and today AP4 manages assets with a value of around SEK 500 billion. AP4’s average annual return since 1974 has been 13%. Over the years, AP4 has also transferred SEK 57 billion net to the pension system. A significant contribution

over 50 years. We have achieved this by being a major investor in several companies and by taking great ownership responsibility.

It all began in 1974, when the Swedish government established an AP Fund to invest in Swedish equities. This was a decision that was questioned at the time, as equity ownership was not as commonplace as it is today, neither among institutional investors such as pension funds nor among private individuals.

The Swedish Parliament’s decision to establish the new

AP Fund was motivated by the need to help protect the value of the investments of the AP Funds and to improve the supply of risk capital for Swedish companies. As well as providing a good return, AP4 has been a source of risk capital, for Swedish listed companies in particular, and over time has been a major contributor to the work to develop rules on good ethics and good conduct on the Swedish stock market.

In this way, AP4 has contributed to Sweden’s pensioners and its national pension system over time.

## 557

SEK billion in accumulated net result since 1974

## 13%

average annual return after costs since 1974

## 57

SEK billion in net payments from AP4 to the pension system since 1974



## 50 years of AP4 – always at the service of pensioners

### 1974

AP4 is established with a start-up capital of SEK 500 million. Significant investments are made in the first year in equity issues made by Volvo, Atlas Copco and MoDo.

### 1978

A limit on voting rights of a maximum of 10% is introduced. AP4 is now the single largest shareholder in companies such as Astra and Volvo.

### 1979

AP4 is exempted from income tax, but will instead transfer 80% of the direct yield to the other AP Funds as a contribution to pension payments.

### 1980

The Board of Directors decides in principle that AP4 should be permitted to invest in unlisted companies. The aim is to provide risk capital to companies that may become listed. The first unlisted investment is made in Lindab Ventilation in the amount of SEK 5 million.

### 1984

AP4 is given a formal return requirement by the Swedish Parliament to invest in a way that ensures a good return, a long-term approach and risk diversification. Asset management is now on such a large scale that automatic data processing is being introduced.

### 1986

AP4 develops Sweden's first institutional ownership policy in response to extensive cross-ownership on the stock exchange, which limits the protection of non-controlling interests. AP4 now takes greater responsibility with regard to smaller shareholders and also becomes a more active owner.

### 1989

Investments in foreign equities are permitted, up to a maximum of 10% of the fund capital. Investing in and monitoring foreign competitors is expected to increase knowledge of Swedish companies on an increasingly international stock market.

### 1993

AP4 leads a group of Swedish institutional investors in Volvo, taking responsibility for forming a Board of Directors, as the principal owner. This follows the collapse of the Volvo-Renault deal, which leaves the company without a Board of Directors. The practice concerning the use of nomination committees is now being formulated on the Swedish stock market.

### 2001

The new pension system is introduced and the AP Funds are now able to invest in all types of listed securities. The funds can invest directly in unlisted real estate companies and AP1-AP4 become co-owners in AP Fastigheter, now Vasakronan.

### 2007

The Council on Ethics is formed by AP1-AP4, a cooperation that uses dialogue to convince international companies to give consideration to environmental, social and corporate governance issues. This helps to create better companies and reduce risk in the assets held by the AP Funds.

### 2012

AP4 makes its first investments in low-carbon strategies, becoming a global pioneer in the field.

### 2019

New investment rules allow up to 40% of the fund's capital to be invested in illiquid assets. The requirement for external asset management is removed and the minimum proportion of fixed income investments is reduced to 20%.

### 2020

Further changes to the investment rules provide greater flexibility with regard to unlisted investments and improve the conditions for cost-effective asset management.

### 2023

AP4 manages nearly SEK 500 billion and has achieved an average annual return of 13% since 1974. In total, AP4 has transferred SEK 57 billion net to the pension system. A significant contribution over 50 years.

## Our strategic platform

### Mission

We contribute to financial security for current and future pensioners in Sweden.

### Vision

We are a global role model. We deliver a first-class return with a long-term, sustainable and responsible approach.

### Investment philosophy

Our investment philosophy describes AP4's distinguishing features as an investor and our investment beliefs specify how we are to act to create added value in our asset management.

### Operational strategy

Our operational strategy is the tool we use for our continuous development as an asset management organisation.

### Values

Our values underpin how we work together to achieve our full potential.

# Strategic platform

As a pension fund within the Swedish income pension system, AP4 is an asset manager that helps to strengthen the pension system and advocates sustainable investments and corporate responsibility. Our strategic platform is based on our statutory mandate, our vision, investment philosophy and operational strategy, as well as our shared values. We strive to be a global role model in our industry and to act with courage and perseverance. The financial security of current and future pensioners is of high concern to us.

### Our mission

Our mission is to contribute to the financial security of current and future Swedish pensioners.

We are a government agency tasked with managing the fund capital for a high long-term return so as to provide the greatest possible benefit to the income pension system. We shall also manage the capital in an exemplary way through responsible investments and responsible ownership, without compromising the goal of achieving a high long-term return.

For us, this means managing the fund capital in a way that

achieves a high long-term return, while also minimising the risk of reduced pensions. We ensure the solvency of the pension system by maintaining the necessary payment capacity so that pensions can be paid even when pension payments exceed pension contributions.

### Our vision

Our vision is to be a global role model that delivers a first-class return and takes a long-term, sustainable and responsible approach.

Our vision is a fundamental part of our identity and our work and it drives our efforts to be at the



forefront of pension funds.

Long-termism is an important aspect of our vision and we benefit from our unique mandate to be long-term, which allows us to capture risk premiums. We have the courage to believe in ourselves and act accordingly and we also have the resilience to hold on to investment decisions that we believe in.

Sustainability and responsibility are also central elements of our vision. We invest sustainably and we take responsibility for the companies we have a stake in. We are conscious that we are managing the money of current and future pensioners and we take this responsibility very seriously. As a key operator in society, we give consideration to our stakeholders and we always act in a responsible and prudent manner with the capital that we manage.

#### Our values

At AP4, we work for a healthy company culture, which is one of the most important preconditions for building and maintaining a sustainable and successful organisation. Our values underpin

our actions to achieve our full potential together. Our values are:

#### We are professional

By acting professionally we always work in the best interests of the pensioners. Our ethics, reliability and responsibility shall leave no room for doubt.

#### We have implementation power

Owing to our strong sense of drive, engagement and perseverance, we get things done. We take initiative.

#### We challenge and think new

We continuously develop our activities with creativity, curiosity and flexibility. We are distinguished by a willingness to embrace change.

#### Together we are successful

We have a strong team spirit and draw from each other's expertise. We stand united in both good times and bad, and together we form a stronger organisation. We have trust and respect for each other, and take responsibility both as individuals and as a team.

#### Our investment philosophy

The investment philosophy is based on three distinguishing features that define AP4 as an asset manager, as well as six different investment beliefs that specify how we are to act to create added value in our asset management. Read more about our investment philosophy on pages 20–21.

#### Our operational strategy

AP4's operational strategy describes the focus and activities for AP4's development as an asset management organisation. The operational strategy is based on six key development areas. Three of these areas are central to AP4's operations as an asset manager – the investment portfolio, system support and sustainability.

Three other areas describe how we need to work together to develop as an organisation and achieve our goals. Our development areas are:

#### Future-proofed investment portfolio

that is equipped for a changing environment and new commitments.

#### First-class system support

that supports the needs and ambitions of the business.

#### Leadership in sustainability

sets out our ambition to be a global role model in sustainability by constantly developing in a changing world.

#### Continuous development

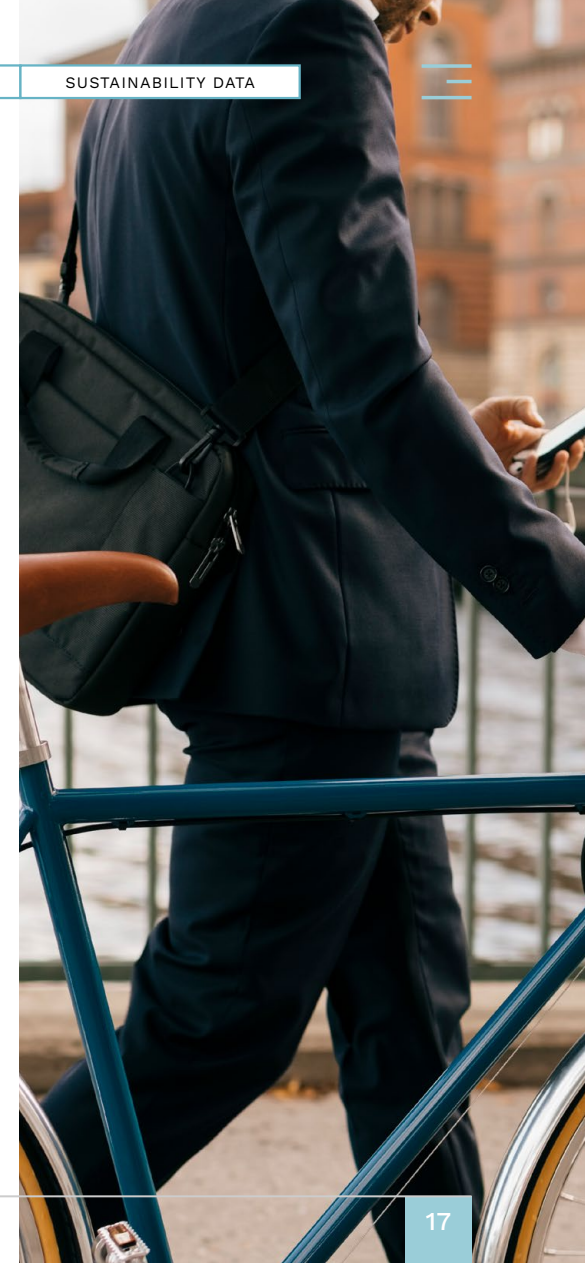
for us as specialists to grow in our roles and seek out new challenges.

#### Simplicity as a guiding principle

means that we strive to be an efficient organisation that does not complicate things.

#### Creative co-operation

means that we work in a dynamic environment that contributes to satisfaction and effective collaboration, both in the office and digitally.



# Our employees

Our employees are vital for our value creation in the state pension system and it is they who help us to fulfil our mission. It is therefore crucial for us to attract, retain and develop people with different perspectives and mindsets if we are to remain a leading pension fund, both now and in the future.

## Working at AP4

Working at AP4 means having an opportunity to contribute to a socially important mission, to use your specialist expertise and to continuously develop and grow in your role. We are a cost-efficient organisation that conducts knowledge-intensive operations with relatively few employees. This means that every employee has great responsibility and plays an important role in the operation's results and success. This also entails a certain dependence on individual persons, which is why it is important to identify the right competencies in every recruitment process to develop and drive the business forward in the long term. AP4 has a major need for a range of key competencies and regular competence inventories are made, resulting in development plans at both unit and individual levels.

## Work environment and culture

For AP4, a good, positive company culture is one of the most important preconditions for building and maintaining an organisation that is sustainable and successful over time. Encouraging a balanced work life combined with good leadership are therefore important areas that AP4 works with on a continuous basis. In practice, this means that our work environment is characterised by a shared view of professionalism, work methods and implementation strength.

Employee surveys are conducted every year and in 2023 the employee survey showed results at a continued high level and that are above or in line with the target levels for all areas measured by the survey.

Our culture supports and facilitates working in an engaged,

unassuming and safe manner. We work together in order to solve daily challenges – and we take initiative to raise questions, reconsider and think new. We strive to maintain a sustainable, inclusive and attractive workplace where everyone has the opportunity to contribute. Our talented employees, with their range of skills and mindsets, make a difference to the success of our organisation.

Key metrics for employees are reported on page 89.



# Strategy and operations

## IN THIS SECTION:

- ASSET MANAGEMENT STRUCTURE
- UPDATED ALM ANALYSIS
- ASSET MANAGEMENT BY ASSET CLASS
- OUR APPROACH TO SUSTAINABILITY
- CONVENTION-BASED EXCLUSIONS
- FOCUS AREA: CORPORATE GOVERNANCE
- AP FUNDS' COUNCIL ON ETHICS
- FOCUS AREA: CLIMATE & ENVIRONMENT
- PREREQUISITES FOR THE CLIMATE TRANSITION
- THEMATIC SUSTAINABILITY ANALYSIS
- BIODIVERSITY
- CLIMATE STRATEGIES IN THE GLOBAL EQUITY PORTFOLIO

# Asset management structure

The goal of AP4's asset management is to achieve a high long-term return that contributes to the pension system's strength and lowers the risk for reduced pensions. A prerequisite for this is the integration of sustainability factors into asset management.

## AP4's asset management is grounded in the AP Funds Act

Asset management is conducted on the basis of the statutory assignment and the investment opportunities that this presents. AP4 is to manage the fund capital in such a way that it generates a high long-term return for the pension system. This assignment also stipulates that asset management is to be conducted in an exemplary way through responsible investments and responsible ownership. In addition, particular emphasis shall be put on ensuring that AP4 contributes to sustainable development without compromising on the overarching return objective.

## Investment philosophy dictates overarching focus

AP4's board has adopted an investment philosophy that is based on AP4's mission and the preconditions it includes. The investment philosophy stipulates three essential distinguishing features for AP4, i.e. preconditions that to some extent distinguish AP4 and create opportunities for successful asset management.

These features are:

- the ability to act long-term
- a large degree of freedom to formulate the asset management in the best way within the framework of the AP Funds Act
- a portfolio size that enables cost-efficient asset management without limiting investment opportunities

These features are complemented with so-called investment beliefs, which clarify how AP4 is to act to create value added in asset management.

The investment beliefs pertain to:

- well-balanced risk-taking
- inefficient markets
- diversification
- sustainability
- competent organisation
- structured processes

## Asset management structure with three time horizons

The asset management structure takes advantage of the opportunity to invest over several time horizons. For each time horizon, the Board

stipulates goals and investment guidelines.

The various time horizons are:

- the pension system's needs for the long term over 40 years
- a medium-term perspective that takes into account macroeconomic and market conditions over a 5–15 year horizon
- a shorter operational perspective for individual investment assessments of up to 10 years

## Long-term real return target

AP4 makes assessments about the pension system's long-term need for return levels and its need for payments from the AP Funds to cover any deficits. These assessments are made with a time perspective of up to 40 years. The analysis of the pension system is combined with a very long-term assessment of expected returns for various asset classes. This culminates in a long-term return target, which is currently a 3.5% annual real rate of return, and decisions on ranges for the portion of equities in the portfolio, the fixed

income portfolio's average duration, and currency exposure.

## Medium-term real return target

From a medium-term perspective, with a 5–15 year interval, it is possible to make assessments in greater detail of macroeconomic parameters such as growth and inflation. It is also possible to make a market assessment that takes into account valuation levels, for example. These assessments form the foundation of a more detailed analysis of expected returns for various asset classes. This leads to the Board's decisions about the Dynamic Normal Portfolio (DNP), which is the benchmark portfolio for asset management that comprises a weighted market index. Decisions are also made on a medium-term return target over 10 years, which is currently a 3% annual real return.

## Day-to-day asset management with active return target

The operative asset management thereafter comes into play, which



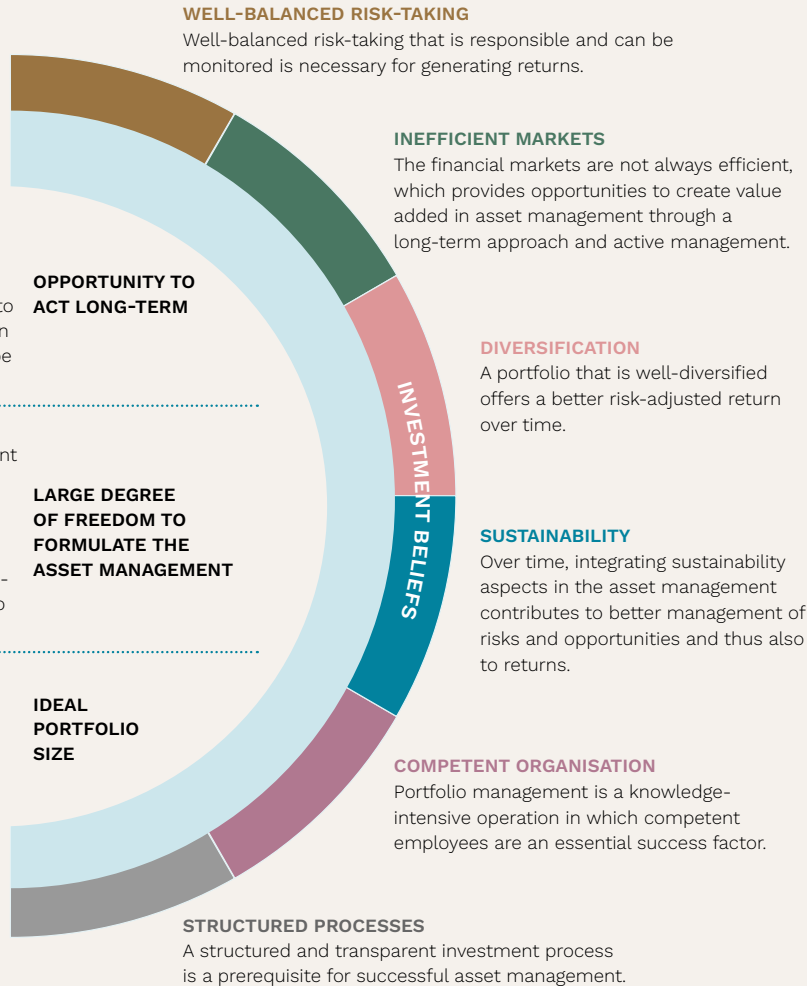
## AP4's investment philosophy

THE THREE DISTINGUISHING FEATURES OF AP4'S INVESTMENT PHILOSOPHY

The mandate to have an investment horizon that is longer than for many other investors entails an opportunity to act long-term and think differently than other investors when it is deemed to be beneficial over the long term.

Large degree of freedom within the framework of AP4's statutory investment rules to formulate the strategy and the portfolio structure, and choose investments that create opportunities to benefit from AP4's comparative strengths and diversification opportunities, and proactively adapt the portfolio when the market conditions change.

Ideal size of AP4's capital – neither too small nor too large – provides economies of scale that enable cost efficiency without limiting investment opportunities.



entails allocation decisions among various asset classes and a broadening to assets that are not represented in the DNP.

The goal of asset management is to outperform the return of the DNP by 1 percentage point per year with a 5-year evaluation horizon. The asset management is governed by a risk mandate of a maximum 5% active risk in relation to the DNP.

Within the context of ongoing asset management, decisions are also made on the choice of investment strategy, such as active or passive management, and whether management should take place internally within AP4 or externally. AP4 decides on the choice of management strategy, based on an assessment of what is expected to provide the best return after costs for the chosen strategy.

Finally, ongoing investment decisions are made regarding individual stocks, bonds and other financial instruments within the asset classes and asset management mandates.

### The Board governs and follows up

AP4's Board of Directors adopts an annual business plan and the governance documents that regulate AP4's asset management structure, including sustainability work. The governance documents are reviewed every year and are

revised when necessary.

AP4's CEO is responsible, together with the heads of the respective asset management units, for the asset management work and for ensuring that sustainability is integrated in AP4's investment processes.

### Asset management structure that integrates sustainability

The Board of Directors has assigned AP4's CEO the task of assessing the sustainability matters that arise in the investment operations. The CEO reports on a regular basis to the Board about how such issues are being dealt with and about the achievement of goals. The Board prioritises sustainability-related issues that have bearing on the asset management strategies, and such issues are addressed at essentially every board meeting.

Further details of how AP4 works with sustainability in its asset management are provided from page 22.

### Asset management by asset class

Asset management by asset class is described on pages 24–25. Detailed return data by asset class over longer time horizons is provided on page 87.

### Asset management structure that integrates sustainability

	Climate scenario analysis	Thematic sustainability analysis	Reduce risks	Invest in trends	Influence as investor
<b>Description</b>	Analysis of the climate transition and its potential impact on supply and demand, and by extension also on expected growth and inflation. The starting premise for AP4's climate scenario analysis is achievement of the Paris Agreement's goals, which entails a relatively rapid climate transition.	Identify sustainability trends, their strength and time perspectives with the goal to understand which value chains are affected, identify winners and losers, and by extension to find attractive investment themes for AP4's operative asset management.	Investment strategies and exclusions that reduce exposure to sectors or individual investments with significant sustainability-related risks.	Based on the thematic sustainability analysis and other trend analyses, invest assets to benefit from and contribute to the transition to a sustainable economy.	As an owner, exercise influence over companies to achieve development that leads to companies with lower sustainability risks.
<b>Analysis horizon</b>	5–15 years	5–15 years	Up to 10 years	Up to 10 years	Up to 10 years
<b>Frequency</b>	Yearly	Yearly	Continuously	Continuously	Continuously
<b>Responsibility</b>	CEO and Board of Directors where the DNP is involved	CEO and Board of Directors where the DNP is involved	CEO and CEO-delegated mandate	CEO and CEO-delegated mandate	CEO and CEO-delegated mandate
<b>Results</b>	<ul style="list-style-type: none"> <li>Used in macroeconomic analysis with up to a 10-year perspective to assess political and technological changes, growth and inflation as well as thematic sustainability investments.</li> </ul>	<ul style="list-style-type: none"> <li>Leads to AP4's view on influence and opportunities in various areas, parts of value chains and sectors. Serves as support in individual investments to reduce risks and invest in sustainability trends.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced exposure to climate risk in the equity and credit portfolios, for example.</li> <li>Exclusion decisions to not have ownership in companies that violate international conventions that Sweden has signed.</li> </ul>	<ul style="list-style-type: none"> <li>Proactive investments in, for example, sustainable infrastructure, selection of companies in Sweden and globally with focus on companies whose operations are supported by long-term sustainability trends.</li> </ul>	<ul style="list-style-type: none"> <li>Voting at general meetings of shareholders in Sweden and internationally. In Sweden, where AP4 is a significant and well-known investor, close dialogues are conducted directly with companies.</li> <li>Internationally, AP4 collaborates with AP1–AP3 through the Council on Ethics as well as with other investors in various sustainability collaborations.</li> </ul>

# Updated ALM analysis confirms strength of pension system

Every three years, AP4 conducts an Asset Liability Management (ALM) analysis of the long-term development of the income pension system, focusing on its financial strength and required return. The analysis illustrates how AP4 will best benefit the pension system in the long term. An important result derived from this is the proportion of AP4's portfolio that should consist of equities with a 40-year time horizon.

## AP4's ALM analysis in brief

The ALM analysis carried out in 2023 provides a picture of the development of the pension system, and the results of the analysis can be used to set AP4's long-term return target. The analysis also provides an understanding of the proportion of equities in AP4's portfolio that is appropriate in the long term. While a high proportion of equities provides a higher expected return in the long term, a very high proportion of equities increases the risk of pensions being negatively affected by the application of the brake. The aim is to identify a proportion of equities that provides a low risk of the brake being applied while also strengthening the pension system through good returns, without benefiting one generation at the expense of another.

To analyse the long-term perspective, variables such as demographics, the design of the income pension system and the anticipated risk and return of the assets are taken into consideration. The strength of the system and balance sheet are simulated over a 40-year horizon. Analysis of the simulations results in AP4's long-term return targets, as well as the equity allocation, currency exposure and bond duration that are best suited to the needs and characteristics of the system.

The ALM analysis for 2023 was made from a historically strong position. The income pension system is well funded and the balance ratio, which measures the financial strength of the system, was at its strongest level ever. One of the main reasons for the strong balance ratio is the good return that the AP Funds have achieved since 2001. It is the role of AP4 and the other AP Funds to act as a buffer in times

of weak development for the pension system, as a result of unemployment or unfavourable demographics for example. Should the balance ratio fall below 1, the brake kicks in, adversely affecting the size of pensions.

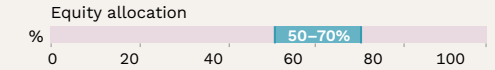
The forecasts of the Swedish Pensions Agency expect the balance ratio to continue to strengthen due to favourable demographic trends. Changes in the dynamics of the pension system can have a major impact and a new factor in this year's ALM work was the target age. The target age links the retirement age to life expectancy and means that we retire later, the longer we are expected to live. This limits the financial burden on the pension system that a longer life expectancy could otherwise impose.

The long-term development of the pension system does involve uncertainties, however, which we choose to take into account and allow for in our ALM work. Both the target age rule and the returns

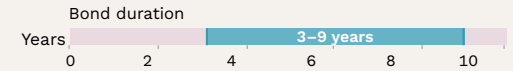
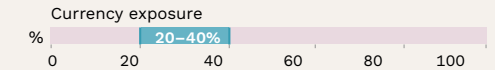
generated by the AP Funds have a major impact, but we do not know how the pension system will develop over the next 40 years. The Swedish Pensions Agency produces three pension system projections: base, pessimistic and optimistic. AP4 chooses to apply the pessimistic scenario. In this scenario, the Swedish Pensions Agency assumes that both the birth rate and net immigration are lower than in the base scenario. The overall analysis shows that the system is strong and robust, even in this scenario. Maintaining a proportion of equities in the range of 50–70% is shown to provide the best benefit for the income pension system.

This year's ALM analysis has also presented an opportunity to analyse the impacts of a potential distribution of surplus (so-called "gas") as well as a possible increase in contribution. The distribution of surplus is a way of increasing pensions by distributing capital

Long-term return target:



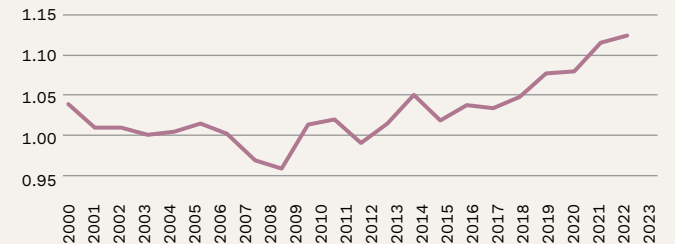
3.5% average annual real return over 40 years



to pensioners when there is a surplus in the system. An increase in contribution, possibly in combination with the gas, means that larger provisions are made in the system and these can benefit pensioners over time or through a one-off increase in pensions. Preliminary results suggest, however, that the conclusion on long-term return targets and the current equities range remains appropriate. The balance ratio expresses the relationship between

the assets and liabilities of the pension system (the assets of the system divided by the pension liability). The balance ratio is a measure of the strength of the system. If it is greater than 1, then assets are greater than liabilities; if it is less than 1, then liabilities are greater than assets and the brake is applied. The balance ratio for 2024 is calculated on the basis of the pension system's balance sheet for 2022.

## Balance ratio



## Asset management by asset class

The tables describe the asset management by asset class, responsibility, return and development of sustainability work.

Asset management unit	Strategic Allocation & Quantitative Analysis
Area of responsibility	Active asset allocation among all asset classes in the portfolio, handling of the asset classes' movements resulting from market movements, broadening of the portfolio to more asset classes, management of listed Global equities and Defensive equities. Analysis support for the Board and other asset management units.
Share of portfolio	<p>Global equities 34% Defensive equities 5%</p>
Asset management focus and strategy	Global equities management consists of cost-efficient and quantitative equities management, combined with fundamental company selection in resource-intensive sectors and investments based on sustainability themes. In addition, active management is conducted through selection of external asset managers with the aim of providing a large diversification of investment strategies for active returns and thus risk diversification.
Return	The return for the Global equities asset class was 17.7%. The annual return over the five-year measurement horizon was 10.3% and the active return averaged -0.2 percentage points per year. For listed Global equities, the active return over five years averaged 0.1 percentage points per year. Defensive equities returned 15.0% in 2023. This asset class was introduced in 2022 and does not yet have a five-year measurement history.
Integration of sustainability in asset management	<ul style="list-style-type: none"> <li>Responsible for climate scenario analysis and its impact on macroeconomic scenarios and DNP.</li> <li>Responsible for thematic sustainability analysis.</li> <li>Does not invest in companies on AP4's exclusion list.</li> <li>Implements low-carbon strategies within the framework of global equities management.</li> <li>Invested in external management mandates with a sustainability focus.</li> <li>Fundamental company selection in resource-intensive sectors.</li> <li>Conducts company dialogues in collaboration with other investors; in 2023 these included dialogues on deforestation, environmental targets, emissions of non-degradable plastics and climate plans.</li> <li>Votes at general meetings of shareholders.</li> </ul>
Development of sustainability in asset management in 2023	<ul style="list-style-type: none"> <li>Managed a project to review the thematic sustainability analysis and established a new working method to build up knowledge about sustainability trends. Invested SEK 0.2 billion in sustainability themes during the year and a total of SEK 1.7 billion since 2020. Read more on page 44–45.</li> <li>Further developed internal low-carbon strategies.</li> <li>Produced a biodiversity report together with an external asset manager.</li> </ul>

Asset management unit	Fundamental Equities
Area of responsibility	Active management of the Swedish equities asset class.
Share of portfolio	<p>Swedish equities 16%</p>
Asset management focus and strategy	Swedish equities management is conducted with a starting point in fundamental company analysis where long-term perspective, corporate governance and sustainability are key parts of the strategy. The goal is to outperform the market index by identifying companies with long-term favourable growth in value and equities with revaluation potential.
Return	The return for Swedish equities in 2023 was 18.3%. Over the five-year measurement horizon, the average annual return has been 15.4% and the active return has averaged 0.7 percentage points per year.
Integration of sustainability in asset management	<ul style="list-style-type: none"> <li>Sector-based risk analysis of sustainability challenges as part of the investment process.</li> <li>Does not invest in companies on AP4's exclusion list.</li> <li>Takes responsibility as an owner and serves on nomination committees to ensure that the companies have the best possible boards. Diversity is an important dimension in this work.</li> <li>Votes at general meetings of shareholders.</li> <li>As a consequence of the investment philosophy and taking sustainability risks into account, the portfolio's CO2 intensity is very low.</li> </ul>
Development of sustainability in asset management in 2023	<ul style="list-style-type: none"> <li>Made new thematic sustainability investments totalling SEK 1.6 billion, primarily in smaller companies within the health sector. Since 2020, more than SEK 6 billion in total has been invested according to sustainability themes, principally in social sustainability (including health), cleaner industry and fossil-free transport.</li> </ul>



### Asset management by asset class, continued

Asset management unit	Fixed Income & FX	Asset management unit	Alternative Investments
<b>Area of responsibility</b>	Active management of the assets classes Global and Swedish fixed income, active currency management and management of AP4's total currency hedging.	<b>Area of responsibility</b>	Investments in illiquid real estate and infrastructure assets (within Real assets), unlisted credits (within Global fixed income) and unlisted equities (within Global equities).
<b>Share of portfolio</b>	<p>Global fixed income assets <b>17%</b> Swedish fixed income assets <b>9%</b></p>	<b>Share of portfolio</b>	<p>Real assets <b>16%</b> Unlisted equities <b>3%</b> Unlisted credits <b>2%</b></p>
<b>Asset management focus and strategy</b>	The fixed income portfolio is liquid and creditworthy. Bonds with the highest credit rating, AAA, <sup>1</sup> accounted for 57% (51%) of AP4's holdings of fixed income securities. Corporate bonds accounted for 45% (47%) of AP4's bond holdings at year-end.	<b>Asset management focus and strategy</b>	The Real assets asset class currently consists mainly of direct investments in unlisted and listed real estate companies and to a lesser extent of investments in joint-venture companies and funds focused on real estate and infrastructure investments. In unlisted equities and unlisted credits, AP4 invests mainly with external asset managers and through joint-venture companies.
<b>Return</b>	The return for the year for AP4's liquid fixed income portfolio was 3.9%. The return averaged 0.4% per year over five years and the active return averaged 0.6 percentage points per year. The return contribution from AP4's currency exposure was -0.1 percentage points in 2023. Over a five-year period, AP4's currency exposure has contributed an average of 1.0 percentage points to the return per year.	<b>Return</b>	Real assets returned -5.4% in 2023. Over a five-year period, the return has averaged 8.8% and the active return has averaged 1.5 percentage points per year. Unlisted equities returned -5.2% in 2023. Over a five-year period, the return has averaged 13.4% per year and the active return has averaged 2.5 percentage points per year. Unlisted credits returned 5.7% in 2023. Over a five-year period, the return has averaged 5.6% per year and the active return has averaged 5.9 percentage points per year.
<b>Integration of sustainability in asset management</b>	<ul style="list-style-type: none"> <li>Assesses sustainability trends such as the energy transition, resource efficiency and renewable energy ahead of investment decisions.</li> <li>Does not invest in companies on AP4's exclusion list.</li> <li>No investments in companies with significant exposure to extraction of fossil energy sources.</li> <li>Invests in green bonds and social bonds.</li> </ul>	<b>Integration of sustainability in asset management</b>	<ul style="list-style-type: none"> <li>Evaluates and specifies requirements for the sustainability work of external asset managers and joint-venture companies ahead of potential investments as an integrated part of investment evaluations and follow-up. Stipulates requirements for external asset managers and investment companies to not invest in sectors or companies on AP4's exclusion list. Directs a significant share of new investments to areas identified through the thematic sustainability analysis.</li> <li>Measures and reports unlisted real estate companies' carbon emissions since 2019.</li> </ul>
<b>Development of sustainability in asset management in 2023</b>	<ul style="list-style-type: none"> <li>Made new thematic sustainability investments in green bonds and social bonds to a value of just over SEK 0.8 billion.</li> <li>Measures and reports CO2 emissions for the credit portfolio since 2023. See page 98.</li> </ul>	<b>Development of sustainability in asset management in 2023</b>	<ul style="list-style-type: none"> <li>Made thematic sustainability investments totalling SEK 5.0 billion, most of which were for the theme of decarbonisation in energy systems.</li> <li>Engaged in a dialogue with AP4's real estate companies and external asset managers in real assets regarding climate impact and climate strategy.</li> <li>Collected carbon emissions data for unlisted infrastructure investments.</li> <li>Developed sustainability criteria in agreements with external fund managers.</li> </ul>

1. The credit risk classification (rating) presented pertains to an internal standard. The assessment in this standard for 2023 is based on the ratings issued by the selected rating agency (Moody's Analytics UK Ltd).

# Our approach to sustainability

One of AP4's investment beliefs is that incorporating sustainability matters in asset management is a prerequisite for long-term successful management, as it contributes to a better risk-adjusted return over time. Sustainable development is a precondition for maintaining favourable and balanced growth over time.

The sustainability work of AP4 is based on the AP Funds Act, which stipulates that AP4 must manage its fund capital in an exemplary way through responsible investments and responsible ownership. In asset management activities, particular emphasis is to be placed on how sustainable development can be promoted without compromising on the goal of the highest possible long-term return.

As AP4 manages public pension funds, the starting point for sustainability matters is the core values of the Swedish state, which are specified as follows:

- Sweden's instrument of government, which is based on democracy, fundamental rights and freedoms, the equal value of all people and the freedom and dignity of the individual
- UN international conventions to which Sweden is a signatory, including those relating to the environment, human rights,

labour law, corruption and inhumane weapons

- The ILO core conventions
- International frameworks that Sweden supports, such as the UN Global Compact, the OECD Guidelines for Multinational Enterprises, and the UN Guiding Principles on Business and Human Rights (UNGP)
- Sweden's positions on issues of international law

## Sustainability governance

AP4's sustainability policy and ownership policy are adopted annually by the Board of Directors. These policies stipulate the objectives, goals and guidelines for sustainability work.

The CEO has overall responsibility for sustainability matters in day-to-day operations. Unit managers in asset management and portfolio managers are responsible for dealing with sustainability matters within their respective investment mandates. The CEO reports the progress and development of sustainability work to the Board on a regular basis.

The sustainability policy applies to all investment activities, whether the investments are made in Sweden or internationally, and to both internal asset management and external asset management mandates.

## Broad management of sustainability aspects

AP4's fundamental approach is to adopt a broad perspective on sustainability aspects in its investment activities, where material sustainability aspects within climate and environment, social responsibility and corporate governance are considered and managed.

- Climate and environment, including climate change, climate transition, resource efficiency, biodiversity and hazardous emissions
- Social aspects, such as human rights and workers' rights
- Corporate governance aspects, such as shareholders' rights, board composition, remuneration issues, transparency and

aspects of business ethics such as corruption

AP4's management continuously analyses sustainability aspects and integrates them into its asset management in a way that is adapted to each asset class and management model.

AP4's investments in listed equities and credits are subject to regular screening for violations of international conventions. If a company is identified in this process, a more in-depth analysis is initiated, followed by dialogue, which is AP4's main means of influencing companies. AP4 engages in dialogue with companies through its own management and through the Council on Ethics of the AP Funds. Read more about this on pages 36–39.

## Five implementation strategies

AP4 has five main implementation strategies for carrying out sustainability work in the investment portfolio:



## Focus areas in sustainability

### Corporate Governance

We take responsibility for contributing to the good development of the companies and better risk-adjusted returns. We address issues such as shareholders' rights, board composition and diversity, remuneration issues, transparency and aspects of business ethics such as corruption, as well as human rights.

### Climate & Environment

We identify systemic risks with global impacts on society, economies and expected returns. We include issues such as climate change, climate transition, resource efficiency, biodiversity and hazardous emissions.

#### 1. Measuring and reporting on sustainability

AP4 measures and reports externally on AP4's sustainability work. Transparent reporting is also something that AP4 expects from the companies and organisations in which AP4 is invested. AP4 continuously evaluates sustainability data for use in asset management strategies and in reporting.

#### 2. Integrating sustainability in investment processes

AP4 integrates sustainability factors in its investment decisions in a structured manner, tailored to each asset class and investment process. Sustainability is an important evaluation criterion for external asset management services used.

#### 3. Influencing as an owner, investor and societal actor

AP4 takes responsibility as an owner and investor by influencing companies through dialogues, as well as other investors and political decision-makers, on sustainability matters. AP4 works together with other investors to achieve greater strength in dialogues and other advocacy work. For AP4, active corporate governance is an effective tool for creating and safeguarding asset value over time, including

in relation to sustainability aspects.

#### 4. Reducing sustainability risks in the portfolio

AP4 works to reduce exposure to assets associated with elevated sustainability risks by making commercially based decisions. AP4 also excludes companies whose activities are not deemed to align with an exemplary interpretation of the international conventions that Sweden has signed or the international guidelines that Sweden supports. Convention-based decisions are not commercial in the sense that they are expected to contribute to higher returns. AP4 does not invest in securities issued by companies or countries that are subject to EU or UN sanctions.

#### 5. Investing in strong sustainability trends

AP4 makes thematic investments that contribute to and benefit from the sustainability transition. Understanding and analysis of various sustainability aspects can contribute to the return by identifying investment opportunities for AP4, such as specific sectors or companies that can be expected to contribute to and benefit from the transition to a more sustainable society.

#### Focus areas in asset management and sustainability

Some areas of sustainability have a systematic impact on an investment portfolio and it is therefore particularly appropriate for an investor to address these. Such areas are financially material and are also investable and therefore allow for a significant impact on the long-term risk and return characteristics of a portfolio. AP4 has established two focus areas of this kind: Climate & Environment and Corporate Governance.

#### Corporate Governance

Corporate governance is an explicit element of AP4's asset management strategy and is deemed to contribute to a good long-term return. Taking responsibility as an owner and pursuing active corporate governance is a tool for integrating sustainability aspects into asset management and is also deemed to be of financial importance to AP4 as an owner. The aim is to contribute to the development, improvement and responsible and transparent operation of the companies' activities. Through its corporate governance work, AP4 conducts dialogues with companies and with other owners and investors, exercises voting rights at general meetings and investor forums, and

works actively within companies' nomination committees, boards and investor bodies. Read more about our corporate governance work on page 30.

#### Climate & Environment

Climate & Environment is financially material and entails a systemic risk that affects the ecological, social and financial stability of all the world's economies and countries. There are significant risks – physical, regulatory, technological and social – associated with climate change to industries and companies and these can have a significant impact on asset values and the ability to generate long-term returns. Slowing climate change is therefore a prerequisite for stable economic growth and thereby for AP4's opportunities to successfully perform its mission over time. Read more about climate and the environment on page 40.

#### Targets, monitoring and reporting

AP4's sustainability reporting must be characterised by openness and provide objective and transparent information so that operations can be reviewed and evaluated externally. AP4 monitors and reports on sustainability work and target attainment in the annual report.

# Convention-based exclusions

**AP4 makes convention-based decisions on which assets we choose to not invest in – an important principle that forms the basis of how we integrate sustainability into asset management.**

AP4’s assessment of which assets the pension capital should not be invested in is based on the requirements of the AP Funds Act for exemplary management and on the international conventions and agreements that Sweden supports. These include, for example, the UN’s Universal Declaration of Human Rights and, with respect to the climate issue, the Paris Agreement. International conventions are often written to govern how countries are to act, not regulate individual companies’ operations. This means that sometimes there are different interpretations of whether – and in such case how – a given company is in violation of a convention. In cases where there is confirmed information that a company is in violation of a given convention, the Council on Ethics of the AP Funds may recommend that the AP Funds not invest in the company. AP4 also has its own sustainability screen to identify companies associated with serious violations

of international conventions. These sustainability-based exclusions are also removed from the DNP. In such way, a sustainability aspect has been included in the Board’s decisions on the benchmark portfolio for AP4’s operative asset management. If a decision pertains to a directly owned holding, AP4 has the opportunity to directly influence the portfolio. This pertains to equities as well as fixed income instruments. In cases where AP4 has invested in an actively managed mutual fund, AP4 evaluates the fund manager’s sustainability process and determines how likely it is that the manager will invest in a company that AP4 has excluded. AP4 requests an assurance from the manager that it only holds the asset in question as an exceptional case and informs the manager that holding an excluded company may mean that the fund management assignment is ended. The underlying holdings are then followed up on a regular basis by AP4.

## Return impact of sustainability decisions

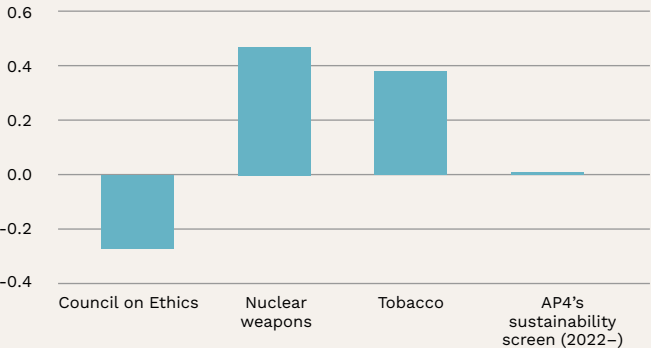
AP4 monitors the return impact of convention-based sustainability decisions over the evaluation horizon of five years, or from the start of the sustainability decision in the case of a period shorter than five years. A positive return contribution shows the effect of having opted out of these companies compared to the global equity portfolio’s stock market index.

Convention-based decisions are based on AP4’s interpretation of the Swedish state’s values and the conventions that Sweden has ratified. These decisions are therefore not business-based in the sense that they are expected

to contribute to returns. However, some decisions may also be subject to a commercial assessment, such as the decision not to invest in tobacco companies or certain individual companies based on the assessed level of risk.

Not owning companies with operations in nuclear weapons or tobacco has made a positive contribution to returns over the past five years. Companies that have been excluded by the Council on Ethics because of serious violations of conventions have performed relatively better than a global stock market index over the past five years.

**Return contribution of sustainability decisions over 5 years (2019–2023), %**



1) Refers to the accumulated return over 5 years, or less if the decision relates to a period shorter than 5 years. The return contribution is calculated on the basis of Global equities.

AP4 does not invest in:



**Nuclear weapons**

Nuclear weapons are classified as weapons of mass destruction, i.e. weapons which, if used, would bear a heavy toll on civilians. The Nuclear Non-Proliferation Treaty, signed in 1968, permits five nations to have nuclear weapons, while biological and chemical weapons are banned by UN conventions. At the same time, the five nations have committed themselves to reducing their nuclear arsenals and, over the long term, to entirely eliminating them. In the meantime, the five countries continue to update and modernise their nuclear weapons programmes. AP4 is of the opinion that this goes against the intention of the Non-Proliferation Treaty and decided in 2018 to not invest in companies with these types of operations.



**Tobacco and cannabis**

AP4 has decided to not invest in tobacco companies. Based on its mission to act in an exemplary way, AP4 believes that an exemplary interpretation of the WHO Framework Convention on Tobacco Control, which seeks to sharply reduce tobacco consumption, supports AP4’s decision to not have ownership in tobacco companies.

In addition to this and based on the UN’s conventions on narcotic preparations, the Council on Ethics of the AP Funds has recommended that the AP Funds not have ownership in companies active in cannabis. However, this decision does not pertain to companies that develop or sell cannabis products for medical or scientific purposes.



**Fossil-based companies not aligned with the Paris Agreement**

Both thermal coal and oil sands are energy sources with high CO2 intensity per energy unit. AP4 is of the opinion that these sources must be phased out as soon as possible, in line with the UN’s Climate Convention and the Paris Agreement. AP4 therefore does not invest in companies in which thermal coal or oil sands account for a significant equities of their sales.

AP4 has reduced the number of holdings in companies within the resource-intensive sectors of energy, power, raw materials and transport. AP4 has divested holdings in companies whose plans and goals are considered to be not aligned with the Paris Agreement.



**Cluster munitions and mines**

According to the UN’s Mine Ban Treaty and the Convention on Cluster Munitions, nations that have signed and ratified these treaties shall cease to produce, conduct trade in or use these types of weapons. The Council on Ethics has recommended that the AP Funds not have ownership in companies with operations in this area.



**Specific companies**

AP1–AP4 cooperate through the Council on Ethics of the AP Funds. In the event it is confirmed that an individual company is in violation of an international convention, the Council on Ethics may choose to engage with the company in a dialogue to bring about an improvement. If such a dialogue does not have the desired result, the Council on Ethics recommends excluding the company. Based on recommendations from the Council on Ethics, AP4 has excluded companies that have violated conventions on human rights, occupied territories, environmental impact and biodiversity. AP4’s own sustainability screen also excludes companies linked to serious violations of international conventions.

# Corporate governance – with a focus on long-term company development

AP4's work as an owner aims to generate the highest possible return over time with the goal that the companies' operations will develop and be conducted responsibly.

Active corporate governance is an effective tool for creating and preserving shareholder value over time. Within the corporate governance framework, AP4 works with matters such as board composition, capital structure, structuring of long-term remuneration programmes, diversity of human capital, the portfolio companies' work with sustainability matters and transparency in reporting. This work takes into account the views of the respective companies' stakeholders in order to best promote the company's long-term development, and in this work AP4 takes into consideration other owners' interests as well as what is best for the company in question.

## Owners and market participants

Well-functioning stock markets are fundamental for long-term

investors to be able to generate high and long-term sustainable returns. AP4 often works together with other owners and market participants through various cooperation initiatives and industry organisations, such as the Institutional Owners Association (IÄF), whose members consist of 18 major institutional investors in the Swedish stock market and which works to promote positive development of self-regulation in the Swedish stock market. Examples of international corporate governance organisations that AP4 is a member of include the International Corporate Governance Network (ICGN) and the Institutional Investors Group on Climate Change (IIGCC). The ICGN is a leading actor in establishing global standards for corporate governance and how owners should act. The IIGCC works to support responsible shareholders

in their efforts to jointly influence both companies and the wider world to embrace a faster transition of their operations and thereby slow climate change.

## Ownership policy – a guardrail

AP4's corporate governance work aims to create the most value for each individual company and is based on the assessment that is continuously made of each individual company's specific situation and on AP4's ownership policy, which can be read in its entirety on AP4's website. Many of the matters that were addressed ahead of and at Swedish companies' annual meetings in 2023 involved remuneration, capital structure and board work – matters that AP4 has worked with for many years. AP4 and the majority of Swedish owners want to see remuneration programmes with relevant and



clear performance requirements. As the complexity of board work is tending to increase, emphasis is put on the importance that boards are well-composed and that they have representation of members who have essential expertise and experience for the companies. Globally, AP4 has voted in favour of proposals that safeguard minority shareholder influence, such as the opportunity to submit proposals at general meetings, and which make it easier for shareholders to convene an extraordinary general meeting. AP4 also supports proposals for companies to increase the transparency and reporting of their sustainability work, for example how the companies are working to reduce their carbon dioxide emissions.

#### Corporate governance in Swedish companies

AP4's holdings in listed Swedish companies are characterised by fundamental active management, which has resulted in AP4 becoming a significant owner in a number of companies. During the year, AP4 was among the ten largest owners in more than 100 companies and among the five largest owners in around eighty companies. We closely monitor developments in these companies and maintain an ongoing dialogue with their boards and



**During the year, AP4 was among the ten largest owners in more than 100 companies and among the five largest owners in around eighty companies. AP4 closely monitors developments in these companies and maintains an ongoing dialogue with their boards and management.**

management. AP4's decisions and positions on corporate governance are based on an individual analysis of each company's situation and conditions for value creation.

In 56 of these companies, AP4 has participated on the companies' nomination committees and has a responsibility for evaluating the work and performance of the boards as well as for the succession within the boards.

Over time, AP4 has seen that the work load for boards of listed companies has grown in scope, complexity and time, which requires a greater work effort by directors and higher demands on experience and expertise. The recruitment of new members is usually based on a long-term succession plan and has a strong focus on the specific challenges and competence needs of the companies. Recruitment processes

are increasingly adopting a global perspective in order to find the most suitable candidates. Even the boards of smaller companies are becoming increasingly internationalised.

For many years, AP4 has advocated for at least one person from the underrepresented gender being included as a final candidate in nominations for new board members. This has yielded good results over time and has helped bring about a higher share of women on the company boards for which AP4 participates on the nomination committee. For the companies in which AP4 was represented on the nomination committee in 2023, the share of women directors was 38%. This level is higher than the average for listed Swedish companies overall, which was 36%. In 2023, the share of women among newly elected directors was 54%, which was higher than the previous year's figure of 39%.

#### Corporate governance in foreign companies

In foreign companies, AP4's share of ownership is typically less than 0.05%. This affects opportunities to exercise corporate governance as well as access to companies' boards and managements. Regardless of the size of AP4's ownership, as a responsible owner

it is important to vote at general meetings. AP4 votes on the basis of its ownership policy and taking into account differences in the laws and practices of local markets. Shareholders' rights vary from country to country; voting rights, for example, can often be more limited in certain countries than in Sweden.

#### Corporate governance in unlisted companies

AP4 invests in unlisted real estate companies, funds and private equity companies. AP4 strives to be a significant investor and is represented on a total of 76 investor bodies such as boards or Limited Partners Advisory Committees (LPACs), corresponding to 80% of unlisted investments in the portfolio.

#### Work on nomination committees

One of the most important duties for an active owner is to evaluate and make recommendations for elections of company boards. AP4 does this by serving on nomination committees, where a significant aspect entails evaluating the board's work and performance, and analysing and identifying the competencies and experience that are needed for each individual company's board. Analysing and identifying essential competencies



is one of an active owner's most important duties, and at AP4 the assessments are always grounded in the analysis that is continuously performed for each investment. In addition to the decisions that are customarily handled by nomination committees, AP4 works mainly with governance issues that are subject to a resolution by a general meeting of shareholders, such as capital structure, remuneration and incentive programmes, and strategic matters. The share of women among newly elected directors was 54% and was higher in 2023 than in previous years. Women accounted for 67% of the final candidates in the recruitment processes for company boards.

#### Voting at general meetings

AP4 prioritises general meetings of Swedish companies in which it has a significant shareholding or where AP4 is one of the company's larger owners, as well as general meetings at which a matter of a principle nature is addressed. When AP4 votes at general meetings of foreign companies, its focus is on issues related to transparent reporting and satisfactory handling of issues that pertain to climate matters, the environment, social aspects and corporate governance.

#### Voting at general meetings of Swedish companies

Through work on nomination committees ahead of the 2023 AGM season, AP4 contributed to 369 nominations of board members. During the year, AP4 considered around 70 proposals for employee incentive programmes. In some 30 cases, AP4 engaged the company in a detailed dialogue before its board adopted the proposal. In a dozen or so cases in which AP4 voted in favour of such proposals, the companies amended the proposals after receiving AP4's views. In two cases AP4 voted against the proposals, typically owing to insufficient – or the absence of – performance criteria. One proposal was submitted relating to an incentive programme for board members. Such proposals often have a short-term focus and, in addition, complex terms that could affect the integrity of the board members, which is why AP4 does not normally support such proposals. Since AP4 has consistently communicated this view, the number of proposals has decreased at the companies where AP4 is active.

AP4 usually votes in favour of authorisations for issues without preferential rights of up to 10%. AP4 supports larger authorisations only

in exceptional cases, where special reasons exist. Most shareholder proposals submitted to general meetings of Swedish companies have been of such an operational nature that AP4 has determined that a general meeting is not the right decision-making forum and has therefore voted against them. In certain cases it was determined that the proposal was not in the company's or shareholders' interests.

#### Voting at general meetings of foreign companies

AP4 voted against 22% of board recommendations pertaining to matters such as the election or re-election of directors. These mainly pertained to re-election of directors or a chair of a board committee that drafted proposals to the general meeting that were not in compliance with generally accepted corporate governance practice. It also applied to directors involved who failed to heed the urgings of previous general meetings for improvements of content and transparency concerning, for example, remuneration programmes for senior executives, where the directors' fees, composition and independence were not in compliance with best practice. With respect to board

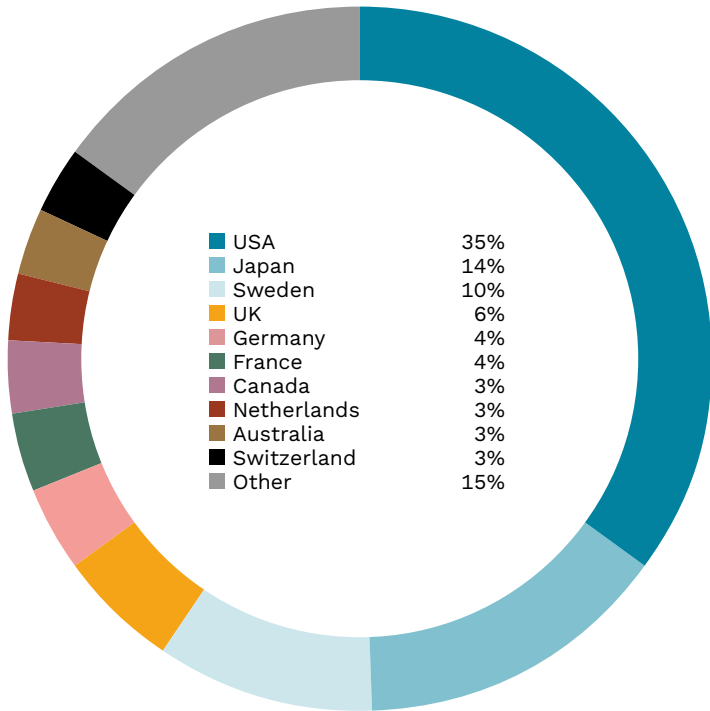
recommendations pertaining to variable remuneration programmes and takeover protections, AP4 voted against 31% and 62% the recommendations, respectively. With respect to shareholder proposals pertaining to climate matters, health, corporate governance, social aspects and human rights, AP4 voted in favour of the shareholder proposals in 80% of cases. Occasionally, similar shareholder proposals are submitted to several companies on different sustainability matters. In those cases where shareholders have proposed something that the company in question has already provided information about or has already achieved, or if the proposal is too detailed, AP4 has generally voted against the proposal. There are certain shareholder proposals, therefore, that AP4 does not support.



**The purpose of AP4's work as an owner is to generate the highest possible return over time with the goal that the companies' operations will develop and be conducted responsibly.**



**Voting by market, breakdown of AGMs**



**Work on nomination committees**

Work on nomination committees	2023	2022	2021	2020	2019
Swedish nomination committees on which AP4 has worked, number	56	46	40	39	37
- corresponding to % share of the number of companies in which AP4 was offered a seat on the nomination committee due to its ownership	93%	92%	85%	98%	-
Share of women on Swedish company boards where AP4 worked on the nomination committee, %	38%	38%	36%	38%	37%
Share of companies with final candidates of both genders where AP4 worked on the nomination committee, %	28% <sup>1)</sup>	50%	47%	52%	76%
Share of newly elected women directors on Swedish company boards where AP4 worked on the nomination committee, %	54%	39%	20%	44%	44%

**Voting at general meetings**

Voting at general meetings	2023	2022	2021	2020	2019
Voting at general meetings (annual and extraordinary) in Sweden, number	131	125	147	109	87
- corresponds to % participation at AGMs of AP4's total number of holdings in listed Swedish equities	74%	88%	69%	51%	47%
Voting at general meetings of foreign companies (annual and extraordinary), number	1,216	1,267	1,064	1,043	1,025
- corresponds to % participation at general meetings of AP4's total number of holdings in listed equities globally	100%	100%	77%	73%	67%

1) For many years, AP4 has advocated for at least one person from the underrepresented gender on each board being included as a final candidate in the recruitment of new board members. At those companies where new board members were proposed in 2023, all the final candidates were women at 45% of the companies. The proportion of companies with final candidates of both genders was 28%. The proportion of companies where all final candidates were men was 28%.

## Metrics and goals for the Corporate Governance focus area

GOALS	Participate on nomination committees by virtue of ownership stake	Interview all or certain board members in connection with board evaluations	Advocate for greater diversity among board members, especially in terms of gender balance	Exercise voting rights at Swedish companies' AGMs	Exercise voting rights at foreign companies' AGMs	Support initiatives that advocate for shareholders' rights and companies' work with sustainability
OUT- COME	<p><b>56</b> Number of nomination committees</p> <p><b>93%</b> Share of nomination committees on which AP4 has been offered a seat</p> <hr/> <p>One of the most important duties for an active owner is to evaluate and appoint a company's board. AP4 does this by serving on nomination committees. AP4 has chosen to refrain from taking a seat on a small number of nomination committees, for example because the company holding is being divested or in some cases when another institutional owner is deemed well suited for the work.</p>	<p><b>100%</b> Share of companies in which AP4 has interviewed all or certain board members</p> <hr/> <p>Typically all board members are interviewed. The chair of the board is interviewed to a special extent.</p>	<p><b>54%</b> Share of women among newly elected directors</p> <hr/> <p>The share of women among newly elected directors was higher in 2023 than in previous years.</p>	<p><b>131</b> Number of Swedish company AGMs at which AP4 voted</p> <p><b>74%</b> Number of Swedish company AGMs at which AP4 voted in relation to total holdings</p> <hr/> <p>AP4 prioritises general meetings of Swedish companies in which it has a significant shareholding or where AP4 is one of the company's larger owners as well as general meetings at which a matter of a principle nature is addressed.</p>	<p><b>1,216</b> Number of foreign company AGMs at which AP4 voted</p> <p><b>100%</b> Number of foreign company AGMs at which AP4 voted in relation to total holdings</p> <hr/> <p>When AP4 votes at general meetings of foreign companies, its focus is on issues related to transparent reporting and satisfactory handling of issues that pertain to climate matters, the environment, social aspects and corporate governance.</p>	<p><b>Achieved</b> Qualitative assessment</p> <hr/> <p>AP4 supports, among others, the Institutional Investors Group on Climate Change (IIGCC), the Transition Pathway Initiative (TPI) and Climate Action 100+ (CA100+), which strive to influence companies with the largest carbon emissions to take measures to reduce their carbon footprints.</p> <hr/> <p>Additional investor initiatives that AP4 is participating in are described on page 35.</p>

## AP4's sustainability partnerships

By collaborating with other investors in the area of sustainability and working in industry organisations, AP4 gains greater strength to influence companies toward change. Presented here are a few investor partnerships and industry organisations in which AP4 participates.



### Institutional Owners Association

The Institutional Owners Association (IÄF) works to promote positive development of self-regulation in the Swedish stock market. IÄF is one of the principals of the Association for Generally Accepted Principles in the Securities Market, which operates through a number of self-regulation bodies in the Swedish market, including the Swedish Securities Council, the Swedish Securities Council's self-regulation committee, the Swedish Corporate Governance Board, the Council for Swedish Financial Reporting Supervision and Swedish Financial Reporting Board. AP4 was a co-founder of IÄF in 2003 and is one of the association's 18 members.



### Investor Initiative on Hazardous Chemicals (IIHC)

The IIHC is an investor-led collaboration, coordinated through ChemSec, for joint advocacy dialogue with companies. It has over 50 institutional investors as active members. Its aim is to reduce the adverse effects of hazardous chemicals and the associated economic risks. Members maintain ongoing dialogues with the world's largest listed chemical companies. The investors are demanding greater transparency in company reporting, a public, time-bound phase-out plan and that the companies develop safer alternatives to hazardous chemicals.



### Transition Pathway Initiative

A collaboration led by investors with the mission to assess large companies' preparedness for the transition to a low carbon economy. Its company assessments provide support for other investor collaborations such as CA100+. AP4 collaborates with AP1, AP3 and AP7, which have a joint representative in the TPI's investor Steering Group.



### International Corporate Governance Network

Promote effective standards of corporate governance and investor stewardship worldwide to contribute to effective markets and sustainable economies. The ICGN was established in 1995.



### The Institutional Investors Group on Climate Change

A European investors membership body for cooperation on climate change issues and engagement with companies, politicians and other investors in dialogue.



### Climate Action 100+

An investor-led collaboration to engage in a dialogue and influence the listed companies that emit the largest amounts of greenhouse gases to take necessary action on climate change.



### Principles for Responsible Investments

The PRI is an organisation that works for responsible investment aimed at increasing the responsible action of companies and operators in relation to ethics and the environment. AP4 has been a signatory of the principles since 2007.

# The Council on Ethics of the AP Funds

The Council on Ethics of the AP Funds (the Council on Ethics) is a collaboration between AP1-AP4 with the guiding principle to use their joint strength to influence companies around the world to strive for sustainable value creation and transparent reporting.

The Council on Ethics cooperates on matters concerning companies that the AP Funds all have holdings in, with a particular focus on those outside Sweden. The Council on Ethics also cooperates with other international investors with a similar sustainability agenda, which provides additional, increased opportunities to influence for positive change and greater transparency in reporting. Through dialogue and talks, the Council on Ethics influences for positive change and thereby contributes to the AP Funds' long-term returns.

## Implementation of new strategy

During the year, the Council on Ethics has gradually begun implementing the new strategy and governance model adopted in 2022. Among other things, this means that a reinforced administrative office of three people is being established, enabling the Council on Ethics to gradually take over the operational

work from the board members of the Council on Ethics. The aim of the new strategy is to make more efficient use of resources and to create more scope for impact in a cost-effective manner. The Council on Ethics will become an even more effective complement to the sustainability work of the AP Funds and will be able to assist in those areas where cooperation provides the greatest benefits.

## Working methods of the Council on Ethics

The Council on Ethics works both proactively and reactively and so helps to prevent, remedy and inhibit incidents from occurring and contributes to positive sustainability development for companies and sectors.

## Reactive work

The Council on Ethics works reactively to influence companies to handle and remedy accidents and incidents that have already taken place. This is done through reactive

dialogues in which companies are influenced to – in addition to correcting things that have already taken place – also conduct more systematic sustainability work, such as for example implementing policies and routines, and increasing transparency in companies' public reporting. The Council on Ethics conducts reactive dialogues with companies to influence them and make demands for improvement. The focus of the dialogues is on urging companies to improve their policies, guidelines, implementation and follow-up as well as to transparently report on their work. An advocacy dialogue is often conducted over several years, and if a dialogue does not lead to a desirable result within four years, the Council on Ethics may recommend that the AP Funds exclude the company. However, this is viewed as a last resort, since there is a risk that the unsatisfactory conditions in question would likely continue. Each year the Council on Ethics follows

up companies that have been excluded, and if the conditions have been remedied, the Council may recommend that the AP Funds once again include the company in their investment considerations.

## Results of reactive work

At year-end 2023, the Council on Ethics' screening of 3,501 companies showed a total of 84 companies with a confirmed violation of an international convention or with a suspected risk of a violation. 3,426 companies passed the screening without remarks. At year-end 2023, active dialogues were being conducted with 54 of the 84 companies that had been identified with a confirmed violation or risk of violation through the screening. A violation of an international convention is considered to be confirmed when it has been verified and assessed according to a number of criteria, including the severity of the violation, the scope and opportunities to prevent the violation. How closely the company is involved in or associated with the violation, and the company's handling of the situation. At risk of violation pertains to cases which, following an analysis, do not meet all of the criteria for a confirmed violation, but where the severity of the violation is considered to be high by the Council on Ethics. This

also includes companies where, for example, a suspected violation is being investigated and where a dialogue has not yet been initiated as well as companies with which the Council on Ethics has engaged in a dialogue, the objectives have been achieved and the dialogue has been concluded, but where the risk is still assessed to be high.

## Dialogue objectives achieved

The Council on Ethics was engaged in 54 company dialogues at the end of 2023, and during the year a total of 36 stages were achieved in the dialogues that were conducted, of which 29 stages were achieved in dialogues that were active at year-end and 7 in dialogues that had been concluded in 2023. It also happens that the Council on Ethics is engaged in more than one dialogue with the same company. In such cases the statistics include the stages that have been achieved in all dialogues with the same company. The difference between the number of companies in active dialogue and companies identified in a screening is due to the fact that the screening also includes companies in which the Council on Ethics has concluded a dialogue but is still monitoring the company, and that the screening includes companies that are being investigated.

## Proactive work

The Council on Ethics' proactive work addresses complex sustainability challenges and systemic risks with the aim of contributing to positive change in identified sustainability areas. This helps companies improve their handling of sustainability in the value chain, prevent violations and incidents from taking place, and address relevant systemic risks. The work leads to reduced sustainability risk in the AP Funds' assets. The proactive work has resulted in a large number of companies implementing policies, processes and routines to better deal with environmental, social and corporate governance matters. As a result, over time sustainability has become a more integral part of the companies' work.

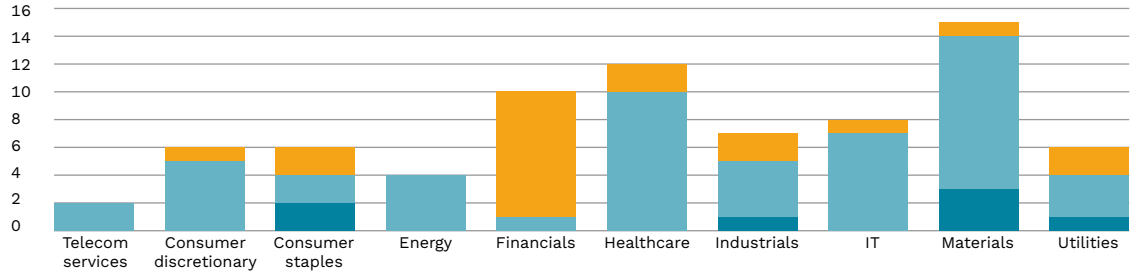
## Proactive focus areas and proactive projects

The Council on Ethics' prioritisations and choices of proactive focus areas are based on, among other things, the risks and opportunities for negative impacts on people and the environment that have been identified in the Council on Ethics' business intelligence analysis, the direct and indirect financial exposure for the AP Funds, and the assessed opportunities for the Council on Ethics to make a positive difference.

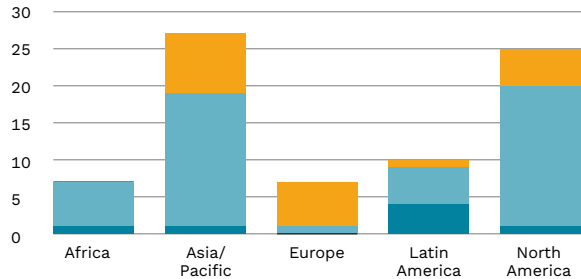
## Breakdown of reactive company dialogues

Breakdown of the Council on Ethics' reactive company dialogues in 2023 by region, sector and sustainability area, where it is suspected or confirmed that a violation of an international convention occurred.

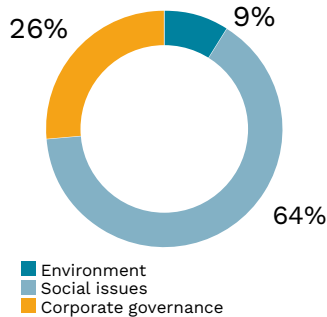
**Dialogues by sector, number**



**Dialogues by region, number**



**Dialogues by sustainability area**



Screening of the AP Funds' holdings	2023	2022
Number of screened companies in the AP Funds' portfolios	3,510	3,202
- of which, confirmed violation	18	28
- of which, at risk for violation	66	83
- of which, with no remarks from screening	3,426	3,091

Outcome of number of companies in active dialogue	2023	2022
Number of companies in active dialogue at start of year	86	81
Companies with concluded dialogue with objectives achieved	-7	-5
Companies with concluded dialogue for other reasons <sup>1</sup>	-5	0
Companies with which new dialogues have been opened during the year	3	16
Companies recommended for exclusion by the Council on Ethics	-3	0
Changes in the AP Funds' holdings	-20	-6
Number of companies in active dialogue at end of year	54	86

1. Number of companies with concluded dialogue for other reasons, such as the company having sold the business concerned.

## Proactive work and projects of the Council on Ethics

The proactive advocacy of the Council on Ethics addresses complex sustainability challenges and systemic risks, and helps to improve companies' awareness and management of these risks. The work is given direction by focus areas and there were five new focus areas adopted in 2023. Proactive work is carried out based on these focus areas and supported by a systematic process. The objective is to contribute to a positive shift in the complex sustainability challenge being addressed. This is a long-term venture and a proactive project usually lasts at least three years.

Focus area	Description of focus area	Projects within focus area
<b>Antimicrobial resistance (AMR)</b>	Antimicrobial resistance (AMR) occurs when bacteria, viruses, fungi and parasites no longer respond to medicines, making infections more difficult to treat and increasing the risk of disease spread, severe illness and death. Drug-resistant infections are rising globally, both in humans and in animals, and can have significant consequences for global health and the economy. The AP Funds and the Council on Ethics believe that AMR is a significant systemic risk for both society and the AP Funds' portfolios over time. The World Health Organization (WHO) identifies AMR as one of the top ten global public health threats facing humanity. The Council on Ethics works to increase knowledge and awareness about the risks of AMR and to influence positive change through dialogues with relevant companies.	The Council on Ethics works to increase awareness among both companies and investors about the risks of AMR. Through Farm Animal Investment Risk and Return (FAIRR), the Council on Ethics is involved in two investor projects. One project targets listed companies within the <b>animal pharmaceuticals industry</b> and the other focuses on listed <b>fast food restaurants</b> . The latter are major buyers of animal products, where problems include the overuse of antibiotics. Both projects aim to encourage the responsible use of antibiotics in line with WHO guidelines throughout the animal protein value chain and to increase public transparency from companies in this regard.
<b>Child labour and forced labour</b>	Child labour and forced labour occur all over the world and are particularly common in certain industries and regions. Companies can be exposed to this in their direct operations or through their supply chains. Identifying, preventing and mitigating a company's negative impact on human rights is responsible business practice. The Council on Ethics strives to prevent the exploitation of workers and works proactively at industry level as well as with individual companies that have significant negative impacts to bring about systemic changes concerning child labour and forced labour.	The Council on Ethics conducts dialogues with companies in the <b>construction and textile industries</b> on forced labour. Forced labour in its various forms is a risk in all countries. Demand for low-paid, flexible labour is often filled by marginalised groups. Poverty and limited economic opportunities among low-skilled workers, especially among immigrants with poor language skills, often lead them to accept employment in abusive conditions. The construction and manufacturing industries are considered to be particularly vulnerable to the use of forced labour.

Focus area	Description of focus area	Projects within focus area
<b>Climate</b>	Climate change is deemed to constitute a serious systemic risk with a significant impact on the assets of the AP Funds and a negative impact on current and future generations. The scale of the climate transition means that the Council on Ethics needs to prioritise and focus its work to ensure that it achieves the best possible effect. The work will also complement and reinforce the climate-related work conducted by each AP Fund. The Council on Ethics is prioritising two areas going forward: the green transition of emissions-intensive industries and the transformation of mining.	Within <b>Mining 2030</b> , the Council on Ethics is working with other investors, industry organisations, companies, the UN and PRI to achieve a responsible transition in the mining industry. A first step is to map the supply and demand of critical minerals and metals, the risks at different deposits, as well as which industry standards represent best practice and whether these can be strengthened to address the risks identified. One project within CA100+ relates to the <b>transition in emission-intensive industries</b> and encouraging those operating in these industries to work together and to develop action plans that enable the green transition. In a project on <b>biodiversity and food production</b> , the Council on Ethics is conducting dialogues with companies in the food value chain. The focus is on the companies' strategies for functioning ecosystems, biodiversity conservation and halting deforestation.
<b>Tech companies and human rights</b>	Online platforms and big tech companies are playing an increasingly important role in society. This brings many opportunities but also presents several human rights challenges. The risks identified relate to complex issues such as the processing and commercialisation of personal data, privacy and freedom of expression, as well as to the impact on democratic systems and the fostering of extremism and terrorism. In many cases, these risks can be amplified by the business models, corporate culture and remuneration structures of the companies concerned.	The Council on Ethics runs a global collaborative project, <b>Tech companies and human rights</b> , with institutional investors who use dialogue to influence a number of large tech companies to make improvements. The companies need to manage risks to human rights and social impact in order to ensure long-term sustainability. The internet and social media have become part of economic and social society and are used for, among other things, promoting human rights, democracy and an open society, but they also pose sustainability challenges on issues such as the processing and commercialisation of personal data, terrorism and election rigging. The goal is that the companies will strengthen and adapt their sustainability work surrounding human rights, so that their operations will be conducted in line with the UN's Guiding Principles on Business & Human Rights (UNGPs).
<b>Water</b>	There is a serious global shortage of water resources. Having access to enough water of good quality is essential for everything from health and sanitation to food production, power generation and many other industrial processes. Water is also closely related to and affected by other global challenges, including climate change, biodiversity loss and forced migration. How this resource is managed and valued can have major consequences for both society and the economy. Water scarcity is therefore a pressing global challenge, with significant implications for companies and investors.	The Council on Ethics is working on two water projects, one to protect and value freshwater systems and the other to phase out harmful chemicals. In its <b>Valuing freshwater</b> project, the Council on Ethics is participating in the Ceres Valuing Water Finance Initiative. Through this, investors are engaged in dialogues with 72 companies with large water footprints. The aim is for companies to see water as a financial risk and take appropriate action and ensure that freshwater systems are better protected. The focus areas here are: water quantity, water quality, ecosystem protection, access to water/sanitation, governance review and lobbying. In the <b>Hazardous chemicals</b> project, the Council on Ethics participates in the Investor Initiative on Hazardous Chemicals (IIHC), which focuses on the risks of hazardous chemicals to global health and the environment. With the support of ChemSec, the Council on Ethics and other investors conduct dialogues with chemical companies around the world to increase the transparency of data from these companies and to push for the phasing out of "perpetual chemicals".

# Focus area: Climate & Environment

Climate & Environment is a focus area for sustainability in AP4's asset management activities. The focus area includes climate change and climate adaptation, as well as areas such as biodiversity, resource efficiency and waste.

Climate & Environment is financially material and entails a systemic risk that affects the ecological, social and financial stability in both the global economy and in individual countries. Sectors and companies with links to Climate & Environment are exposed to significant risks and opportunities – physical, regulatory, technological and social. These risks could have a substantial impact on asset values and opportunities to generate returns over the long term.

## The climate transition

AP4 supports the Paris Agreement and the more ambitious Swedish environmental objective to achieve net zero GHG emissions (CO<sub>2</sub>e) by 2045. AP4's portfolio and investments support these goals. In 2023, CO<sub>2</sub>e emissions were

reduced by a further 11%. AP4 has reduced CO<sub>2</sub>e emissions for the listed equity portfolio by 65% since 2010. AP4's target is to further cut emissions in half from the 2020 level by 2030, with the ambition to achieve net zero emissions by 2040 at the latest.

AP4 measures and reports CO<sub>2</sub>e emissions in accordance with joint guidelines used by the AP Funds. These pertain to listed equities, which made up 57% of AP4's portfolio at year-end. In addition, AP4 also reports emissions for the unlisted real estate portfolio, which accounted for an additional 9% of total fund capital. Since 2023, AP4 measures and reports CO<sub>2</sub>e emissions for credits, which accounted for 4% of the fund capital. AP4 is working continuously to broaden its measurement and

reporting to cover an even larger share of the portfolio as data with sufficient coverage and quality becomes available.

## Investments in strong sustainability trends

AP4 continuously analyses sustainability trends and developments in various sectors. The different asset management units actively seek out investments that they believe will contribute to and benefit from the transition to a sustainable society. The goal is to make good investments from both sustainability and financial perspectives. Based on the thematic sustainability analysis, during 2023 AP4 made new investments amounting to a total of SEK 7.6 billion. These investments consisted primarily of

## The AP Funds supplement common metrics for reporting carbon footprint

### CO<sub>2</sub>e emissions, MtCO<sub>2</sub>e

Scope 1+2 **0.84**

Scope 3 **1.69**

From 2023 onwards, the AP Funds supplement the common metrics for reporting carbon footprint by also including the indirect emissions of the portfolio companies in the value chain (Scope 3). At the same time, there is a move from measuring emissions based on the share of ownership in each company to measuring emissions based on the share of total company value (Enterprise Value Including Cash – EVIC). Allocating emissions relative to EVIC means that creditors are also allocated their share of a company's emissions.

Common metrics showing the carbon footprint of investments were first introduced in 2015 and have since undergone continuous development. The AP Funds welcome the rapid development of how companies and investors can

measure and report climate risks. Achieving transparency and the reporting of climate risks among companies and investors are key elements in the AP Funds' sustainability work.

Carbon footprint measurement is fraught with challenges. This is particularly true of Scope 3, which is largely based on uncertain estimates, and double counting can occur when Scope 3 figures are summarised across an investment portfolio. Scope 3 can be useful as an estimate of climate risk exposure in a value chain.

AP4 will report the emissions of the listed equity portfolio according to the new guidelines. To maintain the measurement history, emissions are also reported according to the previous measurement method. Annual carbon footprint reporting can be found on pages 96–98.





**Companies whose plans and goals are considered to be not aligned with the Paris Agreement's goals have been divested from the portfolio.**

new commitments in the unlisted portfolio. Decarbonisation in energy systems and cleaner industry were major investment themes during the year. The fundamental global equity management invests in a thematic portfolio of niche companies in a number of environment-related themes such as energy transition with a focus on fossil-free mobility, hydrogen gas, carbon sequestering and recycling. AP4 has also made new investments in listed Swedish companies on the theme of cleaner industry and has participated in new share issues in the health sector, which support the global goal of Good health and well-being. Thematic investments are based on an analysis that AP4 conducted for the first time in 2018. AP4 has been implementing and monitoring thematic investments since 2020. A comprehensive update to the thematic analysis was completed in early 2023. The analysis was

based on a broad analysis of external factors to identify megatrends and investment themes covering around 90% of global greenhouse gas emissions. The following five main investment themes were identified:

- Decarbonize the energy system
- Clean up industry
- Fossil-free transport
- Protect the biosphere
- Green buildings and infrastructure

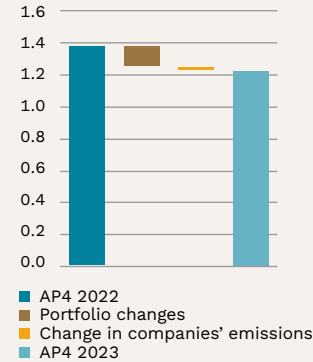
Read more about the thematic analysis on page 44.

**Influence as owner**

Over time AP4 has reduced the carbon footprint of its portfolio through portfolio changes. To achieve the climate goals, the companies that AP4 invests in must also reduce carbon emissions in their own respective operations. In its ownership role AP4 influences companies and cooperates with other investors to broaden knowledge about how the climate issue can be addressed in the asset management operations. AP4 also engages in dialogues with political decision-makers to create conditions for the climate transition. One example of an investor collaboration in which AP4 participates is Climate Action 100+, which uses investor dialogues to

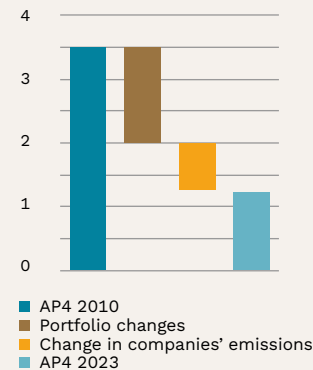
influence companies to reduce their greenhouse gas emissions. Another is the Transition Pathway Initiative (TPI), an investor-led collaboration that builds up a public database based on companies' reporting in line with the Paris Agreement and assesses the progress of each company in their green transition. This work is conducted with support from an independent partner, the London School of Economics. AP4 supports the TPI's work and is a member of the TPI's investor Steering Group. In 2022, AP4 joined the ESG Data Convergence Initiative, an industry coalition of private equity investments for coordination and cooperation regarding standardised reporting of sustainability data. AP4 frequently engages companies in a dialogue within the framework of its international investor partnerships or directly together with other investors. AP4's CEO and a number of colleagues are active participants and speakers at various investor and sustainability conferences.

**Change in CO2e emissions 2023, MtCO2e**



The portfolio's emissions decreased by 11% in 2023. Of the emissions reduction in 2023, 9 percentage points were attributable to the fact that AP4 has reduced the portfolio's carbon emissions through portfolio changes and 2 percentage points to the reduced emissions of the companies.

**Change in CO2e emissions 2010–2023, MtCO2e**



Since 2010, AP4's carbon emissions have decreased by 65%. Overall this means that AP4's carbon footprint is approximately 59% lower than for a broad global equity index. Of the emissions reduction since 2010, 43 percentage points are attributable to the fact that AP4 has reduced the portfolio's carbon emissions through portfolio changes. Companies' emissions reductions over the same period accounted for a reduction of 22 percentage points. Achieving the climate goals going forward requires that the companies that AP4 has ownership in continue to reduce carbon emissions in their own respective operations.



# Prerequisites for the climate transition

The key to a successful climate transition is the rapid expansion of a fossil-free energy system. This will require significant investment in the generation, storage and distribution of fossil-free electrical energy. Access to reasonably priced energy is a prerequisite for maintaining a standard of living that makes the climate transition socially acceptable and therefore politically feasible.

The last hundred or so years of industrialisation and development of society have increased the global temperature by approximately 1°C. The current Nationally Determined Contributions to reduce carbon dioxide emissions are not enough and the world is heading towards a temperature increase of 2°C or significantly more by 2100. With rising temperatures and increased risk of extreme weather events causing widespread damage to nature and people, the cost of not acting quickly enough is far too high.

AP4 analyses the climate transition to identify what needs to be prioritised if the world is to successfully meet its climate

targets and achieve climate neutrality. This analysis represents a key tool for AP4's climate scenario analysis and its thematic sustainability analysis and it also provides the basis for individual investment decisions in the asset management organisation.

## Focus on fossil-free electricity

Fossil-free electricity is the driving force in the green transition. For the transition to be made successfully, the production and distribution capacity of fossil-free electricity needs to be expanded at least at the same rate as energy from fossil fuels is phased out. Achieving net zero

emissions by 2050 will require the massive expansion of clean energy technologies, major investment in increasing energy efficiency and a significant reduction in the energy supplied by fossil fuels as early as 2030.

## Climate target a priority

One conclusion is that the key approach to the transition is to focus on materiality and the actions that provide the greatest benefit. The climate target must be prioritised if the transition is to succeed. If we do not prioritise the climate target, the transition risks being crowded out by other interests and objectives.

**Link to economic growth**

For the transition to be politically and socially acceptable, it needs to take place while preserving adequate economic growth. Energy use is linked to economic growth and global energy demand is expected to continue to rise.

**Political governance necessary**

At an overall level, politicians have a major responsibility to implement effective policies. Carbon pricing is required in order to accelerate the transition by providing a strong incentive for everyone to reduce carbon dioxide emissions in those sectors where scalable substitutes exist, particularly in electricity and heat generation. Simplifying permit processes to enable the expansion of a fossil-free energy system is another good example.

Tax relief, positive incentive schemes and international trade agreements are needed to promote the development of scalable climate-friendly alternatives in sectors where these do not yet exist, for example in the most emissions-intensive commodities such as steel, chemicals and fuels. Green hydrogen and carbon storage are possible examples.

**Sensible use of fossil energy during the transition**

Fossil fuels have a role to play in the transition process. What is most important is to focus on using those fossil fuels that are the most efficient and least harmful to extract. Natural gas can play a key role as a flexible source of energy in a more fluctuating electricity grid. The high dependency on coal needs to be reduced and phased out as soon as possible, however, as does the use of unconventional oil and gas.

**Support for vulnerable regions**

Developing countries and regions facing particular challenges need to be given the conditions and specific support they need to be part of the transition, including by securing access to fossil-free energy for all. The conditions for transition vary between countries, regions and communities, which is why targeted transition support is needed.

**Long-term, active ownership important for the climate transition**

Publicly listed ownership of fossil assets is decreasing but this is only a portion of the total amount of fossil ownership. A significant proportion of fossil fuel

assets – coal in particular – is directly owned by governments or by unlisted, less transparent companies. If listed companies divest their fossil fuel operations, there is a risk of these being transferred to unlisted, less transparent companies, which neither solves the climate problem nor contributes to the climate transition. Responsible, long-term owners have an important role here. Many of the companies that currently have a large carbon footprint will be important for the transition. International owners together play an important role in exerting influence to ensure the transition is as effective as possible. Investors can define thresholds for unacceptable activities, such as the exploration and new exploitation of coal and oil. AP4 believes that systematically divesting from these companies is neither taking responsibility nor making a constructive contribution to the transition.

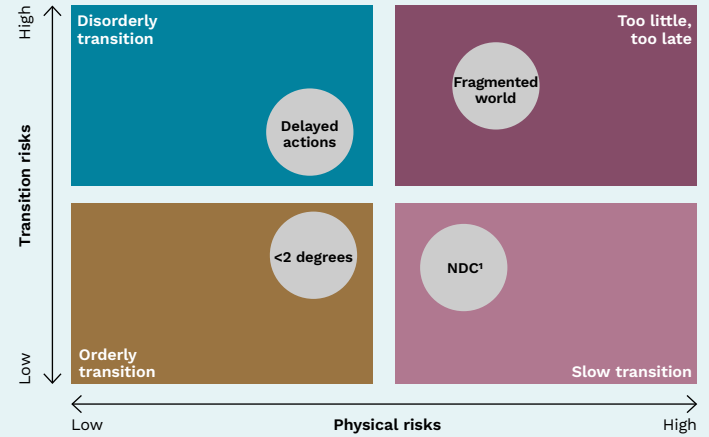
**Updated climate scenario analysis**

As part of AP4’s asset management structure, an annual climate scenario analysis is performed, where AP4 examines the potential impact on macroeconomic development in the medium term. The analysis serves multiple purposes: firstly, climate risks are assessed based on the scenario analysis, as shown in the TCFD tables on pages 99–100, and secondly, it aims to provide a basis for how AP4 integrates climate aspects in its investments.

The analysis examines both the risks associated with the climate transition and the physical risks resulting from a rise in temperature.

The earlier the transition takes place, the lower the physical risks and vice versa. In the medium term, the transition risks dominate. The analysis is based on scenarios for temperature increases, carbon emissions and carbon pricing, leading to consequences for the macroeconomy and ultimately the value of assets.

The most obvious risk scenario is stagflation resulting from a negative supply shock. The climate transition is a force that will have a different impact both between and within sectors. AP4 sees good reason to be proactive in the transition from a risk and return perspective.



1. NDC stands for Nationally Determined Contribution – national climate action plans.



**MIKAEL ANVEDEN**  
 Head of Portfolio Analysis  
 MSc Engineering Applied  
 Mathematics/Physics, CEFA  
 Worked at AP4 since 2022

**AREA OF RESPONSIBILITY:**  
 Mikael is responsible for the Portfolio Analysis unit. Its main task is to provide analytical support to the different areas of the portfolio. Responsibility for AP4's ALM analysis, which was updated in 2023.

# Thematic sustainability analysis

AP4 continuously analyses sustainability trends and seeks out investment opportunities that are expected to contribute to, and benefit from, the transition in the long term and which also provide a good expected return. Investments with a specific focus on the climate transition are developing at a rapid rate and this year's thematic analysis has provided AP4 with the latest knowledge and refined tools.

AP4's thematic sustainability investments are based on an analysis that AP4 first performed in 2018 and subsequently updated in 2023.

"It has both developed our knowledge and provided refined tools for our asset management organisation. Both these aspects are important for our ongoing work to identify good, well-balanced thematic sustainability investments," explains Mikael Anveden, Head of Portfolio Analysis at AP4.

The thematic analysis update was based on a broad analysis of external factors. The initial phase identified the megatrends that represent a spectrum of events in areas such as consumer behaviour and technology, as well as key trends such as greenhouse gas mitigation and biodiversity loss.

"These trends change at different rates and have different

impacts on the climate leading up to 2030, which is the horizon we have chosen to focus on in this analysis. We therefore began by discussing and ranking relevant megatrends based on their significance for the climate in 2030 and the rate of change of the trend itself," continues Mikael Anveden.

The most relevant megatrends were then summarised and grouped into five investment themes, with each theme accounting for a large proportion of the carbon emissions in society. Together they account for around 90% of global emissions. The following investment themes were selected:

- **Decarbonize the industry:** the smart, efficient and flexible production of fossil-free energy
- **Clean up industry:** the production, use and recycling of climate-friendly materials and products

- **Decarbonize transport:** efficient and sustainable passenger and freight transport
  - **Protect the biosphere:** the sustainable management of land and water, agriculture, forestry and biodiversity conservation
  - **Green buildings and infrastructure:** the climate-friendly design, construction, use and recycling of buildings and infrastructure
- Specific areas offering opportunities for AP4 to invest were then compiled, based on each of the investment themes identified.

The individual investment areas change over time and may be more or less mature. AP4 has therefore developed a framework for the active and continuous evaluation of the investment areas.

"Two factors came into play when prioritising the investment areas. One is attractiveness, defined as market size, growth and

regulatory headwinds/tailwinds.

The second is investability, defined as technological maturity, and is linked to relevant megatrends and expected capital inflows. Their importance for the climate transition is also key, of course," Mikael emphasises and continues:

"We remain focused on the areas where we have been making investments for several years, such as wind and solar power, but we have also identified interesting areas to monitor going forward. Examples of these include biomaterials from wood and green metals."

As a result of its thematic analysis work, AP4 has investment areas to work on that are highly topical and still relevant.

"It is important to find a way to continuously monitor and update the underlying investment areas. We have created an annual wheel

for our thematic analysis work and we have established a new working group that is responsible for monitoring the themes and training the organisation."

The work now continues to develop knowledge and evaluate specific investment opportunities. Technology is developing at a rapid pace and the cost of a particular technology is usually critical to its success.

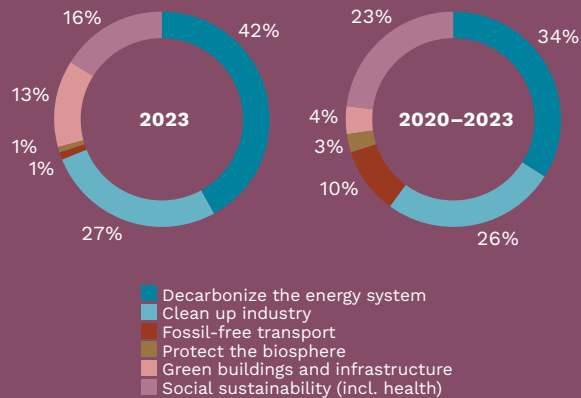
"Here we are closely following developments in areas such as hydrogen production, energy storage and carbon capture. Wind and solar are part of the foundation for the climate transition, but we want to look at the whole picture," concludes Mikael.

## Thematic analysis

The thematic analysis focuses on understanding which value chains are affected and which are expected to be the winners and losers in the sustainability transition. The thematic analysis underpins all investment processes, forms the basis for fundamental selections in resource-intensive sectors and also provides input to help identify dedicated thematic investments.

### Breakdown of thematic sustainability investments, %

In 2023, thematic investments were made totalling SEK 7.6 billion. During the period 2020–2023, AP4 has made investments totalling SEK 36.8 billion.



## Investment themes



### Decarbonize the energy system

Smart, efficient and flexible production of fossil-free energy

- Solar and wind power
- Energy storage



### Clean up industry

Production, use and recycling of climate-friendly materials and products

- Water treatment and infrastructure
- Waste management
- Green metals
- Biomaterials from wood



### Social sustainability

Social sustainability (including health) supports, among other things, the global goal of Good health and well-being

- Research and development within the health sector
- Diversity and inclusion



### Decarbonize the industry

Efficient and sustainable passenger and freight transport

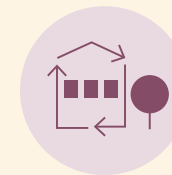
- Electric vehicles
- Alternative fuels



### Protect the biosphere

Sustainable management of land and water, agriculture, forestry and biodiversity conservation

- Sustainable agriculture and food production



### Green buildings and infrastructure

Climate-friendly design, construction, use and recycling of buildings and infrastructure

- Climate-neutral construction
- Green steel & cement



**JULIA RIPA**  
Senior Analyst  
M.Sc.in Engineering  
Mathematics  
Worked at AP4 since 2019

**AREA OF RESPONSIBILITY:**  
Julia works mainly on building sustainable equity strategies based on large ESG datasets within the global equity portfolio. This includes analysing data to identify potential investments with a specific sustainability theme, such as biodiversity.

# Biodiversity

**Biodiversity loss is due to the overconsumption of natural capital and the destruction of the Earth's resources, which restricts economic growth. The negative impact of this has serious consequences for both people and the environment.**

Companies and their value chains are increasingly impacted by biodiversity loss, both through production disruptions and potential regulatory changes. AP4 continuously monitors developments in the field of biodiversity and works to identify tools and analysis models that make it easier to integrate biodiversity in investment decisions. AP4 has also identified "Living biosphere" as a thematic investment area.

"Sustainability data and analysis tools for biodiversity are not as well developed as equivalent tools for measuring the climate transition. There is no standardised method for measuring biodiversity and producing data, which makes integrating biodiversity in investment decisions a challenge," explains Julia Ripa, Senior Analyst at AP4.

There are many reasons for this. "Biodiversity is a combination of different local problems rather than a global challenge. If we compare this with climate investments, for example, greenhouse gas emissions in one part of the world have roughly the same impact as the same amount of greenhouse gas emissions in another part of the world. When it comes to biodiversity, however, nature can be different even at local level. The same impact can therefore have very different effects, depending on where it takes place. For example, a biotope in one part of the world may be sensitive to a particular activity, while another biotope in another part of the world is not nearly as sensitive."

Another reason is that the concept of biodiversity covers several different subdivisions, such as deforestation, freshwater and

marine life. This also increases the complexity of measuring and comparing companies' impact on biodiversity and their dependence on natural resources.

A big part of the problem also lies within the companies' value chains, which are often complex and involve a large number of suppliers at several different stages all over the world.

"It is a challenge for companies and investors to have full control and knowledge of all stages and subcontractors in the value chain. For us as investors, it is important to include the value chain in the company analysis so that we can fully understand a company's risk," explains Julia.

AP4 has mapped the data available for biodiversity and this has resulted in two conclusions. No data tool is currently developed enough to be used for biodiversity

investments. This situation is developing quickly, however.

Some of the data sources may have a high level of detail, but their coverage then tends to be less broad and they often focus on a single industry. Conversely, if the coverage is greater, there is a lack of precision.

"We want to support those companies that are doing the most to reduce their impact and dependence on nature, in every sector and in every country. We believe that most industries are important for the future and so we do not want to divest from an entire industry. We hope that data providers will listen to and work with investors and also with each other. This is a complex and critical area and collaborating on this will help us to find sustainable solutions for the future," concludes Julia.

## What AP4 does

This field is developing rapidly and it is important that we continuously analyse data and investment opportunities within biodiversity so we are ready to take positions when the opportunity arises. We want to make investments and show that we are at the forefront of sustainable investments, where biodiversity is today a natural element.

We are also analysing the possibility of constructing an investment strategy within subcategories of biodiversity. This would make use of more detailed data sources with lower coverage.

We also want to push our advocacy, which is a key part of our biodiversity work. We want to encourage companies to start reporting biodiversity data and to reduce their impact and dependence on nature.

We have made a contribution in the market during the year by participating in the debate on biodiversity investments. Investors play a key role in clarifying the type of data that is needed and helping data providers to ensure that the data is tailored to the needs of investors.

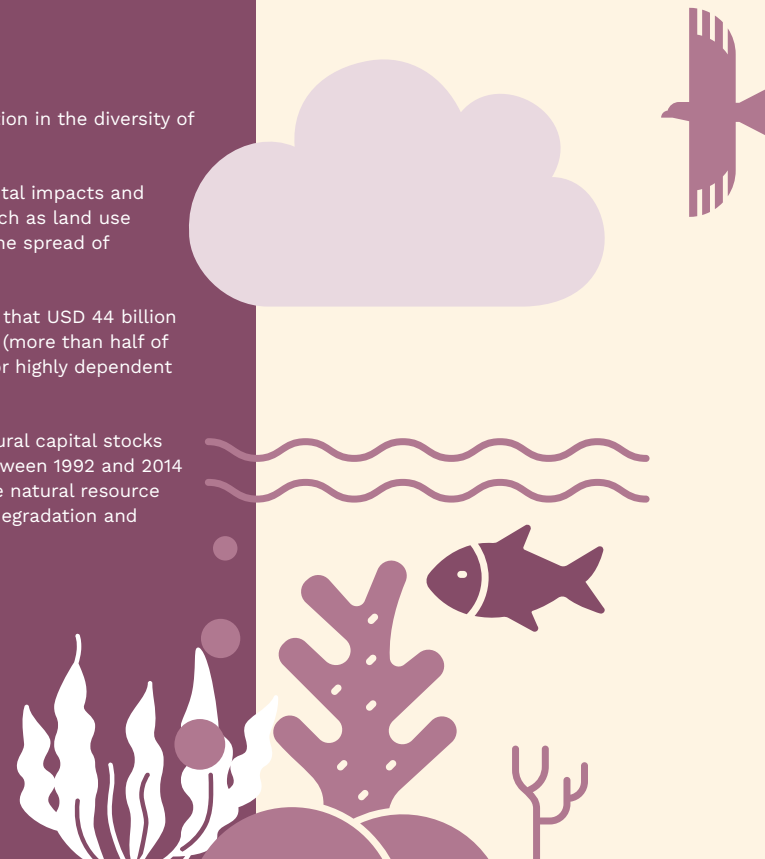
## Biodiversity loss

Biodiversity loss is a reduction in the diversity of species in an ecosystem.

Causes include environmental impacts and a range of other factors, such as land use conversion, pollution and the spread of invasive species.

The OECD (2021) estimates that USD 44 billion of economic value creation (more than half of global GDP) is moderately or highly dependent on nature.

The per capita value of natural capital stocks reduced by 40 per cent between 1992 and 2014 as a result of unsustainable natural resource extraction, environmental degradation and pollution.





**PONTUS LIDBRINK, CFA**  
 Head of Thematic Strategies  
 & Implementation  
 M.Sc.in Engineering Physics  
 B.Sc. in Business  
 Administration  
 Worked at AP4 since 2009

**AREA OF RESPONSIBILITY:**  
 Pontus works mainly with overall responsibility for the management of AP4's global equity portfolio. This includes managing AP4's internal systematic strategies, external fund investments and trading in equities.

# Climate strategies in the global equity portfolio

AP4 integrates climate strategies for all investments in the global equity portfolio. These strategies are tailored to the conditions of the different sectors and sub-portfolios. The aim is to reduce the climate risks of the portfolios, contribute to the climate transition and provide a good return to the pension system.

Sectors of particular importance to the climate transition include energy, power generation, raw materials and transport. AP4 therefore performs fundamental equity management for these sectors.

"We focus on these high-emissions sectors and select the companies that we believe will both provide a better return than their benchmark index and contribute to the energy transition. We invest in companies that have plans and targets that are aligned with the Paris Agreement," explains Pontus Lidbrink, Head of Thematic Strategies and Implementation, and continues:

"This results in a much more concentrated portfolio, where AP4 increases its shareholding in the companies we choose to continue to be invested in, which provides greater opportunity for influencing the companies to make the transition. For other sectors in the internally managed global equity portfolio and for AP4's external fund investments, companies

are instead selected using equity strategies based on quantitative factors.

"We have been making this type of investment since 2012 and have developed and broadened these strategies as a proportion of the portfolio. The strategies we have chosen have helped us to cut the portfolio's carbon emissions by more than half, but that is not enough for us. Our goal is to achieve net zero in the portfolio by 2040 and to halve our emissions again by 2030, measured from 2020."

In this work, AP4 uses both traditional metrics for climate investments, the companies' own direct emissions (Scope 1) and their indirect emissions from the purchase of energy (Scope 2).

"We also use forward-looking carbon dioxide metrics to find companies that already have climate plans in place and have begun their journey of change. We do this using a scenario analysis for carbon pricing as well as assessments of how well

companies are aligned with the 2-degree target. Based on this information, we create a 'sustainability screen', or AP4 Alignment score, which we use to build our equity portfolios," explains Pontus.

## Scenario analysis for carbon pricing

Achieving the environmental objectives set requires the gradual phasing out of burning fossil fuels through taxation. Sweden and the rest of the EU already have a carbon tax, but this is not the case in much of the rest of the world.

"If the global temperature increase is to be kept below 2 degrees, a carbon price of USD 70–140 per tonne of carbon dioxide is needed. In our equity models, we assume an increasing carbon price, depending on the sector and countries in which the companies operate, and then adjust their future margins accordingly. We then reduce our holdings in those companies that have a large negative impact on their margins."

## Adapting to the 2-degree target

Another important component is how well companies and their operations are aligned with the 2-degree target.

"At AP4, we use a developed metric for the companies' estimated future emissions relative to a carbon budget for each individual company that will keep the global temperature increase below 2 degrees. We also take into account in this assessment which companies are most essential to the climate transition. When assessing individual companies, we look at their future emissions targets and consider whether they are realistic. We also monitor how companies have adjusted their emissions historically and ensure that they have begun their journey of change. It is not enough for the company's management to have set a net zero target for 2050 if they have not also demonstrated that they are already taking action to reduce their emissions."

The estimated future emissions for each individual company are



then compared with the emissions required in each sub-sector to keep the temperature increase below 2 degrees. This results in a residual carbon budget for each company that can be either positive or negative. A negative value shows that the company is projected to have lower carbon dioxide emissions than required in the future, while the opposite is true for a positive value.

**AP4 Alignment score**

The data points referred to above are then combined to form an AP4 Alignment score, which gives a good picture of how well the companies are aligned with the energy transition.

“We want to shift the portfolio weighting towards those companies that are helping to achieve the goals of the Paris Agreement and that actively strive to improve their sustainability work. This strategy has a major impact on our investments outside traditionally high-emissions sectors. For example, among consumer companies, there are major differences in how the companies position themselves.”

**Use of Scope 3**

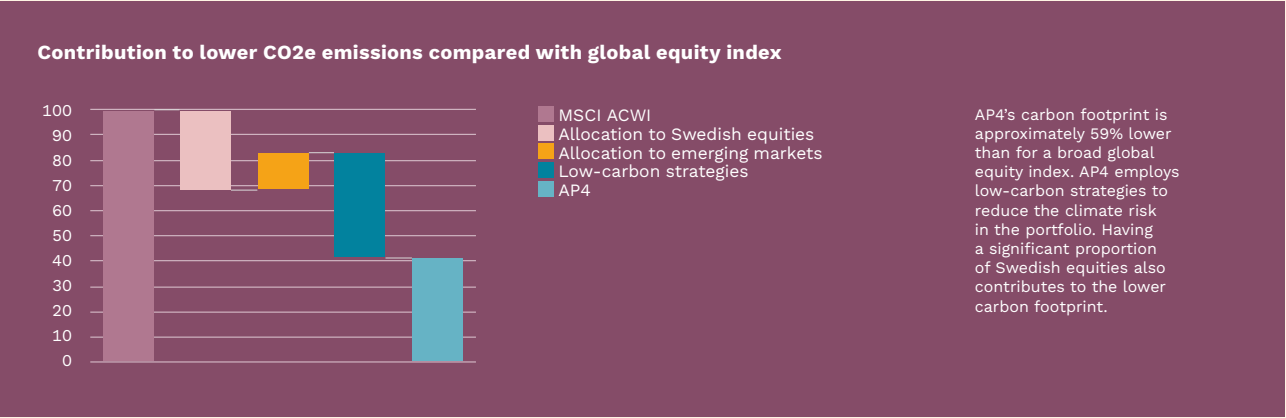
Scope 3 refers to indirect carbon emissions caused by companies. These in turn can be divided into upstream and downstream emissions, depending on where in

the value chain these emissions occur. Upstream emissions are produced by the company’s suppliers and downstream emissions primarily by the use of the companies’ products. Scope 3 results in the double counting of carbon emissions and these are difficult to estimate, particularly in relation to downstream emissions. Scope 3 does, however, provide a picture of companies’ exposure to climate change.

“At AP4, we measure direct emissions (i.e. Scope 1 and 2) as well as the first level of upstream emissions. This means that we also take into account the emissions of the companies’ suppliers, but not of those who supply their suppliers.” Pontus further explains:

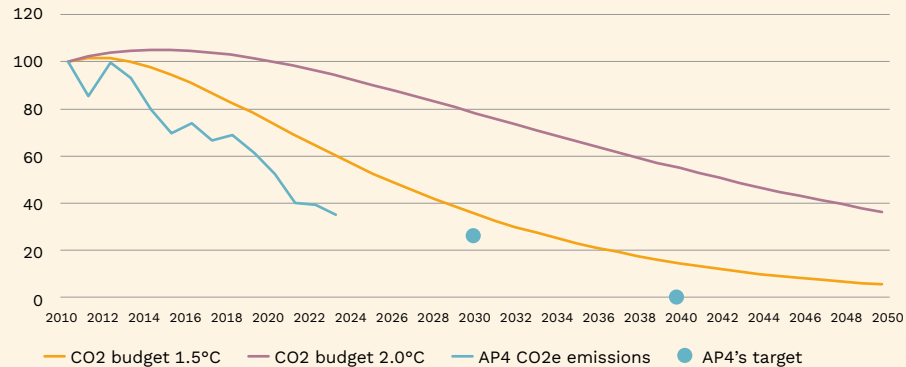
“The reason why we do not look at the full spectrum of Scope 3 emissions is that there is currently not enough reliable data to construct robust equity strategies. The way in which Scope 3 is currently calculated also includes double counting, by definition, as the same emissions are counted for both producers and consumers. We are working to develop our strategies within this area.”

Sectors where indirect emissions are of greater relevance include the energy sector and the automotive industry.



AP4’s carbon footprint is approximately 59% lower than for a broad global equity index. AP4 employs low-carbon strategies to reduce the climate risk in the portfolio. Having a significant proportion of Swedish equities also contributes to the lower carbon footprint.

**Annual greenhouse gas emissions, CO2e<sup>1</sup>**



During 2023, the portfolio’s CO2e emissions decreased by 11%. AP4 has decreased the listed equity portfolio’s CO2e emissions by 65% since measurements began in 2010, which reduces climate risk in the portfolio. AP4 halved emissions between 2010 and 2020. AP4’s target is to cut emissions in half again by 2030 (measured from the 2020 level), to achieve net zero by 2040.

1. Source: Robbie Andrew (2019) based on Global Carbon Project and IPCC SR15 and AP4’s calculations. AP4’s emissions relate to the listed equity portfolio’s Scope 1 and 2 emissions. Index 2010 = 100.

## Metrics and goals

### for the Climate & Environment focus area

GOALS	Contribute to a decrease in global climate emissions in accordance with the Paris Agreement	Make investments that reduce climate risk in the portfolio	Make proactive investments that contribute to and benefit from the climate transition	Evaluate potential asset management strategies based on identified indicators	Advocate for climate transition
<b>OUT-COME</b>	<p><b>-11%</b> Change in portfolio's CO2e emissions in 2023</p> <p><b>-65%</b> Change in portfolio's CO2e emissions since 2010</p> <hr/> <p>AP4's portfolio is to reach net zero by 2040 at the latest.</p> <hr/> <p>Intermediate goal to cut CO2e emissions in half by 2030 at the latest compared with 2020.</p> <hr/> <p>For performance over time, see table in the Sustainability Data section on pages 96–98.</p>	<p><b>41%</b> Portfolio's CO2e emissions as share of global equity index (MSCI ACWI)</p> <p><b>41%</b> Portfolio's CO2e intensity as share of global equity index (MSCI ACWI)</p> <hr/> <p>Measures the listed equity portfolio's CO2e emissions based on each company's CO2e emissions weighted according to AP4's share of ownership in the respective companies.</p> <hr/> <p>Measures the respective companies' CO2e emissions in relation to their revenue, weighted according to AP4's portfolio share in the respective companies.</p>	<p><b>SEK 7.6 billion</b> Proactive investments based on sustainability trends that contribute to and benefit from the transition to a sustainable society</p> <hr/> <p>New commitments to proactive sustainability investments in the unlisted portfolio amounted to SEK 5.0 billion.</p> <hr/> <p>In 2023, such new investments amounted to SEK 1.8 billion within listed equities and SEK 0.8 billion within fixed income.</p>	<p><b>Achieved</b> Description of analysis and implementation</p> <hr/> <p>Conducted fundamental company selection in the transport sector.</p> <hr/> <p>In quantitative global equity management AP4 has introduced the Alignment Score, a tool for company selection in all sectors for operations in line with the Paris Agreement.</p>	<p><b>-9%</b> Changed CO2e emissions owing to AP4's portfolio changes in 2023</p> <p><b>-2%</b> Changed CO2e emissions owing to portfolio companies' reduced emissions in 2023</p> <hr/> <p>AP4 has reduced the portfolio's CO2e emissions through portfolio changes. Since 2010, emissions have been reduced by 43 percentage points due to portfolio changes and by 22 percentage points as a result of reductions in emissions by companies. To achieve the climate targets, the companies that AP4 has invested in must also reduce CO2 emissions in their respective operations.</p> <hr/> <p>AP4 supports organisations such as the Institutional Investors Group on Climate Change (IIGCC) and Climate Action 100+ (CA100+). The latter aims to influence the approximately 160 companies with the largest carbon emissions to take measures to reduce their carbon footprints.</p> <hr/> <p>In 2023, AP4 has conducted company dialogues within the energy sector on climate targets and submitted shareholder proposals for such ahead of the 2024 AGM season.</p>

**The Fourth Swedish National Pension Fund’s sustainability report for 2023**

The Fourth Swedish National Pension Fund (AP4) has prepared a sustainability report for the 2023 financial year.

The sustainability report is based on the AP Funds’ joint guidelines for reporting on how the goal of exemplary asset management

has been achieved. AP4 strives to adhere to the guidelines for sustainability reporting set out in the Annual Accounts Act as well as in the GRI Standards.

Sustainability reporting is presented in this report on pages 11–50 and on pages 86–102.

**Stockholm, 22 February 2024**

**Johan Gyllenhoff**  
Acting Chair of the Board

**Helén Eliasson**

**Monika Elling**

**Anders Johansson**

**Henrik Rättzén**

**Per Strömberg**

**Ingrid Werner**

**Aleksandar Zuza**

**Niklas Ekvall**  
CEO

**Auditor’s opinion regarding the Fourth Swedish National Pension Fund’s sustainability report**

*For the Fourth Swedish National Pension Fund, corporate identity number 802005-1952*

**Engagement and responsibility**  
It is the Board of Directors that is responsible for the sustainability report for the year 2023 and for its preparation in accordance with the Fourth Swedish National Pension Fund’s principles for sustainability reporting.

sustainability report is substantially different and less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

**The scope of the audit**

Our examination has been conducted in accordance with FAR’s auditing standard RevR 12, The auditor’s opinion regarding the statutory sustainability report. This means that our examination of the

**Opinion**

A sustainability report has been prepared.

**Stockholm, 22 February 2024**

**Helena Kaiser de Carolis**  
Authorised Public Accountant

**Peter Nilsson**  
Authorised Public Accountant

# Annual Report

IN THIS SECTION:

- DIRECTORS' REPORT
- INCOME STATEMENT
- BALANCE SHEET
- NOTES
- SIGNATURES
- AUDITOR'S REPORT

# Directors' Report 2023

AP4's return after costs was 9.6% (-11.9%). The net result was SEK 43.9 billion (-62.5). Fund capital at year-end 2023 amounted to SEK 499.6 billion (460.5). Over the last ten-year period, 2014–2023, the return after costs has averaged 8.5% (9.2%) per year.

## Result and fund capital

Fund capital increased by SEK 39.1 billion (-67.1) to SEK 499.6 billion (460.5). The change in fund capital is due partly to the result for the year of SEK 43.9 billion (-62.5) and partly to net payments of SEK -4.8 billion (-4.7) to the public pension system.

SEK billion	2023	2022
Fund capital, opening balance	460.5	527.6
Net payments to the pension system	-4.8	-4.7
Net result for the period	43.9	-62.5
<b>FUND CAPITAL, CLOSING BALANCE</b>	<b>499.6</b>	<b>460.5</b>

## Mission, commitment and long-term return target

AP4's mission is based on the mission stated in the AP Funds Act to manage the fund assets in such a way that they provide the greatest possible benefit to the income pension system. The total risk level must be low and the fund capital must be invested at the chosen risk level in a way that achieves a high long-term return.

In order to give substance to the long-term mission, every three years AP4 conducts an Asset Liability Management (ALM) analysis of its obligations in the pension system. In this analysis AP4 strives to strike a balance between the expected return and risk that best contributes to a long-term strengthening of the pension system while at the same time limiting the risk for reductions of outgoing pension payments through activation of the automated balancing mechanism. In this work, AP4 ensures that one generation of pensioners does not benefit at the expense of another.

The analysis is used to set AP4's long-term return targets and suitable

long-term ranges for the proportion of equities, currency exposure and average duration of fixed income investments.

An ALM analysis was performed in 2023. It concluded that the long-term real return target of 3.5% should be maintained. The appropriate interval for AP4's proportion of equities was kept unchanged within the range of 50–70% of the fund capital. The ranges for currency exposure and the average duration of the fixed income portfolio were also kept unchanged within the ranges of 20–40% and 3–9 years respectively. This was deemed to continue to ensure a well-considered balance between the system's long-term financial position and the risks for balancing.

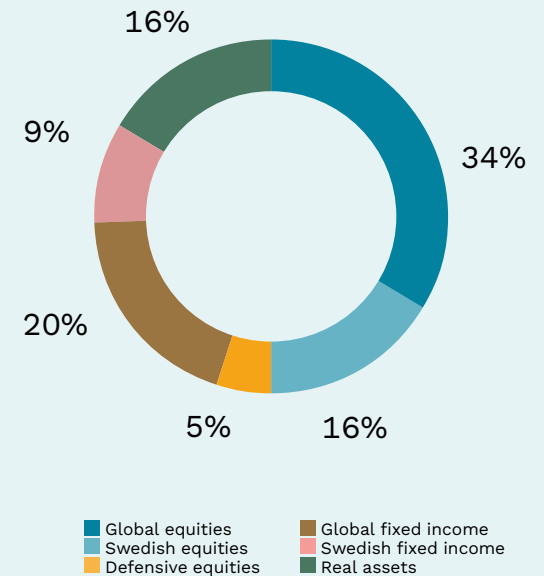
## Benchmark portfolio and medium-term return target

The Dynamic Normal Portfolio (DNP) embodies the Board's decisions on AP4's medium-term asset allocation. The DNP is a benchmark portfolio of a number of asset classes represented by various market indexes – where such relevant indexes exist – such as for listed equities and fixed income assets. Decisions on sustainability-based exclusions are reflected in the design of the DNP.

In connection with decisions on the DNP, the Board also decides on a medium-term return target over a 10-year period on the basis of macroeconomic and market-related assessments. This target is currently a 3% real return per year.

AP4's long-term mission and the higher expected return for equities compared with fixed income assets justifies a higher allocation to equities in the portfolio. AP4 has considerable exposure to Sweden in equities and fixed income investments, which is justified partly by higher expected returns relative to many other markets and partly to favourable opportunities for AP4 to generate excess returns in this market as well as to lower currency hedging costs.

Asset allocation as per 31/12/2023



## Operative portfolio

The day-to-day management of AP4's fund capital is based on the asset allocation stipulated by the DNP and the active risk mandate of 5% active risk (ex-ante tracking error) that the Board has decided on. The portfolio's active return is evaluated in relation to the performance of the DNP.

The total return for AP4's portfolio was 9.6% (-11.8%) before costs and 9.6% (-11.9%) after costs. The strong performance of the stock markets in 2023 was the main reason for the positive return. Global equities had a return of 17.7%, Swedish equities 18.3% and Defensive equities 15.0%. Fixed income investments also showed a positive return. Global fixed income instruments had a return of 4.6% and Swedish fixed income instruments 3.7%. Real assets, consisting mainly of unlisted real estate and infrastructure, reported a negative return of -5.4%.

AP4's long-term return is evaluated over two time periods – since the start of the new pension system in 2001 and over the last ten-year period. The goal is to exceed both the performance of the income index and the return target set by the Board of Directors.

The annualised return after costs has averaged 6.4% since 2001, compared with the real return target which, indexed for inflation, has averaged 6.2%. The income index has increased by 3.1% per year over the same period of time. Over the past ten-year period, the return after costs has averaged 8.5% per year, the real return target has averaged 6.4% per year and the income index has increased by an average of 2.8% per year.

Annual return, %	AP4	Return target	Income index
1 year	9.6	7.5	4.6
5 years	8.9	7.6	3.5
10 years	8.5	6.4	2.8
Since 2001	6.4	6.2	3.1

The active return relative to the DNP was -3.4 (-3.8) percentage points before costs. A contributing factor to the negative active return was that the target return for the asset class Real assets of the CPI + 3 percentage points per year was so high as a consequence of the high rate of inflation during the year at the same time as the asset class had a negative return. Another negative, contributing factor was that the Global equities asset class performed worse than its benchmark index during the year, owing to

Asset class	Market value, SEK bn	Portfolio-return <sup>1</sup> , %	Exposure <sup>2</sup> , %	Return contribution <sup>1</sup> , %	Net result contribution <sup>2</sup> , SEK bn
Global equities	169.0	17.7	33.8	5.8	26.7
Swedish equities	81.1	18.3	16.2	2.9	13.2
Defensive equities	25.8	15.0	5.2	0.8	3.5
Global fixed income	96.8	4.6	19.4	1.0	4.3
Swedish fixed income	46.0	3.7	9.2	0.4	1.6
Real assets	80.9	-5.4	16.2	-1.0	-4.6
Other assets <sup>3</sup>	0.0	0.0	0.0	0.0	0.0
Currencies	0.0	-0.1	0.0	-0.1	-0.6
<b>Total investments</b>	<b>499.5</b>	<b>9.6</b>	<b>100.0</b>	<b>9.6</b>	<b>44.2</b>

1) Portfolio return, return contribution and net result contribution are reported before costs. The portfolio return after costs was 9.6% (-11.9%). The result after costs was SEK 43.9 billion (-62.5).

2) Underlying values of derivative instruments in the passive allocation are distributed among the respective asset classes.

3) Consists mainly of various overlay mandates.

unlisted equities returning -5.3%. Over a five-year evaluation period, the active return for AP4's portfolio has, on average, been 0.3 (1.5) percentage points better than the DNP per year, which is lower than the active return target, which is 1.0 percentage points per year.

Annual active return before costs, %	2023	5 years (2019–2023)
AP4	-3.4	0.3
Active return target	1.0	1.0

## Other assets

Other assets consist mainly of asset allocations in the form of so-called overlay mandates. The return contribution in 2023 was 0.0 percentage points (0.0).

## Risks

Portfolio risk for the operative portfolio at year-end 2023, measured as a 12-month historical standard deviation based on daily observations, decreased to 5.7% from the preceding year's level of 9.4%. In 2023,

the volatility in both the equities and fixed income markets decreased compared with 2022. Using daily market movements during a one-year period as a measure of risk is standard practice, but has limited relevance as AP4's investment horizon is considerably longer.

Active risk for the operative portfolio is measured in relation to the DNP. Active risk for AP4's operative asset management, measured with a 12-month historical standard deviation based on daily observations, decreased during the year and was 1.8% (2.0%) at year-end. Further information is provided in Note 20.

## Equities exposure

Equities exposure at year-end was 55.2% (51.7%). Equities exposure varied during the year between 51.7% (50.8%) and 57.3% (57.2%).

## Currency exposure

Open currency exposure, i.e. the share of assets in foreign currencies that is not neutralised through currency hedges, was 21.6% (19.3%) of total assets at year-end. The return contribution from AP4's open currency exposure was -0.1 (2.8) percentage points. Over a five-year period, AP4's

open currency exposure has contributed an average of 1.0 (1.3) percentage points to the return per year. AP4's open currency exposure in the operative portfolio in 2023 varied between 16.8% (16.8%) and 21.6% (23.3%).

### Interest rate risk

Interest rate risk, measured in terms of modified duration, varied between 3.4% (3.2%) and 4.2% (4.1%) during the past year. At year-end, modified duration of the fixed income portfolio was 4.2% (3.4%). The share of listed AAA<sup>1</sup> credit risk classified bonds decreased during the year and was 57% (52%) of the fixed income portfolio at year-end. The share of BBB<sup>1</sup>-rated bonds at year-end was 23% (29%).

### Exposure to issuers

AP4's ten largest exposures to issuers together amounted to slightly more than SEK 151 billion (135) at year-end 2023. Of these, 46% (43%) consisted of sovereign exposures and 11% (19%) consisted of exposures to the banking and financial sector. The ten largest holdings in the banking and financial sector represented a combined exposure of SEK 39 billion (43).

### Costs

AP4's total management cost ratio was 0.08% (0.08%), measured as a percentage of average fund capital. The total management cost consists of operating expenses and commission expenses.

### Operating expenses

Operating expenses consist mainly of personnel costs, information costs and IT costs.

AP4's operating expenses amounted to SEK 281 (259) million. This corresponds to a management cost ratio of 0.06% (0.05%), measured in terms of operating expenses as a proportion of average fund capital.

Personnel costs amounted to SEK 162 (147) million. The increase compared with the previous year is partly the result of general salary development and partly because the turbulent market in 2022, with negative value growth and negative annual results, meant that AP4 had no costs for variable remuneration. In addition, AP4 also had slightly fewer

Multi-year overview	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Opening fund capital, (SEK bn)	460.5	527.6	449.4	418.0	349.3	356.6	333.9	310.0	294.9	259.7
Net payments to the pension system (SEK bn)	-4.8	-4.7	-7.5	-7.9	-6.5	-6.8	-7.4	-6.6	-4.9	-5.1
Net result for the year (SEK bn)	43.9	-62.5	85.7	39.3	75.2	-0.5	30.1	30.5	20.1	40.2
Closing fund capital (SEK bn)	499.6	460.5	527.6	449.4	418.0	349.3	356.6	333.9	310.0	294.9
Return, total portfolio before costs (%)	9.6	-11.8	19.3	9.7	21.8	-0.1	9.2	10.1	6.9	15.8
Return, total portfolio after costs (%)	9.6	-11.9	19.2	9.6	21.7	-0.2	9.1	10.0	6.8	15.7
Active return before costs (%) <sup>1</sup>	-3.4	-3.8	3.5	2.4	4.4	2.3	-1.1	1.0	4.8	1.4
Return, total portfolio after costs, annualised 5 yrs (%)	8.9	6.9	11.6	9.8	9.3	8.1	11.5	12.0	9.7	10.5
Return, total portfolio after costs, annualised 10 yrs (%)	8.5	9.2	11.8	9.7	9.9	9.9	7.3	6.7	6.7	7.6
Standard deviation total portfolio, ex-post (%) <sup>2</sup>	5.7	9.4	6.1	13.6	5.3	6.4	4.1	7.3	8.8	6.0
Standard deviation total portfolio, ex-post, 10 yrs (%) <sup>3</sup>	9.1	9.0	7.8	8.3	6.7	7.5	8.6	8.8	9.0	8.6
Active risk ex-post, active management (%) <sup>4</sup>	1.8	2.0	1.9	1.7	1.2	1.5	1.7	2.7	2.8	1.9
Currency exposure at balance sheet date (%)	21.6	19.3	20.9	21.0	19.8	18.4	18.4	26.9	27.0	28.1
Sharpe ratio total portfolio, ex-post (%) <sup>2</sup>	1.2	neg	3.2	0.7	4.2	0.1	2.5	1.5	0.8	2.5
Asset management costs, excl. commission expenses (%)	0.06	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07
Asset management costs incl. commission expenses (%)	0.08	0.08	0.08	0.09	0.10	0.10	0.10	0.10	0.11	0.11

1) AP4's operative portfolio is evaluated against a benchmark portfolio made up of a number of market indexes with set asset weights. The market indexes used are adjusted based on the Board's decision on sustainability-based divestments and are hedged to SEK. AP4 can use its tax status as a state pension fund and during 2023 this gave a positive contribution of 0.19 (0.15) percentage points. Active return is calculated as the difference in returns between the operative portfolio and the benchmark portfolio.

2) Pertains to daily return data unless indicated otherwise.

3) Pertains to quarterly data for total assets.

4) Active risk, calculated as standard deviation, measured on a yearly basis, in the difference in the return between the operative portfolio and the benchmark portfolio.

1. The credit risk classification (rating) presented pertains to an internal standard. The assessment in this standard for 2023 is based on the ratings issued by the selected rating agency (Moody's Analytics UK Ltd).

employees in 2022 due to periods of understaffing while replacements were being recruited.

Information costs and IT costs amounted to SEK 87 (74) million. The increase compared with the previous year includes general cost rises and costs for systems and licences paid for in US dollars, as well as costs related to the procurement of new portfolio system support.

Other management costs amounted to SEK 32 (38) million. The decrease compared with 2022 is mainly because the previous year included a project to refurbish the office premises.

### Commission expenses

Commission expenses consist mainly of fees paid to external asset managers and of custodian fees.

Commission costs amounted to SEK 118 (140) million. This corresponds to a commission cost ratio of 0.02% (0.03%), measured in terms of commission costs as a proportion of average fund capital.

Commission costs decreased as a result of lower external management fees, due to the restructuring or liquidation of certain external fund investments. The proportion of externally managed capital was 21% (20%) at year-end.

### Collaboration between the AP Funds

The AP Funds' Collaboration Council was established in 2016 with the aim of collaborating in areas outside of the investment operations with the goal to achieve cost efficiency, efficient use of resources and exchange of experience and knowledge. Cooperation is conducted in the form of coordination groups with varying compositions of representatives from the AP Funds. These cooperation initiatives are driven based on the value added that is created for each of the individual AP Funds as well as for the Funds jointly.

Every year each collaboration group formulates its own mission statement and action plan, which is followed up and reported semi-annually to the Collaboration Council. At the end of the year this work is summarised in a report to the Funds' CEOs, which is also used as documentation for the government's yearly evaluation of the AP Funds.

In 2023, active collaboration was conducted within the various areas of operation. Examples of areas in which the AP Funds collaborated during the year include procurement (e.g. portfolio system, internal audit services, physical and electronic archives), financial reporting, internal training

activities and development of system platforms.

### Procurement of a new portfolio system

AP4 carried out the public procurement of a new portfolio system jointly with AP3. The portfolio system procured covers the entire business flow and includes analysis and portfolio management, order placement, compliance monitoring, transaction administration, financial accounting, and the monitoring and reporting of risk and return. The new portfolio system is standardised, flexible and scalable and will replace several existing systems, helping to simplify the system infrastructure and reduce dependency on human resources. The benefits of the new system solution will also increase the ability to respond more rapidly to new and changing needs both from within the organisation and from the outside world. The implementation phase, which began at the end of 2023, is expected to last for the next two years.

In addition to regular, joint meetings in each collaboration group, a great deal of collaboration also takes place in the day-to-day contact between employees of the AP Funds, in which they have the opportunity to discuss matters within the same area.

### Personnel

The average number of employees during the year was 66 (61), calculated as full-time equivalents. At year-end the total number of employees was 76 (67). Employee turnover at AP4 was 12% (22%).

Johan Gyllenhoff was appointed by the government in May to be a board member and Vice Chair of the Board. He replaced Lars Åberg, who declined re-election.

Britta Burreau, Chair of the Board, passed away in September. Johan Gyllenhoff was appointed by the government as Acting Chair from October 12, 2023, until a new Chair has been appointed, but no later than until the income statements and balance sheets of the AP Funds for 2023 are adopted.

### Remuneration

For a manager of public pension funds it is essential that employee remuneration levels for AP4's employees are reasonable, justifiable and explainable. AP4 strives to ensure that its remuneration is in line with the market and enables AP4 to recruit and retain competent personnel. AP4 shall not be a salary leader. The Board bears ultimate responsibility for

remuneration issues. Every year the Board adopts principles for remuneration and other terms of employment.

The Board is responsible for monitoring compliance with the government's guidelines for terms of employment for senior executives in the AP Funds. The Board solicits the help of external consultants to monitor compliance with the remuneration principles. The Board has appointed a Remuneration Committee that is tasked with serving in an advisory role for the Board and for drafting remuneration matters for the CEO and senior executives. The Remuneration Committee also conducts drafting work for matters related to AP4's principles for remuneration and other terms of employment for all employees. In 2023, total remuneration for an AP4 employee consists of fixed salary, variable salary, pension provisions and other benefits. The CEO, senior executives, the CFO and the heads of Risk Control and Compliance do not receive any variable remuneration.

For other employees, variable remuneration can amount to a maximum of two months' salary. Variable salary may be awarded when clear and measurable goals have been achieved. Variable salary is based on group-oriented and individual quantitative performance goals measured over a rolling three-year period. Variable remuneration is payable only if AP4 posts a positive net result for the financial year. The Board of Directors has decided that as of January 1, 2024, it will no longer apply variable remuneration.

Other benefits are of limited value and are offered to all employees. Examples include healthcare insurance, group insurance and a wellness subsidy. At year-end, AP4 had five parking spaces that employees could use in exchange for taxation as benefit. Further information is provided in Note 6 and in AP4's Fund Governance Report.

### Significant events after the end of the financial year

The government announced on January 9, 2024, that a further task had been added to the Buffer funds review. This task is to investigate how the Stockholm-based buffer funds can realise greater economies of scale, including an analysis of potential advantages and disadvantages, and specifically highlighting the advantages and disadvantages of consolidating them into two buffer funds based in Stockholm, and to submit the necessary legislative proposals. The report will be presented in spring 2024.



# Income Statement

SEK million	Note	2023	2022
<b>OPERATING INCOME</b>			
Net interest income	2	2,391	1,701
Dividends received		5,341	6,322
Net income, listed equities and participations	3	39,951	-72,422
Net income, unlisted equities and participations	4	-7,652	4,895
Net income, fixed income assets		2,492	-8,454
Net income, derivative instruments		1,827	-2,980
Net income, changes in exchange rates		-26	8,856
Commission expenses	5	-118	-140
<b>TOTAL OPERATING INCOME</b>		<b>44,206</b>	<b>-62,222</b>
<b>OPERATING EXPENSES</b>			
Personnel costs	6	-162	-147
Other administrative expenses	7	-119	-112
<b>TOTAL OPERATING EXPENSES</b>		<b>-281</b>	<b>-259</b>
<b>NET RESULT FOR THE YEAR</b>		<b>43,925</b>	<b>-62,481</b>

# Balance Sheet

SEK million	Note	31/12/2023	31/12/2022
<b>ASSETS</b>			
Equities and participations, listed	8, 19	284,462	261,446
Equities and participations, unlisted	9, 18, 19	81,465	82,853
Bonds and other fixed income assets	10, 19	111,901	106,928
Derivative instruments	11, 19, 21	15,656	5,765
Cash and cash equivalents		6,804	7,729
Other assets	12, 21	216	999
Prepaid expenses and accrued income	13	1,383	1,194
<b>TOTAL ASSETS</b>		<b>501,887</b>	<b>466,914</b>
<b>LIABILITIES AND FUND CAPITAL</b>			
<b>Liabilities</b>			
Derivative instruments	11, 21	1,425	5,413
Other liabilities	14, 21	101	249
Prepaid income and accrued expenses	15	810	793
<b>Total liabilities</b>		<b>2,336</b>	<b>6,455</b>
<b>Fund capital</b>			
Fund capital, opening balance	16	460,459	527,629
Net payments to the pension system		-4,833	-4,689
Net result for the year		43,925	-62,481
<b>Total fund capital</b>		<b>499,551</b>	<b>460,459</b>
<b>TOTAL LIABILITIES AND FUND CAPITAL</b>		<b>501,887</b>	<b>466,914</b>
Pledged assets, contingent liabilities and commitments	17, 18		

# Notes

The Fourth Swedish National Pension Fund (AP4), corporate identity number 802005-1952, is one of the buffer funds in the Swedish national pension system and has its registered office in Stockholm. The annual report for the 2023 financial year was approved by the Board of Directors on 22 February 2024. The income statement and balance sheet are subject to government approval.

## Note 1. Accounting and valuation policies

According to the Swedish National Pension Funds Act (Lagen (2000:192) om allmänna pensionfonder), the annual report shall be prepared in accordance with generally accepted accounting principles, entailing that the assets that the AP Funds invest in shall be recognised at market value. Based on this principle, the First, Second, Third and Fourth Swedish National Pension Funds (AP1–AP4) have drawn up and applied uniform accounting and valuation policies, as summarised below.

The AP Funds' accounting and valuation policies are gradually being adapted to International Financial Reporting Standards (IFRS). A complete adaptation to IFRS would not materially affect the reported results and capital. AP4 meets the requirement to be classified as an investment company in accordance with IFRS 10. Compared with the current IFRSs, the only major difference is that a statement of cash flows has not been prepared and that IFRS 16 Leases has not been applied.

### Trade date accounting

Transactions in securities and derivative instruments in the money market, bond market, stock market and currency market are recognised on the balance sheet as per the trade date, i.e. at the point in time when the material rights and risks are transferred between parties. The receivable from or liability to the counterparty between the trade date and settlement date is recognised under Other assets and Other liabilities, respectively. Other transactions, mainly transactions in unlisted equities, are recognised on the balance sheet as per the settlement date, which is consistent with market practice.

### Net accounting

Financial assets and liabilities are reported net on the balance sheet when there is a legal right to offset transactions and there is an intention to settle net or realise the asset and settle the liability simultaneously.

### Translation of foreign currencies

Transactions in foreign currency are translated to Swedish kronor (SEK) at the exchange rate in effect on the transaction date. On the balance sheet date, assets and liabilities in foreign currency are translated to SEK at the exchange rate in effect on the balance sheet date. Changes in the value of assets and liabilities in foreign currency are broken down into a part attributable to the change in value of the asset or liability in local currency and to a part attributable to the changed exchange rate. The exchange gain or loss that arises from changes in exchange rates is reported in the income statement on the line "Net income, changes in exchange rates".

### Equities in subsidiaries and associated companies

According to the Swedish National Pension Funds Act, both equities in and loans to subsidiaries and associated companies are measured at fair value. Fair value is determined using the same methods used for unlisted equities and participations. There is no requirement to prepare consolidated accounts. Loans to subsidiaries and associated companies that are intended to be held to maturity are measured at fair value in accordance with the fair value option provided in IFRS 9. However, the entire change in value is reported as part of the shareholding on the line Net income, unlisted equities and participations.

### Valuation of financial instruments

All of AP4's investments are measured at fair value, whereby realised and unrealised changes in value are recognised through profit or loss. The lines Net income/loss for the various asset classes thus include realised and unrealised gains or losses. Equity instruments are held for trading and are therefore measured at fair value through profit or loss. Debt instruments are held for trading and are therefore measured at fair value through profit or loss. Loans to subsidiaries and associated companies are intended to be held to maturity; however, the fair value option is used here in order to be in compliance with the requirements in the Swedish National Pension Funds Act for fair value measurement. The AP Funds measure all of their assets at fair value. There follows a description of how fair value is

determined for AP4's various investments.

### Listed equities and participations

For equities and participations traded in a regulated market or trading platform, fair value is determined based on official year-end market quotations according to AP4's designated index provider, usually an average price. Holdings not included in an index are valued at quoted prices observable in an active market. Brokerage fees paid are recognised as expenses under Net income, listed equities and participations.

### Unlisted equities and participations

For equities and participations not traded on a regulated market or trading platform, fair value is determined based on a valuation obtained from the counterparty or other external party. The reported value is updated when a new valuation has been obtained and is adjusted for any cash flows up to the end of the accounting period. In cases where AP4 has good reason to believe that the valuation is incorrect, an adjustment is made of the received valuation.

Valuations of unlisted participations are made in accordance with the International Private Equity and Venture Capital Valuation (IPEV) Guidelines, or equivalent principles, and are to be made primarily while taking into account deferred tax liabilities at the value used for property transactions, which differs from the valuation that is used in the accounting of the real estate companies.

### Bonds and other fixed income assets

For bonds and other fixed income assets, fair value is calculated based on the official market quotation on the balance sheet date (usually the bid rate) according to AP4's designated index provider. Holdings not included in an index are valued at quoted prices observable in an active market. In cases where an instrument is not traded in an active market, and reliable market prices are not available, the instrument is measured using generally accepted valuation models, which entails that cash flows are discounted to the relevant yield curve.

Interest income includes interest calculated using the effective interest method based on amortised cost. Amortised cost is the discounted present value of future payments, where the discount rate consists of the effective interest rate at the date of acquisition. This means that acquired surplus and deficit values are allocated over the remaining term or until

the next interest rate adjustment and are included in reported interest income. Changes in value attributable to changes in interest rates are reported in “Net income, fixed income assets”, while changes in value attributable to exchange rate changes are reported in “Net income, changes in exchange rates”.

#### Derivative instruments

For derivative instruments, fair value is based on year-end quotations. In cases where an instrument is not traded in an active market and reliable market prices are not available, the instrument is measured using generally accepted valuation models, in which observable market data is used as the input data.

Derivative contracts with positive fair value on the balance sheet date are reported as assets, while contracts with a negative fair value are reported as liabilities. Changes in value attributable to changes in exchange rates are reported in the income statement under “Net income, changes in exchange rates”, while other changes in value are reported as “Net income, derivative instruments”.

#### Repurchase transactions

In genuine repurchase transactions, so-called repos, the sold asset remains on the balance sheet and the payment received is recognised as a liability. The sold security is recognised as a pledged asset on the balance sheet among memorandum items. The difference between the settlement in the spot and futures markets is allocated over the term and recognised as interest.

#### Securities lending

Loaned securities are reported on the balance sheet at fair value, while the consideration received for the loan is reported as interest income in the income statement. Collateral received for loaned securities can consist of securities and/or cash. In cases where AP4 has the right of disposal over cash received as collateral, the collateral is reported on the balance sheet as an asset and corresponding liability. In cases where AP4 does not have disposal over the collateral, it is not reported on the balance sheet, but is specified separately in a note under the heading “Pledged assets, contingent liabilities and commitments”. This item also includes the value of loaned securities and their related collateral.

#### Items recognised directly against fund capital

Incoming and outgoing payments that have been made against the pension system are reported directly in fund capital.

#### Commission expenses

Commission expenses are recognised in the income statement as a deduction from operating income. They consist of external costs for asset management services, such as custodian fees and fixed fees to external asset managers as well as fixed fees for listed funds. Performance-based fees, which are paid when asset managers achieve returns above the agreed level where profit-sharing is applied, are recognised as a deduction under net income for the relevant asset class.

Asset management fees for unlisted equities and participations are recognised as an acquisition cost and are therefore included in the unrealised result.

#### Operating expenses

All asset management costs, excluding brokerage fees, fees paid to external asset managers and custodian fees, are recognised as operating expenses. Investments in equipment including internally developed and purchased software that are not of significant importance are normally expensed on an ongoing basis. Investments that do not meet these criteria are capitalised and depreciated over their estimated economic life.

#### Taxes

AP4 is exempt from all income tax on investments in Sweden. Taxes on dividends and withholding taxes assessed in certain countries are reported net in the income statement under the respective income classes.

AP4 has been registered for value-added tax (VAT) since 2012 and is thereby subject to VAT on purchases made abroad. AP4 is not entitled to recover VAT paid. Expensed VAT is included in the expense item to which it belongs.

#### Amounts in SEK millions

Amounts are specified in millions of Swedish kronor (SEK m), unless otherwise indicated.

#### Note 2. Net interest income

	2023	2022
<b>Interest income</b>		
Bonds and other fixed income assets	2,076	1,501
Other interest income	315	201
<b>Total interest income</b>	<b>2,391</b>	<b>1,702</b>
<b>Interest expense</b>		
Other interest expenses	0	-1
<b>Total interest expense</b>	<b>0</b>	<b>-1</b>
<b>NET INTEREST INCOME</b>	<b>2,391</b>	<b>1,701</b>

#### Note 3. Net income, listed equities and participations

	2023	2022
Income, listed equities and participations	40,008	-72,351
Less brokerage fees	-57	-71
<b>NET INCOME, LISTED EQUITIES AND PARTICIPATIONS</b>	<b>39,951</b>	<b>-72,422</b>

#### Note 4. Net income, unlisted equities and participations

	2023	2022
Capital gains/losses	329	872
Unrealised changes in value	-7,981	4,023
<b>NET INCOME, UNLISTED EQUITIES AND PARTICIPATIONS</b>	<b>-7,652</b>	<b>4,895</b>

External asset management fees for unlisted assets are reported as part of the asset's cost and are thereby charged against unrealised net income for unlisted assets. Consequently, refunded management fees have a

positive effect on unrealised income. During the year a total of SEK 358 million (259) was paid in asset management fees for unlisted assets, of which SEK 358 million (259) qualifies for refunds. Also during the year, SEK 37 million (43) was refunded, and the unrealised result for unlisted equities and participations was thereby negatively affected by SEK 321 million (-216) net.

### Note 5. Commission expenses

	2023	2022
External asset management fees, listed assets	-103	-123
Other commission expenses, including custodian fees	-15	-17
<b>COMMISSION EXPENSES</b>	<b>-118</b>	<b>-140</b>

Commission expenses do not include performance-based fees. Performance-based fees for the year totalled SEK 34 million (29) and reduced net income for the respective asset classes.

### Note 6. Personnel

#### Number of employees

	2023		2022	
	Total	Women	Total	Women
Average number of employees <sup>1</sup>	66	25	61	23
Number of employees, 31 December <sup>2</sup>	76	29	67	25
Number of persons in Executive Management, 31 December	7	3	7	3

- The average number of persons employed is converted to full-time equivalents.
- The number of employees as at 31 December refers to the total number of employees, both permanent and temporary.

#### Salaries and fees

Board fees are set by the government and were increased most recently in 2020 pursuant to government decision FI2020/00074/FPM of 9 January 2020. The Board sets the terms of employment for the CEO based on a recommendation from the Remuneration Committee. Remuneration for the CEO, senior executives, the CFO and the respective heads Risk Control and Compliance, consists of a fixed salary. Every year, under commission by the Board of Directors and Remuneration Committee, an external consultant performs an examination of remuneration levels for senior executives of AP4. The Board can thereby verify that AP4 complies with the government's guidelines for remuneration of senior executives of the AP Funds. Read more about remuneration in the Fund Governance Report.

#### Variable remuneration

The variable remuneration plan is part of AP4's remuneration policy and is adopted yearly by the Board. The plan covers all employees except for the CEO, senior executives, the CFO and the respective heads of Risk Control and Compliance. The basic principle is that variable remuneration is payable for the achievement of excess returns relative to the benchmark and reference indexes, provided that AP4 shows a positive total result for the financial year. The maximum outcome for a full-time equivalent employee is two months' salary. For 2023, SEK 3,008 thousand (240) has been expensed for variable remuneration, excluding social security contributions. The Board of Directors has decided that as of 2024, variable remuneration will no longer be applied.

#### Pensions and similar benefits

The CEO's employment contract includes special stipulations for pension benefits and severance pay. The ordinary retirement age is 65, however, the employee has the right to remain in service until the end of the month in which they turn 69 (68).

Starting in 2023, pursuant to the Employment Protection Act (Lag om anställningsskydd – LAS), employees have the right to remain in service until the end of the month in which they turn 69. A mutual notice period of six months applies for the CEO. In the event that the Fund serves notice, the CEO is also entitled to severance pay equal to 18 months' salary. Severance pay is paid out monthly and is reduced by any other income from salary, assignments or own business.

Other members of the Executive Management as well as other

employees have individual employment contracts in which the notice period is based on the applicable collective agreement between the Employers Organisation of Swedish Banking Institutions (BAO) and the Swedish Confederation of Professional Associations (SACO). Pension entitlements are either defined-benefit solutions in accordance with the applicable collective agreement between BAO and SACO, or defined-contribution solutions in accordance with AP4's pension policy, entailing a pension contribution of 30% of salary amounts higher than 7.5 times the Income Base Amount.

All employees are entitled to exchange a portion of their gross salary for pension contributions. In such cases, the pension contribution is increased by 5.8%, which corresponds to the difference between AP4's cost for payroll tax and its cost for the special employer's payroll tax on pension contributions. The procedure is cost-neutral for AP4.

Employees hired before 1 January 2007 have, in addition to benefits under the pertinent collective agreement, disability insurance for periods of illness lasting longer than three months, for which a benefit is payable to cover 90% of salary amounts lower than 20 times the Base Amount and 80% of salary amounts higher than 20 times the Base Amount. The maximum benefit corresponds to 40 times the Base Amount. Benefits paid out are decreased by benefits payable from Försäkringskassan, SPP and any other insurances.

#### Other benefits

All employees have the opportunity to take out healthcare insurance and group life insurance, which are taxed as employment benefits.

AP4 also has 5 parking spaces that employees have been able to book and these have been taxed as an employment benefit during the year.

The total value of this employment benefit in 2023 was SEK 336 thousand (281).

## Note 6. Personnel cont.

Personnel costs, SEK thousand, 2023	Salaries and fees	Variable remuneration	Pension costs	Of which, salary exchange	Social security costs <sup>2</sup>	Total
<b>Board of Directors and CEO</b>						
Acting Chair of the Board Johan Gyllenhoff as of October 2023	118	-	-	-	37	155
Chair of the Board Britta Burreau, to September 2023	156	-	-	-	49	205
Other board members <sup>1</sup>	843	-	-	-	249	1,092
CEO Niklas Ekvall	4,420	-	2,673	1,105	2,037	9,130
<b>Other members of the Executive Management</b>						
Head of Fundamental Equities Jannis Kitsakis	2,724	-	1,294	-	1,170	5,188
Head of Risk & Business Support Nicklas Wikström	1,812	-	1,098	355	836	3,746
General Counsel Theresa Einarsson	1,675	-	888	169	742	3,305
Head of Sustainability, Finance & Communication Tobias Fransson	2,290	-	1,174	-	1,004	4,468
Head of Strategic Allocation & Quantitative Analysis Magdalena Högberg	2,487	-	880	-	995	4,362
Head of Alternative Investments Jenny Askfelt Ruud	2,330	-	884	-	947	4,161
<b>Other employees</b>	68,766	3,008	22,600	1,787	27,832	122,206
<b>Total</b>	<b>87,621</b>	<b>3,008</b>	<b>31,491</b>	<b>3,416</b>	<b>35,897</b>	<b>158,017</b>
Other personnel costs						4,045
<b>TOTAL PERSONNEL COSTS</b>						<b>162,062</b>

- Individual directors' fees are reported in the Fund Governance Report.
- Social security costs also include payroll tax.

Personnel costs, SEK thousand, 2022	Salaries and fees	Variable remuneration	Pension costs	Of which, salary exchange	Social security costs <sup>2</sup>	Total
<b>Board of Directors and CEO</b>						
Chair of the Board Britta Burreau	205	-	-	-	64	269
Other board members <sup>1</sup>	945	-	-	-	251	1,196
CEO Niklas Ekvall	4,294	-	2,502	987	1,956	8,752
<b>Other members of the Executive Management</b>						
Head of Fundamental Equities Jannis Kitsakis	3,003	-	1,158	-	1,224	5,385
Head of Risk & Business Support Nicklas Wikström	1,770	-	1,033	355	807	3,610
General Counsel Theresa Einarsson	1,403	-	1,036	381	692	3,131
Head of Sustainability, Finance & Communication Tobias Fransson	2,249	-	994	-	948	4,191
Head of Strategic Allocation & Quantitative Analysis Magdalena Högberg	2,654	-	803	-	1,029	4,486
Head of Alternative Investments Jenny Askfelt Ruud	2,365	-	807	-	939	4,111
<b>Other employees</b>	61,444	240 <sup>3</sup>	20,639	2,409	24,143	106,466
<b>Total</b>	<b>80,332</b>	<b>240</b>	<b>28,972</b>	<b>4,132</b>	<b>32,053</b>	<b>141,597</b>
Other personnel costs						5,432
<b>TOTAL PERSONNEL COSTS</b>						<b>147,029</b>

- Individual directors' fees are reported in the Fund Governance Report.
- Social security costs also include payroll tax.
- Adjusted variable remuneration pertaining to the 2021 financial year.

## Note 7. Other administrative expenses

	2023	2022
Cost of premises	12	16
Information and IT costs	87	74
Purchased services	11	13
Other administrative expenses	9	9
<b>TOTAL OTHER ADMINISTRATIVE EXPENSES</b>	<b>119</b>	<b>112</b>
<b>The item Purchased services includes fees paid to the accounting firm as follows:</b>		
Audit assignment, PwC	1.0	0.8
Other audit services, PwC	0.3	0.4
<b>Total fees paid to accounting firm</b>	<b>1.3</b>	<b>1.2</b>

## Note 8. Equities and participations, listed

	31/12/2023 Fair value	31/12/2022 Fair value
Swedish equities	99,694	87,961
Foreign equities	129,176	119,487
Participations in Swedish funds	836	919
Participations in foreign funds	54,756	53,078
<b>TOTAL EQUITIES AND PARTICIPATIONS, LISTED</b>	<b>284,462</b>	<b>261,446</b>

The scope of loaned securities as well as collateral received is shown in Note 17. A complete list of shareholdings can be found on AP4's website: [www.ap4.se](http://www.ap4.se).

## Note 8. Equities and participations, listed cont.

### Five largest holdings of Swedish equities

31/12/2023	No. equities	Fair value	Capital, %	Votes, %
Lifco AB	25,921,906	6,408	5.71	3.56
Atlas Copco AB	41,448,288	6,361	0.84	0.30
Swedish Orphan Biovitrum AB	21,010,927	5,610	5.93	5.93
Getinge AB	20,213,022	4,534	7.42	4.63
Sagax AB	23,954,029	4,236	5.13	4.44

### 31/12/2022

Lifco AB	28,385,248	4,943	6.25	3.90
Atlas Copco AB	41,606,365	4,730	0.85	0.35
Getinge AB	20,920,184	4,525	7.68	4.79
Swedish Orphan Biovitrum AB	20,107,765	4,337	6.49	6.49
Sagax AB	26,376,538	4,240	5.91	4.90

### Five largest holdings of foreign equities

31/12/2023	No. equities	Fair value
Apple Inc	2,638,509	5,119
Microsoft Corp	1,169,771	4,433
Nvidia Corp	464,889	2,320
Amazon.Com, Inc	1,415,746	2,168
Meta Platforms, Inc	423,343	1,510

### 31/12/2022

Apple Inc	3,014,952	4,082
Microsoft Corp	1,327,102	3,316
Johnson & Johnson	799,371	1,471
Amazon.Com, Inc	1,537,520	1,346
Unitedhealth Group Inc	215,251	1,189

## Note 9. Equities and participations, unlisted

	31/12/2023 Fair value	31/12/2022 Fair value
Equities in Swedish associated companies	42,475	48,778
Equities in foreign associated companies	1,215	1,382
Equities and participations in other Swedish unlisted companies	9,218	8,786
Equities and participations in other foreign unlisted companies	28,557	23,907
<b>TOTAL EQUITIES AND PARTICIPATIONS, UNLISTED</b>	<b>81,465</b>	<b>82,853</b>

## Note 9. Equities and participations, unlisted cont.

Equities in associated companies, 31/12/2023	Corporate identity number	Domicile	No. equities	Capital, %	Votes, %	Fair value	Equity	Profit
<b>Equities in Swedish associated companies</b>								
Vasakronan Holding AB	556650-4196	Stockholm	1,000,000	25	25	24,426	78,873	-10,903
Rikshem Intressenter AB	556806-2466	Stockholm	250	50	50	14,011	25,302	-3,916
Polhem Infra KB	969789-2413	Stockholm	-	33	33	2,424	7,273	-1,061
4 to 1 Investments KB	969795-3033	Stockholm	-	25	25	1,456	5,822	39
Cinder Invest AB	559256-2630	Stockholm	10,000	20	20	158	651	22
4 to 1 Investments AB	559313-2490	Stockholm	6,250	25	25	0	2	-1
AP4 Investment AB <sup>1</sup>	559130-3929	Stockholm	50,000	100	100	0	0	0
AP4 Alternative Investments AB <sup>2</sup>	559386-5347	Stockholm	25,000	100	100	0	0	0
AP4 Alternative Investments KB	969797-3965	Stockholm	-	100	100	0	0	0
Polhem Infra AB	559183-3917	Stockholm	20,000	33	33	0	0	0
<b>Total equities in Swedish associated companies</b>						<b>42,475</b>		
<b>Equities in foreign associated companies</b>								
ASE Holdings II S.à.r.l.		Luxembourg	479,928,633	45	45	757	Not public	Not public
ASE Holdings III S.à.r.l.		Luxembourg	557,931,703	35	35	392	Not public	Not public
ASE Holdings S.à.r.l.		Luxembourg	3,218,428	38	38	66	Not public	Not public
<b>Total equities in foreign associated companies</b>						<b>1,215</b>		

Other holdings, 31/12/2023	Corporate identity number	Domicile	Capital, %	Votes, %	Cost
<b>Five largest holdings in other equities and participations, Swedish unlisted companies<sup>3</sup></b>					
LSTH Svenska Handelsfastigheter AB	559009-2325	Stockholm	23	4	2,002
Infranode I (No. 1) AB	556982-5283	Stockholm	20	0	876
Alfvén & Didrikson AB	556954-4066	Stockholm	26	17	836
Areim Investment 3-5 AB	559111-1165	Stockholm	49	9	621
Gullspång Re:Food II Invest AB	559328-3467	Stockholm	32	9	567
<b>Five largest holdings in other equities and participations, foreign unlisted companies<sup>3</sup></b>					
Infrastructure Alliance Europe 2 SCSp		Luxembourg	37	-	2,726
Infrastructure Alliance Europe 1 SCSp		Luxembourg	26	-	2,313
ACP Series 3 Partnership L.P.		USA	16	-	1,391
Generation IM Sustainable Solutions Fund III (B), L.P.		Guernsey	15	-	1,247
Trill Impact (No.1) SCSp		Luxembourg	11	-	932

1. AP4 and AP4 Investment AB co-own AP4 Investment KB (969784-9959), in which AP4 has a significant influence.
2. AP4 and AP4 Alternative Investments AB co-own AP4 Alternative Investments KB (969797-3965), in which AP4 has a significant influence.
3. Refers to AP4's holdings in limited partnerships and other similar structures in which AP4 does not have significant influence.

A complete specification of shareholdings is available at [www.ap4.se](http://www.ap4.se).

## Note 9. Equities and participations, unlisted cont.

Equities in associated companies, 31/12/2022	Corporate identity number	Domicile	No. equities	Capital, %	Votes, %	Fair value	Equity	Profit
<b>Equities in Swedish associated companies</b>								
Vasakronan Holding AB	556650-4196	Stockholm	1,000,000	25	25	28,081	89,767	8,493
Rikshem Intressenter AB	556806-2466	Stockholm	250	50	50	16,345	29,218	227
Polhem Infra KB	969789-2413	Stockholm	-	33	33	2,778	8,335	154
4 to 1 Investments KB	969795-3033	Stockholm	-	25	25	1,446	5,782	77
Cinder Invest AB	559256-2630	Stockholm	10,000	20	20	128	502	-17
4 to 1 Investments AB	559313-2490	Stockholm	6,250	25	25	0	1	-1
AP4 Investment AB <sup>1</sup>	559130-3929	Stockholm	50,000	100	100	0	0	0
AP4 Alternative Investments AB <sup>2</sup>	559386-5347	Stockholm	25,000	100	100	0	0	0
Polhem Infra AB	559183-3917	Stockholm	20,000	33	33	0	1	0
<b>Total equities in Swedish associated companies</b>						<b>48,778</b>		
<b>Equities in foreign associated companies</b>								
ASE Holdings II S.à.r.l.		Luxembourg	5,799,351	45	45	1,008	Not public	Not public
ASE Holdings III S.à.r.l.		Luxembourg	23,445,783	35	35	353	Not public	Not public
ASE Holdings S.à.r.l.		Luxembourg	1,607,738	38	38	21	Not public	Not public
<b>Total equities in foreign associated companies</b>						<b>1,382</b>		

### Other holdings, 31/12/2022

#### Five largest holdings in other equities and participations, Swedish unlisted companies<sup>3</sup>

	Corporate identity number	Domicile	Capital, %	Votes, %	Cost
LSTH Svenska Handelsfastigheter AB	559009-2325	Stockholm	39	4	1,502
Infranode I (No. 1) AB	556982-5283	Stockholm	20	20	851
Alfvén & Didrikson AB	556954-4066	Stockholm	32	17	733
Areim Investment 3-5 AB	559111-1165	Stockholm	49	9	548
Areim Fastigheter 4 (Eq) AB	559168-0979	Stockholm	13	5	479

#### Five largest holdings in other equities and participations, foreign unlisted companies<sup>3</sup>

		Domicile	Capital, %	Votes, %	Cost
Infrastructure Alliance Europe 1 SCSp		Luxembourg	25	-	2,882
ACP Series 3 Partnership L.P.		USA	22	-	1,238
Generation IM Sustainable Solutions Fund III (B), L.P.		Guernsey	15	-	1,221
Infrastructure Alliance Europe 2 SCSp		Luxembourg	37	-	1,071
White Peak Real Estate IV L.P.		Jersey	24	-	924

1. AP4 and AP4 Investment AB co-own AP4 Investment KB (969784-9959), in which AP4 has a significant influence.
2. AP4 and AP4 Alternative Investments AB co-own AP4 Alternative Investments KB (969797-3965), in which AP4 has a significant influence. Operations were in a start-up phase as per 31 December 2022.
3. Refers to AP4's holdings in limited partnerships and other similar structures in which AP4 does not have significant influence.

A complete specification of shareholdings is available at [www.ap4.se](http://www.ap4.se).



## Note 10. Bonds and other fixed income assets

	31/12/2023 Fair value	31/12/2022 Fair value
<b>Breakdown by issuer category</b>		
Swedish mortgage institutions	19,551	25,087
Other Swedish financial companies	10,265	4,376
Swedish non-financial companies	1,008	965
Foreign governments	57,463	52,884
Other foreign issuers	23,614	23,616
<b>TOTAL BONDS AND OTHER FIXED INCOME ASSETS</b>	<b>111,901</b>	<b>106,928</b>
<b>Breakdown by type of instrument</b>		
Other bonds	99,092	95,895
Subordinated loans	4,863	4,644
Unlisted promissory note loans	8	-
Unlisted shareholder loans	7	552
Participations in Swedish fixed income funds	457	-
Participations in foreign fixed income funds	7,437	5,837
Other instruments	37	-
<b>TOTAL BONDS AND OTHER FIXED INCOME ASSETS</b>	<b>111,901</b>	<b>106,928</b>

The scope of loaned securities as well as collateral received is shown in Note 17.

## Note 11. Derivative instruments

	31/12/2023 Fair value		31/12/2022 Fair value	
	Positive	Negative	Positive	Negative
<b>Equity-related instruments</b>				
Forward contracts	5	102	-	-
Swaps	-	1	-	0
<b>Total equity-related instruments</b>	<b>5</b>	<b>103</b>	<b>-</b>	<b>0</b>
Of which cleared	-	-	-	-
<b>Interest-related instruments</b>				
FRA/Forward contracts	42	31	-	-
Swaps	17	173	0	-
<b>Total interest-related instruments</b>	<b>59</b>	<b>204</b>	<b>0</b>	<b>-</b>
Of which cleared	-	-	-	-
<b>Currency-related instruments</b>				
Options	760	453	1,123	838
Forward contracts	14,827	548	4,642	3,531
Swaps	5	117	-	1,044
<b>Total currency-related instruments</b>	<b>15,592</b>	<b>1,118</b>	<b>5,765</b>	<b>5,413</b>
Of which cleared	-	-	-	-
<b>TOTAL DERIVATIVE INSTRUMENTS</b>	<b>15,656</b>	<b>1,425</b>	<b>5,765</b>	<b>5,413</b>
Of which cleared	-	-	-	-

For details about areas of use and risk management for derivative instruments, see Note 20.

## Note 11. Derivative instruments cont.

### Maturity analysis

Most of AP4's derivatives have maturities of less than one year. Only a few currency futures, interest rate futures, credit default swaps, cross currency basis swaps and a total return swap have a longer maturity. Of these, 7 (20) contracts have a negative fair value. These are presented in the tables below.

### Maturity analysis of derivative positions with negative fair value, with terms longer than 12 months, 2023

Maturity structure Term	>1 yr <3 yrs	>3 yrs <5 yrs	>5 yrs <10 yrs	>10 yrs
Cross Currency Basis Swap	-	-51	-66	-
Credit Default Swap	-	-175	-	-
Interest rate futures	0	-	-	-
Total Return Swap	-	-1	-	-
Currency forward contracts	-1	-	-	-
<b>Total</b>	<b>-1</b>	<b>-227</b>	<b>-66</b>	<b>-</b>

### Maturity analysis of derivative positions with negative fair value, with terms longer than 12 months, 2022

Maturity structure Term	>1 yr <3 yrs	>3 yrs <5 yrs	>5 yrs <10 yrs	>10 yrs
Issued currency options	-171	-	-	-
Cross Currency Basis Swap	-306	-	-696	-
Total Return Swap	-	0	-	-
Currency forward contracts	-28	-	-	-
<b>Total</b>	<b>-505</b>	<b>0</b>	<b>-696</b>	<b>-</b>

## Note 12. Other assets

	31/12/2023	31/12/2022
Receivables from sold unliquidated assets	209	995 <sup>1</sup>
Other assets	7	4
<b>TOTAL OTHER ASSETS</b>	<b>216</b>	<b>999</b>

1. An adjustment has been made to the comparative figure for the previous year.

## Note 13. Prepaid expenses and accrued income

	31/12/2023	31/12/2022
Accrued interest income	935	771
Accrued dividends and repayments	429	407
Other prepaid expenses and accrued income <sup>1</sup>	19	16
<b>TOTAL PREPAID EXPENSES AND ACCRUED INCOME</b>	<b>1,383</b>	<b>1,194</b>

1. This item includes prepaid licence fees of SEK 3 million (-) recognised in the income statement over 14 years.

## Note 14. Other liabilities

	31/12/2023	31/12/2022
Accounts payable	18	14
Liabilities for purchased unliquidated assets	75	226 <sup>1</sup>
Other liabilities	8	9
<b>TOTAL OTHER LIABILITIES</b>	<b>101</b>	<b>249</b>

1. An adjustment has been made to the comparative figure for the previous year.

## Note 15. Prepaid income and accrued expenses

	31/12/2023	31/12/2022
Accrued interest expenses	789	743
Accrued personnel costs	15	10
Accrued external asset management fees	-	31
Other accrued expenses	6	9
<b>TOTAL PREPAID INCOME AND ACCRUED EXPENSES</b>	<b>810</b>	<b>793</b>

## Note 16. Fund capital

	31/12/2023	31/12/2022
<b>FUND CAPITAL, OPENING BALANCE</b>	<b>460,459</b>	<b>527,629</b>
<b>Net payments to the pension system</b>		
Paid-in pension contributions	85,004	81,822
Pension funds disbursed to the Swedish Pensions Agency	-89,552	-86,259
Transfer of pension rights to EG	-1	0
Settlement of pension rights	-15	0
Administration fees to the Swedish Pensions Agency	-269	-252
<b>Total net payments to the pension system</b>	<b>-4,833</b>	<b>-4,689</b>
<b>Net result for the year</b>	<b>43,925</b>	<b>-62,481</b>
<b>FUND CAPITAL, CLOSING BALANCE</b>	<b>499,551</b>	<b>460,459</b>

## Note 17. Pledged assets, contingent liabilities and commitments

	31/12/2023	31/12/2022
<b>Pledged assets and contingent liabilities</b>		
Securities on loan against collateral received in the form of securities <sup>1</sup>	13,623	17,214
Collateral pledged for exchange-cleared derivative contracts	3,410	2,097
Pledged assets pertaining to OTC derivative contracts <sup>2</sup>	-	1,651
<b>Commitments</b>		
Investment commitments for future payments for alternative and strategic investments	33,372	25,133
Subscription commitments, see Note 18	4,549	9,500
Other commitments, see Note 18	5,000	-

- Collateral received for loaned securities amounts to SEK 14,057 million (17,840).
- Collateral received for OTC derivative contracts amounts to SEK 15,272 million (1 250).

## Note 18. Related parties

The purpose of this note is to disclose how AP4's result and financial position have been affected by transactions and outstanding balances, including commitments, with related parties in accordance with the definitions in IAS 24. With respect to salaries and remuneration paid to the Board of Directors and senior executives, see Note 6. All associated companies are considered to be related parties to AP4, see also Note 9.

	31/12/2023	31/12/2022
<b>Vasakronan Holding AB</b>		
Interest income	9	9
Commitments <sup>1</sup>	4,500	4,500
<b>Rikshem Intressenter AB</b>		
Interest income	15	15
Commitments <sup>2</sup>	5,000	5,000
<b>ASE Holdings S.à.r.l.</b>		
Shareholder loans	-	251
Commitments <sup>3</sup>	49	-

## Note 18. Related parties cont.

	31/12/2023	31/12/2022
<b>ASE Holdings II S.à.r.l.</b>		
Interest income	-	27
Shareholder contributions during the year	-	33
<b>ASE Holdings III S.à.r.l.</b>		
Interest income	0	22
Shareholder contributions during the year	75	76
Shareholder loans	25	294
<b>Cinder Invest AB</b>		
Shareholder contributions during the year	30	21
Dividends received	5	5
<b>4 to 1 Investments AB</b>		
Shareholder contributions during the year	0	-
<b>4 to 1 Investments KB</b>		
Contributions during the year	0	598

- At the request of Vasakronan, AP4 has committed to buying commercial paper in the company up to a value reported above.
- At the request of Rikshem, AP4 has committed to providing loan financing to the company up to a value reported above.
- At the request of ASE Holdings S.à.r.l., AP4 has committed to making a capital contribution up to a value reported above.

## Note 19. Financial instruments, price and valuation hierarchy

Fair value	31/12/2023 Level 1	31/12/2023 Level 2	31/12/2023 Level 3	31/12/2023 Total
<b>Financial assets</b>				
Equities and participations, listed	238,405	42,450	3,607	284,462
Equities and participations, unlisted	-	-	81,465	81,465
Bonds and other fixed income assets	98,548	5,407	7,946	111,901
Derivative instruments	46	15,610	-	15,656
<b>Total financial assets</b>	<b>336,999</b>	<b>63,467</b>	<b>93,018</b>	<b>493,484</b>
<b>Financial liabilities</b>				
Derivative instruments	-134	-1,291	-	-1,425
<b>Total financial liabilities</b>	<b>-134</b>	<b>-1,291</b>	<b>-</b>	<b>-1,425</b>
<b>NET FINANCIAL ASSETS AND LIABILITIES</b>	<b>336,865</b>	<b>62,176</b>	<b>93,018</b>	<b>492,059</b>

Changes in Level 3	Equities and participations, unlisted	Equities and participations, listed	Bonds and other fixed income investments
<b>Opening balance, 1/1/2023</b>	<b>82,853</b>	<b>4,271</b>	<b>6,389</b>
Invested	6,935	151	2,338
Sold/repaid	-1,704	-854	-315
Realised change in value	505	-46	28
Unrealised change in value	-7,124	85	-494
Transfers from Level 1 or 2	-	-	-
Transfers to Level 1 or 2	-	-	-
<b>Closing balance, 31/12/2023</b>	<b>81,465</b>	<b>3,607</b>	<b>7,946</b>

Fair value	31/12/2022 Level 1	31/12/2022 Level 2	31/12/2022 Level 3	31/12/2022 Total
<b>Financial assets</b>				
Equities and participations, listed	216,113	41,062	4,271	261,446
Equities and participations, unlisted	-	-	82,853	82,853
Bonds and other fixed income assets	100,243	296	6,389	106,928
Derivative instruments	-	5,765	-	5,765
<b>Total financial assets</b>	<b>316,356</b>	<b>47,123</b>	<b>93,513</b>	<b>456,992</b>
<b>Financial liabilities</b>				
Derivative instruments	-	-5,413	-	-5,413
<b>Total financial liabilities</b>	<b>-</b>	<b>-5,413</b>	<b>-</b>	<b>-5,413</b>
<b>NET FINANCIAL ASSETS AND LIABILITIES</b>	<b>316,356</b>	<b>41,710</b>	<b>93,513</b>	<b>451,579</b>

Changes in Level 3	Equities and participations, unlisted	Equities and participations, listed	Bonds and other fixed income investments
<b>Opening balance, 1/1/2022</b>	<b>68,538</b>	<b>3,913</b>	<b>4,284</b>
Invested	10,860	-	3,108
Sold/repaid	-2,031	-602	-1,174
Realised change in value	1,034	1,318	123
Unrealised change in value	4,452	-358	48
Transfers from Level 1 or 2	-	-	-
Transfers to Level 1 or 2	-	-	-
<b>Closing balance, 31/12/2022</b>	<b>82,853</b>	<b>4,271</b>	<b>6,389</b>

## Note 19. Financial instruments, price and valuation hierarchy cont.

### Level 1. Instruments with publicly quoted prices

Financial instruments traded in an active market. A market is considered to be active if it has quoted prices that are regularly updated more frequently than once a week and if the prices used are unadjusted for settled trades in the market. Approximately 70% of AP4's investments are classified in this level.

### Level 2. Valuation methods based on observable market data

Financial instruments traded in a market that is not considered to be active, but where there are quoted prices that are unadjusted for trades, or observable input data that is updated regularly for indirect valuation using generally accepted models. At AP4 this category mainly includes market-quoted equity funds that are not considered to be active but where there is observable input data that is regularly updated for indirect valuation as well as OTC derivatives such as forward exchange contracts and interest rate swaps, but also fixed income instruments and funds containing interest-related instruments with low liquidity. OTC derivatives are valued using discount curves that are indirectly based on regularly updated observable input data that is interpolated or extrapolated to calculate non-observable interest rates. Input data for these interest rates that is used to discount the future cash flows of the instrument for valuation is updated regularly and is observable, though this does not apply for the interest rates. These instruments are therefore classified as Level 2.

### Level 3. Valuation techniques based on non-observable market data

Financial instruments that are valued using a significant amount of non-observable data or that cannot otherwise be classified as Level 1 or Level 2. These mainly include unlisted equities and owner loans in directly held real estate companies and unlisted equities in private equity firms. For private equity firms, the IPEV's principles are used as the main framework and include several valuation methods such as valuation based on actual transactions, multiples valuations, calculations of net asset value and discounted cash flows. For holdings in directly owned real estate

companies, the principles of IPD Svenskt Fastighetsindex are used as the main framework, with two basic methods: the local market price method and the indirect return method (NPV approach). With the local market price method, the property holdings are compared with similar properties sold on the open market, while the indirect return method involves the use of forecast future cash flows discounted to net present value.

### Sensitivity analysis

According to IFRS, a sensitivity analysis shall be presented using an alternative valuation for Level 3 assets. In terms of valuation methodology, an alternative valuation of these assets is associated with major difficulties. Generally speaking, for unlisted properties the yield requirement is of central importance, but assumptions about factors such as vacancies, operating costs, market and profit growth are also of great importance. For private equity firms, profit growth and the stock exchange's P/E multiple valuations are important.

Level 3 valuations normally include a delay, which in a positive-trending market entails a conservative valuation and vice versa. A sensitivity analysis of Vasakronan, AP4's largest property holding, with a fair value of equities and participations of SEK 24.4 billion, i.e. nearly 30% of unlisted equities in Level 3, has been performed by the real estate company. According to this analysis a change in required yield by +/- 0.25 percentage points would change the value of the shareholding in Vasakronan by approximately SEK -2.3/+2.5 billion.

For the valuation of AP4's investments in private equity firms reported in unlisted equities, corresponding to SEK 35.0 billion, significant assumptions are made about valuation multiples and future cash flows. A changed assumption for the EV/EBITDA multiple by +/- 5% would result in a change in the valuation of these investments by SEK +/- 4.4 billion. The valuation of AP4's high-yield fixed income assets reported in listed equities, as well as bonds and other fixed income assets, corresponding to SEK 11.8 billion, is based substantially on discount rates for interest income and repayment of loans. A change in the discount rate of +/- 1 percentage point for all maturities would result in a change in value by SEK +/- 0.2 billion.

## Note 20. Risks

There follows a description of the management of AP4's main risks, which comprise operational and financial risks.

### Operational risk

By operational risk is meant the "risk of loss resulting from inadequate or failed processes, human error, defective systems or external events". The definition includes legal risks. Examples of operational risks include conscious or unconscious mismanagement, which can be caused by substandard routines or instructions, inadequate systems, insufficient control and audit, and by criminal actions or external events.

The overall goal in managing operational risk is to achieve and maintain a good control culture and to reduce significant operational risks within AP4.

### Established, Fund-wide process and methodology

Operational risks in AP4 are to be managed through an established joint-Fund process and methodology. This process includes process mapping, identification and valuation of risks, and shall be conducted for all identified processes. Key controls shall be in place for all material risks, which as far as possible reduces the likelihood of risks materialising or mitigates the consequences when undesirable events occur despite all. In the gradation of risks, existing key controls shall be quality-assured to ensure they have the desired functionality and are effective.

As part of the operational risk management process it is especially important to evaluate change processes and their effects on the operations. Operational risks are evaluated specifically in connection with the implementation of new products, system changes and organisational changes.

To minimise operational risks, a clear division of responsibilities and authorities shall be documented in written rules. Applicable processes and routines shall ensure good internal control and be documented in relevant instructions.

### Responsibility and organisation

In the day-to-day activities all managers and employees shall maintain an awareness of risks in the business and their key controls, and act in such a way to ensure that the operations, assets or trust in AP4 among parties in the external operating environment are not jeopardised. Further, all units are responsible for ensuring that the daily operations meet the requirements for good internal control and allocate sufficient resources for this.

The operations, with the process owner as the responsible party, shall identify, assess and manage the risks in their respective areas of operation. Risk & Business Support is responsible for supporting and coordinating the management of operational risks throughout AP4. This responsibility includes developing and providing expert and methodology support and following up, evaluating and developing the risk management process. In addition, Risk & Business Support is responsible for conducting follow-ups at least yearly to ensure compliance with the joint risk management methodology for operational risks for all identified processes in AP4. The same applies for significant, identified change processes such as implementation of new products, system changes and organisational changes.

AP4's Legal unit is responsible for legal risk aspects of contracts and similar.

### Financial risks

Financial risks, consisting mainly of market, credit and liquidity risks, are monitored and controlled by the independent Risk & Business Support unit, which reports directly to the CEO and the Board of Directors. The goal of asset management is to only take positions that are expected to generate favourable returns within established risk mandates. Therefore, the main risks that AP4 exposes itself to should consist of transparent financial risks, and in such case predominantly market risks where there are good opportunities to forecast risk premiums.

### Market risks

Market risk is the risk that the value of an instrument will be negatively affected by variations in share prices, exchange rates or market interest rates. Since AP4's holdings consists mainly of listed instruments with daily pricing in liquid markets, there are good opportunities to regularly measure and report on market risks through both forecast and realised risk levels. AP4's goal is to hold a high proportion of listed equities and fixed income instruments.

### Equity price risk

Equity price risk refers to the expected variation in the market value of equities. Equity price risk is managed through diversification across regions, countries and sectors.

### Interest rate risk

Only AP4's fixed income assets are included in the measurement of interest rate risk, which refers to expected variations in the market value of AP4's fixed income assets caused by nominal interest rate movements in fixed income markets. AP4 manages interest rate risk through diversification across regions and yield curves.

### Currency risk

Currency risk refers to expected variations in exchange rates for assets denominated in foreign currencies. Currency risk arises in connection with investments that are quoted in foreign currencies. The Swedish National Pension Funds Act limits the total currency exposure in AP4 to a maximum of 40 percentage points. AP4's investment policy determines the ultimate currency exposure in the Dynamic Normal Portfolio (DNP).

## Note 20. Risks cont.

### Real estate price risk

By real estate price risk is meant the expected variation in the market value of real estate. Real estate price risk is managed through diversification of property types, such as office, residential, industrial, etc., and of regions, mainly within Sweden but also via other countries.

### Risk in investments

Value at Risk (VaR) is used as a metric to calculate financial risk. Value at Risk is defined as the maximum loss that can arise with a given probability over a given period of time. In the table below, a time period of 1 year and 95% confidence level are used, unless stated otherwise.

Asset classes, 31/12/2023	VaR, ex-ante holding period 12 months	Contribution volatility % 12-month portfolio	VaR, ex-ante holding period 1 day <sup>2</sup>
Global equities <sup>1</sup>	37,810	4.6	1,100
Swedish equities	27,340	3.3	915
Defensive equities	5,050	0.6	142
Global fixed income instruments <sup>1</sup>	2,372	0.3	112
Swedish fixed income instruments	249	0.0	11
Real assets <sup>1</sup>	30,693	3.8	234
Currency and other	-4,907	-0.6	-77
<b>Total investments</b>	<b>98,607</b>	<b>12.0</b>	<b>2,437</b>

- For certain AP4 assets, market quotations of asset prices with good periodicity are not available, or underlying holdings of an index are also missing. This makes it difficult to forecast the risks for these assets in a satisfactory manner in AP4's risk system, Barra. AP4 has therefore chosen to use alternative listed securities or other approximations for these holdings. Approximations have been used for a total of 18.5% of assets. Approximations have been made as follows: For unlisted real assets, corresponding to 13.6%, an aggregate weighting of three factors has been used: an equity factor, a real estate factor, and cash. For unlisted equities and high-yield fixed income instruments, corresponding to 4.9%, a European equity index and European high-yield index have been used, respectively.
- To enable comparisons with AP1, AP2 and AP3, AP4 has also estimated VaR based on a one-day holding period, a 95% confidence level, and a data length of one year in which the observations are given equal weight. In this context a simulation method with historical return distribution has been used for the calculation.

Asset classes, 31/12/2022	VaR, ex-ante holding period 12 months <sup>2</sup>	Contribution volatility % 12-month portfolio	VaR, ex-ante holding period 1 day <sup>3</sup>
Global equities <sup>1</sup>	38,626	5.1	1,921
Swedish equities	28,194	3.7	1,351
Defensive equities <sup>4</sup>	5,300	0.7	281
Global fixed income instruments <sup>1</sup>	1,133	0.2	124
Swedish fixed income instruments	136	0.0	24
Real assets <sup>1</sup>	26,337	3.5	354
Currency and other	-3,494	-0.5	-351
<b>Total investments</b>	<b>96,232</b>	<b>12.7</b>	<b>3,704</b>

- For certain AP4 assets, market quotations of asset prices with good periodicity are not available, or underlying holdings of an index are also missing. This makes it difficult to forecast the risks for these assets in a satisfactory manner in AP4's risk system, Barra. AP4 has therefore chosen to use alternative listed securities or other approximations for these holdings. Approximations have been used for a total of 20.3% of assets. Approximations have been made as follows: For unlisted real assets, corresponding to 15.3%, an aggregate weighting of three factors has been used: an equity factor, a real estate factor, and cash. For unlisted equities and high-yield fixed income instruments, corresponding to 4.9%, a European equity index and European high-yield index have been used, respectively.
- To better harmonise the metric Value at Risk (VaR) with the metric volatility as well as the long-term nature of AP4's operations, VaR is presented for a holding period of 12 months instead of 10 days as previously.
- To enable comparisons with AP1, AP2 and AP3, AP4 has also estimated VaR based on a one-day holding period, a 95% confidence level, and a data length of one year in which the observations are given equal weight. In this context a simulation method with historical return distribution has been used for the calculation.
- Defensive equities is a new asset class that was introduced in 2022.

## Note 20. Risks cont.

### Currency exposure

AP4 hedges investments using currency derivatives to control its open currency exposure. AP4's open currency exposure at year-end was 21.6% (19.3%). AP4's currency exposure is shown in the table below.

Currency exposure 31/12/2023	USD	JPY	HKD	INR	CHF	KRW	Other	Total
Equities and participations	118,538	9,961	6,402	5,062	5,199	3,638	73,447	222,247
Bonds and other fixed income assets	47,199	8,346	-	-	-	-	21,869	77,414
Derivative instruments, excl. currency derivatives	-48	15	-	-	-	-	-189	-222
Other receivables and liabilities, net	2,627	464	204	-	397	1	2,716	6,409
Currency derivatives	-118,154	1,689	-1,124	-620	-1,782	1	-77,996	-197,986
<b>Currency exposure, net</b>	<b>50,162</b>	<b>20,475</b>	<b>5,482</b>	<b>4,442</b>	<b>3,814</b>	<b>3,640</b>	<b>19,847</b>	<b>107,862</b>

Currency exposure 31/12/2022	USD	JPY	HKD	INR	GBP	CHF	Other	Total
Equities and participations	106,450	9,657	7,829	4,096	8,773	4,818	62,373	203,996
Bonds and other fixed income assets	34,067	9,443	-	-	4,729	-	24,986	73,225
Derivative instruments, excl. currency derivatives	0	0	-	-	-	-	0	0
Other receivables and liabilities, net	7,980	88	236	-	869	447	2,110	11,730
Currency derivatives	-106,825	-8,522	-3,746	-	-10,472	-1,658	-68,650	-199,873
<b>Currency exposure, net</b>	<b>41,672</b>	<b>10,666</b>	<b>4,319</b>	<b>4,096</b>	<b>3,899</b>	<b>3,607</b>	<b>20,819</b>	<b>89,078</b>

### Credit risk

Credit risk refers to the risk that an issuer or counterparty cannot meet its payment obligations. Credit exposure refers to the value that is exposed to credit risk through contracts with counterparties or issuers. Credit exposure thus includes both issuer and counterparty exposures. Total credit risk is limited by the selection of the interest rate index in the DNP and limits per rating category. Credit risk per pool of issuers or issuer is restricted by limits which include both issuer and counterparty risk.

The CEO approves all counterparties with which AP4 may conduct transactions (regarding both standardised and non-standardised instruments). Furthermore, it has been determined that when trading in OTC derivatives, ISDA (International Swaps and Derivatives Association) Master Agreements and CSAs (Credit Support Annex) are applied with all large counterparties.

Rating classes, <sup>1</sup> 31/12/2023	Non-standardised derivatives			
	Bonds, <sup>2</sup> exposure	Fair value <sup>2</sup>	Collateral/ security	Residual risk
AAA	59,466	-	-	-
AA	8,601	7,658	-6,492	1,166
A	11,503	6,032	-8,682	-2,651
BBB	23,540	0	-777	-777
BB	780	-	-	-
No rating <sup>3</sup>	343	-	-	-
<b>Total credit risk exposure</b>	<b>104,233</b>	<b>13,690</b>	<b>-15,951</b>	<b>-2,262</b>

Rating classes, <sup>1</sup> 31/12/2022	Non-standardised derivatives			
	Bonds, <sup>2</sup> exposure	Fair value <sup>2</sup>	Collateral/ security	Residual risk
AAA	52,162	-	-	-
AA	6,331	-51	406	355
A	12,244	-118	99	-19
BBB	29,426	0	110	110
BB	390	-	-	-
No rating <sup>3</sup>	745	-	-	-
<b>Total credit risk exposure</b>	<b>101,298</b>	<b>-169</b>	<b>615</b>	<b>446</b>

1. The credit risk classifications (ratings) presented here refer to an internal standard. The assessment in this standard is based on the ratings issued by the selected rating agency (Moody's Analytics UK Ltd).
2. Fair value, including accrued interest.
3. Pertains to subordinated loans, bonds and shareholder loans in Alternative investments and Real estate.



## Note 20. Risks cont.

### Management of derivatives

AP4 uses derivatives in most asset management mandates. Derivatives have several areas of use and purposes, where the most important are:

- Hedging of AP4's foreign investments, where derivatives are the only alternative.
- Improving the efficiency of index management, where derivatives are used to minimise transaction costs and simplify administration.
- Improving the efficiency of active management, where derivatives are used to minimise transaction costs and simplify administration as well as to enable positions to be taken that cannot be created using other instruments (short positions, volatility positions, etc.).
- Regulating the operative portfolio's risk with the help of strategic derivative positions.

The use of derivatives is limited both in terms of the nominal underlying values and market risk. All derivative positions and associated risks are subject to daily position and risk monitoring.

The CEO approves all counterparties with which AP4 may conduct transactions regarding both standardised and non-standardised instruments.

Further, when trading in OTC derivatives, ISDA and CSA agreements must exist for all large counterparties. ISDA Master Agreements refer to standard agreements for regulating derivatives trading between two counterparties. CSAs refer to an annex to an ISDA Master Agreement. CSAs regulate how collateral is to be pledged as outstanding liabilities in the form of liquid funds or securities.

### Liquidity risk

Liquidity risk includes liquidity risk related to cash flows and liquidity risk in financial instruments.

Liquidity risk in a financial instrument consists of the risk that the instrument cannot be sold or can only be sold at a significantly lower price than the market-quoted price. A large share of AP4's securities are immediately available for trading or lending. Illiquid financial instruments consist primarily of assets in unlisted companies and real estate. OTC

derivatives and credit instruments may also become illiquid and/or show significant differences between the bid and ask prices from time to time.

Liquidity risk may also be high if large net payments are needed from the liabilities side, since AP4 has a payment obligation to the Swedish Pensions Agency. This makes it necessary to hold a large share of liquid instruments. At present AP4 makes monthly payments to the Swedish Pensions Agency that are relatively small in relation to existing capital, however, possible losses on currency forward contracts and equity index futures may be significant, and daily forecasts of liquidity in SEK and other currencies are to be prepared.

AP4's liquidity risk in financial instruments is limited by the investment universe as well as by limits for active risk combined with the choice

of benchmark index for fixed income securities and listed equities. Further, the Swedish National Pension Funds Act limits liquidity risk, as it stipulates that a minimum of 20% of AP4's total market value must be invested in debt instruments with low credit and liquidity risk.

The Board's rules limit liquidity risk through special rules for investments in fixed income assets and through careful monitoring of cash balances. AP4 invests a large share of the portfolio in listed equities and government bonds with good liquidity. Overall, liquidity risk in AP4 is considered to be low.

The table below provides a summary of AP4's liquidity risk according to the maturity structure. Bonds and fixed income instruments are stated at fair value, including accrued interest.

Maturity structure, 31/12/2023, Term	<1 yr	1<3 yrs	3<5 yrs	5<10 yrs	>10 yrs	Total
Nominal government	5,439	8,790	6,074	26,801	10,309	57,413
Nominal corporate	11,311	17,184	11,244	7,079	0	46,818
<b>Total</b>	<b>16,750</b>	<b>25,974</b>	<b>17,318</b>	<b>33,880</b>	<b>10,309</b>	<b>104,231</b>

Maturity structure, 31/12/2022, Term	<1 yr	1<3 yrs	3<5 yrs	5<10 yrs	>10 yrs	Total
Nominal government	2,720	23,629	12,611	8,452	5,921	53,333
Nominal corporate	11,598	19,407	12,442	4,518	-	47,965
<b>Total</b>	<b>14,318</b>	<b>43,036</b>	<b>25,053</b>	<b>12,970</b>	<b>5,921</b>	<b>101,298</b>

All liabilities have terms of less than one year except for a few currency futures, interest rate futures, credit default swaps, cross currency basis swaps and a total return swap, see Note 11. However, the combined market value of these contracts is limited, and they have therefore been omitted from the table above.

## Note 21. Financial assets and liabilities that are netted on the balance sheet or subject to netting agreements

31/12/2023	Gross amount	Netted amount on balance sheet	Net amount on balance sheet	Amounts not netted on the balance sheet			Other <sup>1</sup>	Total on balance sheet
				Offsetting of financial instruments under agreements	Collateral received/pledged	Net amount after offsetting		
<b>Assets</b>								
Derivative instruments	15,656	-	15,656	1,409	13,153	1,094	-	15,656
<b>Total</b>	<b>15,656</b>	<b>-</b>	<b>15,656</b>	<b>1,409</b>	<b>13,153</b>	<b>1,094</b>	<b>-</b>	<b>15,656</b>
<b>Liabilities</b>								
Derivative instruments	1,425	-	1,425	1,409	-	16	-	1,425
<b>Total</b>	<b>1,425</b>	<b>-</b>	<b>1,425</b>	<b>1,409</b>	<b>-</b>	<b>16</b>	<b>-</b>	<b>1,425</b>

31/12/2022	Gross amount	Netted amount on balance sheet	Net amount on balance sheet	Amounts not netted on the balance sheet			Other <sup>1</sup>	Total on balance sheet
				Offsetting of financial instruments under agreements	Collateral received/pledged	Net amount after offsetting		
<b>Assets</b>								
Derivative instruments	5,765	-	5,765	3,869	1,168	728	-	5,765
<b>Total</b>	<b>5,765</b>	<b>-</b>	<b>5,765</b>	<b>3,869</b>	<b>1,168</b>	<b>728</b>	<b>-</b>	<b>5,765</b>
<b>Liabilities</b>								
Derivative instruments	5,413	-	5,413	3,869	1,296	248	-	5,413
<b>Total</b>	<b>5,413</b>	<b>-</b>	<b>5,413</b>	<b>3,869</b>	<b>1,296</b>	<b>248</b>	<b>-</b>	<b>5,413</b>

1. Other instruments on the balance sheet not subject to agreements that allow offsetting.

The table shows financial assets and liabilities that are presented net on the balance sheet or that have rights associated with legally binding master agreements for offsetting or similar agreements. Financial assets and liabilities are recognised net on the balance sheet when AP4 has a legal right to net under normal business conditions and in the event of insolvency, and if there is an intention to settle net or sell the asset and settle the liability simultaneously. Financial assets and liabilities that are subject to legally binding master agreements on offsetting or similar agreements that are not presented net on the balance sheet are arrangements that usually come into force in the event of insolvency, but not under normal business conditions or for arrangements in which AP4 does not have the intention to liquidate positions simultaneously.

# Board of Directors' signatures

Stockholm, 22 February 2024

Our auditors' report was submitted on 22 February 2024

**Johan Gyllenhoff**  
Acting Chair of the Board

**Helén Eliasson**

**Monika Elling**

**Helena Kaiser de Carolis**  
Authorised Public Accountant  
Appointed by the Swedish  
government

**Peter Nilsson**  
Authorised Public Accountant  
Appointed by the Swedish  
government

**Anders Johansson**

**Henrik Rättzén**

**Per Strömberg**

**Ingrid Werner**

**Aleksandar Zuza**

**Niklas Ekvall**  
CEO

# Auditor's Report

## Report on the audit of the annual accounts

### Opinion

We have audited the annual accounts of AP4 for 2023. The Fund's annual accounts are included on pages 52–75 of this document.

In our opinion, the annual accounts have been prepared in accordance with the Swedish National Pension Funds Act (2000:192) and present fairly, in all material respects, the financial position of the Fourth AP Fund as of 31 December 2023 and of its financial performance for the year then ending according to the Swedish National Pension Funds Act. The statutory administration report is consistent with the other parts of the annual accounts.

We therefore recommend that the income statement and balance sheet be adopted.

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities according to these standards are described in more detail in the section Auditor's responsibilities below. We are independent in relation to AP4 according to generally accepted auditing standards in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these standards.

We believe that the audit evidence we have obtained is sufficient and appropriate as a basis for our opinion.

### Other information than the annual accounts

This document includes other information than the annual accounts. The other information comprises the pages 1–51 and 78–102. The Board of Directors and the Managing Director are responsible for the other information.

Our opinion on the annual accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts, our responsibility is to read the information identified above and consider whether the

information is materially inconsistent with the annual accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### Responsibilities of the Board of Directors and Managing Director

It is the Board of Directors and Managing Director who are responsible for the preparation and fair presentation of the annual accounts in accordance with the Swedish National Pension Funds Act. The board of Directors and Managing Director are also responsible for the internal control they deem necessary to enable the preparation of annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts, the Board of Directors and Managing Director are required to assess the Fund's capacity to continue its operations. They disclose, where applicable, conditions that may affect the ability to continue as a going concern and to use the going concern assumption.

However, the going concern assumption does not apply if the Board of Directors and the Managing Director intend to liquidate the Fund or cease operations or have no realistic alternative to doing so.

### Auditor's responsibilities

Our responsibility is to obtain reasonable assurance as to whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an Auditor's Report that includes our opinion. Reasonable assurance is a high level of assurance, but does not comprise a guarantee that an audit conducted in accordance with ISA and generally accepted auditing standards in Sweden will always identify material misstatements should they exist. Misstatements can arise from fraud or error and are

considered to be material if, individually or taken together, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts.

As a part of the audit in accordance with ISA, we exercise professional judgement and maintain professional scepticism throughout the entire audit. In addition, we execute the following activities:

- We identify and assess the risks of material misstatement in the annual accounts, whether due to fraud or error, design and execute audit procedures based on, amongst other things, these risks, and obtain audit evidence which is sufficient and appropriate to provide a basis for our opinion. The risk of not identifying a material misstatement resulting from fraud is higher than one resulting from error, as fraud can include collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- We obtain understanding of the internal control of the fund relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal controls.
- We evaluate the appropriateness of the accounting principles applied and the reasonability of the accounting estimates and related disclosures made by the Board of Directors and Managing Director.
- We reach a conclusion on the appropriateness of the Board of Directors' and Managing Director's application of the going concern basis of accounting in the preparation of the annual accounts. We are also to reach a conclusion, based on the audit evidence obtained, whether any material uncertainty exists related to such events or circumstances which can result in significant doubt as regards the Fund's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our Auditor's Report to the related disclosures in the annual accounts, or if such disclosures are inadequate, we are required to modify our opinion on the annual accounts. Our conclusions are based on the audit evidence obtained up to the date of our Auditor's Report. However, future events or circumstances may cause the Fund to cease to continue as a going concern.

- We evaluate the overall presentation, structure, and content of the annual accounts, including the disclosures, and whether the financial reports represent the underlying transactions and events in a manner providing a true and fair presentation.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform the Board of significant observations during the audit, including any significant shortcomings that we have identified in internal controls.

### Report on other legal and regulatory requirements

#### Opinion

In addition to our audit of the annual accounts, we have also audited the inventory of the assets managed by AP4. We have also audited to determine if there are any criticisms, in general, as regards the Board of Directors' and Managing Director's management of AP4 for 2023.

The audit has shown no grounds for criticism in relation to the inventory of the assets or, in general, the administration.

#### Basis for opinion

We conducted our audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities according to those standards are described in more detail in the Auditor's responsibilities section below. We are independent in relation to AP4 according to generally accepted auditing standards in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these standards.

We believe that the audit evidence we have obtained is sufficient and appropriate as a basis for our opinion.

#### Responsibilities of the Board of Directors and Managing Director

It is the Board of Directors that has the responsibility for the accounts and for the administration of the Fund's assets according to the Swedish National Pension Funds Act.

The Board of Directors is responsible for the organisation of AP4 and for the administration of the Fund's activities. This includes, amongst other things, the ongoing assessment of the AP4 Fund's financial situation and ensuring that the organisation of AP4 is designed in such a manner that

the accounts, funds management and the Fund's activities are, in general, subject to satisfactory controls. The Managing Director is responsible for the day-to-day administration according to the Board of Directors' guidelines and instructions and for, amongst other things, the implementation of measures necessary to ensure that the Fund's accounting is executed in compliance with the applicable legislation and that the funds of AP4 are managed in a satisfactory manner.

#### Auditor's responsibilities

Our responsibility regarding the audit of the administration and, thereby, our opinion on discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance if there is any criticism of the Board of Directors' and Managing Director's administration of AP4 for the financial year 2023.

Reasonable assurance is a high level of assurance but does not comprise a guarantee that an audit executed in accordance with generally accepted auditing standards in Sweden will always identify actions or negligence which can result in criticism.

As a part of an audit according to generally accepted auditing practice in Sweden, we exercise professional judgement and maintain a professional scepticism through the entire audit. The audit of the administration is based primarily on the audit of the accounts.

Any additional audit procedures selected to be executed are based on our professional judgement with the starting point being the risks in the operations and the determined level of materiality. This means that we focus the audit on such measures, areas and circumstances that are significant to the operations, and where non-compliance in such contexts would be of particular importance to AP4's situation. We review and test decisions taken, decision-making documentation, measures implemented and other circumstances relevant to our opinion on the administration.

Stockholm, 22 February 2024

**Helena Kaiser de Carolis**  
 Authorised Public Accountant  
 Appointed by the  
 Swedish Government

**Peter Nilsson**  
 Authorised Public Accountant  
 Appointed by the  
 Swedish Government

# Fund Governance Report

IN THIS SECTION:

- FUND GOVERNANCE REPORT
- BOARD OF DIRECTORS
- EXECUTIVE MANAGEMENT

# Fund Governance Report

The Fund Governance Report describes AP4’s statutory mission, audit and evaluation as well as the work and organisation of the Board of Directors. The report follows applicable parts of the Swedish Corporate Governance Code (“the Code”), which provides guidance for generally accepted practice for listed Swedish companies. AP4 is a government agency, and the differences between public law and company law are substantial. The Fund Governance Report is therefore limited to the parts of the Code that can be regarded as relevant for AP4. The Fund Governance Report has not been reviewed by AP4’s external auditors.

## Governance of AP4 – an agency governed by law

AP4 is a government agency whose operations are regulated by the Swedish National Pension Funds (the AP Funds) Act (Lagen (2000:192) om allmänna pensionfonder (AP-fonder)). The purport of this law is that AP4’s capital may only be used by the state to fund income-related retirement pensions, unless Swedish Parliament decides otherwise. In accordance with Swedish National Pension Funds Act, the AP Funds each have their own, independent boards of directors, which are responsible for the organisation and administration of the respective Funds’ capital. According to this Act, AP4’s board and operations may not be steered by government directives nor by business policies or economic policy interests.

## AP4’s mission

AP4 shall manage pensions funds in an exemplary way through responsible investments and responsible ownership to provide the greatest possible benefit for the pension system. The goal of exemplary asset management shall be achieved without compromising on the overarching goal of generating a long-term high return.

## Investment rules

The investment rules for AP1–AP4 are stipulated in the Swedish National Pension Funds Act. Investments may be made in all market-listed and tradable instruments on the capital market, except for those related to commodities.

- A minimum of 20% of assets must be invested in fixed income securities with low credit and liquidity risk.
- A maximum of 40% of assets may be exposed to currency risk.
- A maximum of 10% of assets may be exposed to an individual issuer or group of issuers with internal ties.
- The market value of AP4’s equities in listed Swedish companies may amount to a maximum of 2% of the total market capitalisation.
- A maximum of 10% of votes may be owned in an individual listed company (except for real estate companies in which the share of ownership prior to its listing exceeded 10%).
- A maximum of 40% of assets may consist of illiquid assets.
- Illiquid assets may only be owned indirectly via funds, real estate companies or private equity companies (or via co-investments with such funds and private equity companies).

## Review and evaluation

The AP Funds are reviewed by external auditors. The government adopts the AP Funds’ income statements and balance sheets annually. Under assignment by the government, the AP Funds’ operations are also evaluated every year. This evaluation is presented in a report that is submitted to Swedish Parliament.

## Audit of operations

AP4’s auditors are appointed by the Swedish government. The current assignment is held by Helena Kaiser de Carolis and Peter Nilsson, from PwC. This assignment applies until AP4’s income statement and balance sheet for 2023 have been adopted and also includes a specific assignment for PwC to coordinate the audits of the AP Funds. The auditors issue an audit report on their review and an opinion certifying that a sustainability

report has been prepared. The auditors report directly to the Board of Directors, in part via a written audit report and in part via an oral presentation. The auditors attend at least one board meeting per year. The auditors report annually to the Ministry of Finance.

An internal audit has been conducted by externally procured accounting firm KPMG, which performs a yearly risk analysis. Based on this, the Board makes decisions on reviews. In 2023, one such internal audit assignment was carried out in relation to sustainability reporting.

## External and internal rules and regulations

AP1–AP4 have jointly prepared accounting and valuation policies which aim to ensure that they apply uniform accounting policies and that their annual reports are thereby comparable. The document is updated on a regular basis and is discussed annually with the external auditors. Since 2012, the AP Funds have a joint policy for remuneration, employee benefits, entertainment and business travel that has been adopted by the respective AP Funds’ boards. This joint, overarching policy is complemented by AP4’s more detailed internal employee and ethics-related policies and guidelines.

## External and internal rules, regulations and documents that affect governance and operations:

- The Swedish National Pension Funds (the AP Funds) Act (Lagen (2000:192) om allmänna pensionfonder (AP-fonder)).
- Laws such as the Administrative Procedures Act, the Public Procurement Act, and the principle on public access to information.
- Views from external auditors.
- The government’s evaluation and report to Riksdagen (Swedish Parliament).
- Swedish Parliament’s written statement.
- The AP Funds’ joint policies, and joint accounting and valuation policies.
- AP4’s internal policies and rules.
- AP4’s business plan, including the Sustainability Policy and Ownership Policy.
- The Swedish Corporate Governance Code (the Code).

### The Board's responsibilities and duties

The Board of Directors is ultimately responsible for AP4's organisation and the administration of AP4's capital. The Board has delegated responsibility for the day-to-day administration to the CEO. The Board is also responsible for hiring and evaluating the CEO, taking positions on overarching strategic issues, ensuring that its decisions are executed, and checking and following up that the operations and its various risks are managed in a suitable manner.

### Management of conflicts of interest

The Board annually adopts a policy for the management of potential conflicts of interest in AP4's operations. At each board meeting, the question of whether there would be a conflict of interest with regard to any member and agenda item is also addressed.

### Important duties of the Board include adopting the following, among other things:

- Rules of Procedure for its work.
- The CEO's instructions.
- Policies, rules and guidelines for the operations, personnel (including remuneration principles and terms of employment), financial and operational risks, and ethical guidelines for employees.
- The focus of asset management through set return targets, the Dynamic Normal Portfolio (DNP), and risk mandate for the day-to-day asset management.
- A yearly business plan for AP4.

### Evaluation of the Board's work

An evaluation of the Board's work is conducted for each year. All of the board members participate in the evaluation. The result of the evaluation is used as a basis for a discussion within the Board about how its work can be further developed.

### The Board's composition

AP4's board shall be made up of nine regular directors not counting deputies. The board members are appointed by the government. Of these, two are appointed based on a recommendation from the employer organisations and two are appointed based on a recommendation from the employee unions. The government appoints the Chair of the Board

and Vice Chair of the Board from among the board members who were not nominated by the labour market parties. The board members are appointed by the government on the basis of their expertise in promoting fund management. A member of the Board of Directors is appointed for no longer than the period until the income statement and balance sheet are adopted in the third calendar year following the year in which the member was appointed.

The board members on 31 December 2023 were Johan Gyllenhoff (Acting Chair of the Board), Helén Eliasson, Monika Elling, Anders Johansson, Henrik Rättzén, Per Strömberg, Ingrid Werner and Aleksandar Zuza. The Chair of the Board, Britta Burreau, passed away in September 2023 and Johan Gyllenhoff was appointed by the government as Acting Chair from October 12, 2023, until a new Chair has been appointed. The Board appointment applies until a permanent Chair has been appointed, but for no longer than until AP4's income statement and balance sheet for 2023 have been adopted by the government.

Biographical information on AP4's directors is provided on page 84.

### The Board's four committees

The Board has established four committees — the Remuneration, Portfolio System, Audit and Risk Committees — which conduct drafting work on various matters for the Board.

#### Remuneration Committee

The Remuneration Committee shall serve as a drafting and advisory body for the Board on remuneration matters concerning the CEO and senior executives. The committee also conducts drafting work on other matters concerning AP4's principles for remuneration and other terms of employment for all employees. The members of the Remuneration Committee as per 31 December 2023 were Helén Eliasson (committee chair), Monika Elling and Anders Johansson.

#### Portfolio System Committee

The Portfolio System Committee was established in 2022 to focus on the procurement and implementation of a new portfolio management system.

Board meetings in 2023	Remuneration Committee <sup>1</sup>	Portfolio System Committee <sup>1</sup>	Audit Committee <sup>1</sup>	Risk Committee <sup>1</sup>	Attendance/total no. meetings	Fee (SEK 000s)
Johan Gyllenhoff, Acting Chair of the Board (from September) <sup>2</sup>		x	x	x	4/5	118
Britta Burreau, Chair of the Board (until September)					4/5	156
Lars Åberg, Vice Chair of the Board (until May)					2/2	73
Helén Eliasson	x				7/7	109
Monika Elling	x				7/7	109
Anders Johansson	x				7/7	109
Henrik Rättzén		x	x	x	7/7	125
Per Strömberg			x		7/7	109
Ingrid Werner				x	6/7	109
Aleksandar Zuza					6/7	100

<sup>1</sup> Pertains to committee members as per 31 December 2023.

<sup>2</sup> Johan Gyllenhoff was appointed Vice Chair of the Board in May 2023. Director's fee paid starting in June 2023. On 12 October, Johan Gyllenhoff was appointed Acting Chair of the Board.



The members of the Portfolio System Committee as per 31 December 2023 were Henrik Rättzén (committee chair) and Johan Gyllenhoff.

### Audit Committee

The Audit Committee shall serve as a drafting, oversight and advisory body for the Board with respect to AP4's external financial reporting, accounting, the effectiveness of AP4's internal control, external audit, monitoring of AP4's management of operational risks, and compliance. AP4's external auditors attend all meetings of the Audit Committee.

The members of the Audit Committee as per 31 December 2023 were Henrik Rättzén (committee chair), Johan Gyllenhoff and Per Strömberg.

### Risk Committee

The Risk Committee shall serve as a drafting, oversight and advisory body for the Board with respect to AP4's governance, monitoring, and reporting of financial risks in the operations. The members of the Risk Committee as per 31 December 2023 were Ingrid Werner (committee chair), Johan Gyllenhoff and Henrik Rättzén.

### Directors' fees

Directors' fees are set by the government. The full-year fee for 2023 is SEK 200,000 for the Chair of the Board, SEK 150,000 for the Vice Chair of the Board, and SEK 100,000 for each of the other directors. The government has also set a yearly budget of SEK 100,000 for all committee assignments.

### Minuted meetings in 2023

During the 2023 financial year, the Board held seven minuted meetings. As shown in the table above, directors' attendance was high, averaging 93%. Attendance at board meetings included, in addition to the board members, the CEO, AP4 executives in a presenting role, and AP4's General Counsel as company secretary.

### In focus during 2023

In addition to its continuing work duties, the focus of the Board's work in 2023 was related to the following, among other matters:

- Project to update the ALM analysis every three years.

- Project for the procurement and implementation of a portfolio system. A Portfolio System Committee was established in 2022 to draft this matter for the Board.
- Decision on a new medium-term allocation mandate, DNP+.
- Project to update the thematic sustainability analysis.
- Review of the asset management structure and the tasks and mandate structure of the operational portfolio.
- Corporate governance work during the year.
- Collaboration between the AP Funds.
- A business plan for 2024.

## Risk management at AP4

Well-balanced active risk-taking based on set level of risk is a central component in AP4's asset management.

### Risk management in three steps

To achieve its set return targets, AP4 must take well considered risks in its asset management. Adept risk management is necessary for successful asset management. It must be possible to foresee risks prior to an investment and to subsequently control them. Risk management can be broken down into three steps:

1. Risk governance – risk tolerance framework
2. Continuous risk management
3. Monitoring and control

#### Step 1. Risk governance – risk tolerance framework

The Board of Directors has overarching responsibility for AP4's operations and adopts an investment policy and risk management plan for AP4's operations every year.

Together with the Swedish National Pension Funds (the AP Funds) Act (Lagen (2000:192) om allmänna pensionfonder (AP-fonder)), these governing documents provide a framework for AP4's risk tolerance. To manage the various aspects of risk governance, the Board has established a Risk Committee and an Audit Committee with three members each. The Risk Committee serves in an advisory, oversight and drafting role for the Board with respect to AP4's governance, monitoring and reporting

of financial risks in the operations. The Audit Committee is tasked with overseeing the external financial reporting and the effectiveness of AP4's internal controls.

Its duties also include overseeing the work on monitoring management of operational risks and monitoring compliance. AP4's risk and investment strategy has been formulated in accordance with the overall objective to generate the highest possible return over time, with low risk for reduced pensions, and thereby contribute to the pension system's financial strength.

The investment policy describes, among other things, the focus of asset management based on return targets and the Dynamic Normal Portfolio (DNP), which takes its starting point from AP4's ALM (Asset Liability Management) process. In addition, the investment policy describes AP4's risk mandate for the continuing asset management. The risk management plan describes the division of responsibility and authority for the investment operations, the principal risks in the operations and how these risks are to be controlled and followed up. The main risks are financial and operational risks. A more detailed description of risks is provided in Note 20.

#### Step 2. Continuous risk management

AP4's daily risk management and control activities are decentralised to all operating aspects of the organisation and are conducted in accordance with the three lines of defence principle. This principle distinguishes between the functions that own the risks (the first line of defence), functions for monitoring, control and compliance (the second line of defence), and functions for independent review (the third line of defence). AP4's application of the three lines of defence is adapted to what is deemed to be suitable for AP4 and does not fully adhere to regulatory requirements.

#### Three lines of defence

The first line of defence for risk management and control lies in the direct business operations, which includes every administrative unit in the investment operations as well as business support functions, such as Finance, Back Office and Legal.

The second line of defence consists of the Risk Control function in Risk & Business Support, and Compliance. Compliance and Risk Control are units that are independent from the investment operations and report

directly to the CEO and Board of Directors.

The third line of defence rests with internal audit. In 2023, the internal auditor was an audit firm externally procured by AP1–AP4. Each year the Board decides on the scope and the areas for which internal audit is to be conducted. The internal auditor performs an annual risk analysis and the Board decides on audits on the basis of this analysis. In 2023, one internal audit assignment was carried out in relation to sustainability reporting. In 2023, AP1, AP2, AP3 and AP4 have jointly procured the internal audit service.

### Financial and operational risks

In the ongoing risk management, risks are broken down into financial and operational risks. Financial risks consist mainly of market, credit and liquidity risks. The CEO delegates the risk mandate received from the Board for financial risks to the various asset management units. The respective asset managers are responsible for risk management within their respective mandates. Risk management within a mandate is conducted through calculated risk-taking, which can have both positive and negative outcomes. AP4's financial risks have their starting point in the Board's decision on the overall asset allocation in the Dynamic Normal Portfolio (DNP) as well as in AP4's risk mandate for the continuing asset management. Through set risk mandates for the asset management, the scope for risk-taking in the continuing asset management is limited. As documentation for AP4's continuing work on optimising risk-taking, risk forecasts are used for the respective asset management areas, instruments, risk factors, and so on.

AP4 plans risk-taking with the help of stress tests and various scenario analyses. Operational risks in AP4 are to be managed through an established joint-Fund process and methodology. In the day-to-day activities all managers and employees are to maintain an awareness of risks in the business and their key controls, and act in such a way to ensure that the operations, assets or trust in AP4 among parties in the external operating environment are upheld.

### Step 3. Monitoring and control

The Risk & Business Support unit is responsible for monitoring AP4's financial and operational risks. This involves checks to ensure compliance in the operations with statutory investment rules, targets and guidelines,

the requirements of the risk management plan and the CEO's decisions. The Risk & Business Support unit's work includes closely measuring and analysing risk and returns as well as reporting on these daily, both in absolute figures and relative to benchmark indexes, and reporting any breaches of applicable rules or regulations.

Risk & Business Support is organised into four different functions: Back Office, IT, Risk & Systems, and Risk Control. Of these, the Risk & Systems and Risk Control functions are part of AP4's risk management. The Risk & Systems function is responsible for the valuation principles for all instruments as well as daily analysis, control and reporting of returns, risks (forecast and outcome), and risk-adjusted returns. The Risk Control function is responsible for monitoring limits based on prevailing rules and control of financial risks. The Risk Control function is also responsible for monitoring operational risks in the investment operations and for ensuring compliance with rules governing operational risks. Operational risks in AP4 are to be managed through an established joint-Fund process and methodology. This process includes process mapping, identification and valuation of risks, and shall be conducted for all identified processes on a regular basis. Key controls shall be in place for all material risks, which as far as possible reduces the likelihood of risks materialising or mitigates the consequences when undesirable events occur. In the gradation of risks, existing key controls shall be quality-assured to ensure they have the desired functionality and are effective. As part of the operational risk management process it is especially important to evaluate change processes and their effects on the operations. Operational risks are evaluated specifically in connection with the implementation of new suppliers, product changes, system changes and organisational changes. To minimise operational risks, a clear division of responsibilities and authorities shall be documented in written instructions. Applicable processes and routines shall ensure good internal control and be documented in relevant instructions. The so-called four-eyes principle is applied consistently. The Compliance function reviews the operations with respect to compliance with laws, regulations and other guidelines, policies, instructions and internal rules, including ethical guidelines. Its responsibility includes providing support to the operations on compliance issues and analysing compliance risks in the operations.

## Remuneration at AP4

AP4's role as a manager of Swedish public pension funds requires that remuneration levels for the employees, including the CEO, are reasonable, justifiable and explainable. In general AP4 strives to ensure that remuneration levels on the whole are in line with the market and enable AP4 to attract and retain talented employees. AP4 shall not be a salary leader, however.

### AP4's Board of Directors

AP4's board is responsible for addressing remuneration issues in a purposeful, responsible and transparent way. Each year the Board adopts the principles for remuneration and other terms of employment for AP4's employees. In addition, the Board conducts an annual follow-up of how these principles have been applied at AP4 during the preceding year, and verifies and certifies that the government's guidelines on terms of employment for senior executives of the AP Funds have been adhered to. As part of this work, with the support of external consultants the Board regularly conducts comparisons of AP4's remuneration levels for both members of the Executive Management and other employees using salary statistics from relevant, comparable employers in the market.

### Remuneration Committee

The Remuneration Committee is a committee appointed by the Board of Directors. It serves in an advisory, oversight and drafting role for the Board for remuneration matters concerning the CEO and senior executives of AP4. The Remuneration Committee conducts drafting work for important remuneration decisions in addition to handling other related duties delegated to it by the Board. The committee also conducts drafting work for other matters concerning AP4's remuneration principles and other terms of employment for all employees, and is responsible for monitoring application of these principles. Finally, the committee conducts drafting work behind the assessment of AP4's compliance with the government's guidelines for terms of employment for senior executives of the AP Funds.

### The AP Funds' joint policy

The AP Funds' joint policy for remuneration principles, employee benefits, entertainment and business travel was formulated jointly by the First, Second, Third, Fourth, Sixth and Seventh AP Funds in 2012 and was adopted by AP4's board. This joint, overarching policy is complemented by AP4's more detailed internal policies and guidelines, including AP4's Remuneration Policy. The policies and guidelines are subject to annual review.

### AP4's Remuneration Policy

According to AP4's Remuneration Policy, an employee's total remuneration to 31 December 2023 consists of a fixed salary, variable salary, pension and other benefits.

#### Fixed salary

Fixed salary shall be in line with the market and competitive, but not market-leading. Salaries are set on an individual basis and are commensurate with the level of responsibility and degree of difficulty of the work involved, as well as with the competence and capacity required for each employee's work.

#### Variable salary

Each year, the Board of Directors has approved a plan for variable remuneration for all of AP4's employees. No variable salary is payable to the CEO, senior executives, the CFO or the respective heads of Risk Control and Compliance. The plan provides an opportunity to receive a maximum of two months' salary based on the achievement of predetermined targets based on objective criteria. The targets included in the plan are designed to balance collective achievements with the individual employees' contributions to and responsibility for AP4's overall performance during a rolling three-year period. Variable remuneration is paid out only if AP4 achieves a positive net result in absolute terms for the year to which the variable remuneration pertains.

The Board of Directors has decided that as of 2024, variable remuneration will no be longer applied.

### Pension

AP4 applies the so-called BTP plan under applicable collective agreements with BAO (the Employers Organisation of Swedish Banking Institutions) and SACO (the Swedish Confederation of Professional Associations) for all employees except for the CEO. Employees hired after 1 April 2008 with salaries higher than 10 times the Income Base Amount receive Alternative BTP, a defined contribution pension solution whereby pension premiums are paid in an amount corresponding to 30% of the employee's salary that is higher than 7.5 times the Income Base Amount. For other employees, unless otherwise agreed, a mainly defined benefit retirement pension applies, according to the BTP plan. The CEO is entitled to retirement at 65 years of age and receives pension provisions corresponding to 30% of their salary.

### Salary exchange/enhanced occupational pension

All employees are entitled to exchange a portion of their gross salary for pension contributions in a way that is cost-neutral for AP4.

### Other benefits

The combined value of other benefits is of limited value in relation to employees' total remuneration. Examples of other benefits include supplementary healthcare insurance, group insurance and a wellness subsidy. AP4 encourages its employees to take advantage of their parental leave benefits and therefore compensates part of the difference between salary and the parental leave benefit. AP4 has five parking spaces that employees could use during the year in exchange for taxation as benefit.

### Notice periods and severance pay

A notice period for end of employment applies in accordance with the rules of the collective agreement between BAO and SACO for all employees except for the CEO. For the CEO, a mutual notice period of six months applies. In the event AP4 serves notice, the CEO may also be entitled severance pay of a maximum 18 months' salary. Upon new employment or for income earned from an own business, the remuneration during the notice period or severance pay is to be reduced by an amount equivalent to the new income.

### The Board's follow-up of salaries in 2023 for all permanent employees

During the year, the Board – with the help of external consultants – commissioned a salary survey based on the guidelines of the Discrimination Act as well as an external market comparison. The salary survey that was conducted from a gender equality perspective showed that there are no significant differences in salary with respect to equal work, work of equal value, or in female-dominant work categories. The external market comparison, where AP4's salaries were compared with salaries for equivalent positions in the financial sector in Sweden showed that AP4's salary levels are in line with both AP4's Remuneration Policy and the government's guidelines for terms of employment for senior executives of the AP Funds. After consideration of the results of the comparative analysis, the Board could conclude that AP4 applies remuneration levels that are within set guidelines and that AP4's salaries are in line with the going rate in the market, reasonable, and justifiable without being market-leading. In addition, it was determined that, with respect to senior executives, remuneration is in accordance with the guidelines for terms of employment for senior executives of the AP Funds.

# Board of Directors



## Johan Gyllenhoff

Acting Chair of the Board since October 2023  
Born 1962  
B.Sc.Econ.

### Other assignments

Chair: Vattenfall Eldistribution AB, Försäkringsaktiefbolaget Vattenfall Insurance. Director: Kärnavfallsfonden



## Helén Eliasson

Director since 2020  
Born 1971  
B.A. Social Care

### Other assignments

Member of Regional Executive Board, Vice Chair, County Council of Region Västra Götaland. Director: SKR's board of directors, member of Västra Götaland Regional Assembly



## Monika Elling

Director since 2020  
Born 1962  
B.Sc.Econ.

### Other assignments

Chair: Talent Eye AB.  
Director: Didner & Gerge, X Shore AB



## Anders Johansson

Director since 2022  
Born 1960

### Other assignments

Chair: Forena insurance industry trade union.  
Director: TCO, Folksam Liv, Kooperationens Pensionsstiftelse, FPK Tjänstepensionsföretag



## Henrik Rättzén

Director since 2019  
Born 1965  
B.Sc.Econ.

### Other assignments

Chair: Hedvig Försäkring AB, BOSAM, Freedom Holding, Bumbee-Labs, Tangerine Smart Climate Technologies  
Director: Nordnet, Alektum Group, Senior Advisor



## Per Strömberg

Director since 2022  
Born 1968  
Ph.D. Carnegie Mellon University, B.Sc. Econ. Stockholm School of Economics

### Other assignments

Professor of Finance and Private Equity, Stockholm School of Economics.  
Director: COIN Securities Services AB, Royal Swedish Academy of Sciences



## Ingrid Werner

Director since 2017  
Born 1961  
Ph.D. Econ., Honorary Doctorate in Economics, Stockholm School of Economics

### Other assignments

Chair: FINRA Economic Advisory Committee, Academic Advisory Board Swedish House of Finance. Director: Dimensional Mutual Funds and ETFs, Research Advisory Council for SAFE, Scientific Council for SFI



## Aleksandar Zuza

Director since 2020  
Born 1975  
M.Sc.Business, M.Sc. Econ.

### Other assignments

Research Officer: IF Metall

## Britta Burreau

Chair of the Board Britta Burreau died in September 2023, following a short illness. Vice Chair Johan Gyllenhoff was appointed Acting Chair of the Board by the government on 12 October 2023.

# Executive Management



## Niklas Ekvall

CEO

Born 1963

Employed since 2016

Ph.D. Financial Economics, M.Sc. Industrial Engineering

Previous positions with Nordea, Carnegie, AP3, Handelsbanken and the Stockholm School of Economics

### Other assignments

Chair: Swedish House of Finance, Stockholm School of Economics  
 Director: Vasakronan AB, Hans Dahlborgs Stiftelse för Bank- och Finansforskning, The Royal Swedish Academy of Sciences Investment Committee



## Jenny Askfelt Ruud

Head of Alternative Investments

Born 1973

Employed since 2018

M.Sc.Econ.

Previous positions with Enwise, Ratos, McKinsey & Company, Arts Alliance and Morgan Stanley



## Magdalena Högberg

Head of Strategic Allocation & Quantitative Analysis

Born 1983

Employed since 2013

M.Sc. Eng., M.Sc. Econ., CFA

Previous positions with VPD and Astando



## Theresa Einarsson

General Counsel

Born 1977

Employed since 2019

LL.B.

Previous positions with Apoteksgruppen, Advokatfirman Vinge, Davis Polk & Wardwell LLP and Hammarskiöld & Co



## Jannis Kitsakis

Head of Fundamental Equities

Born 1976

Employed since 2008

M.Sc.Econ.

Previous positions with Handelsbanken



## Tobias Fransson

Head of Sustainability, Finance & Communication

Born 1968

Employed since 2003

M.Sc.Econ.

Previous positions with ABB, SEB and Capto Financial Consulting



## Nicklas Wikström

Head of Risk & Business Support

Born 1968

Employed since 2008

M.Sc. in Accounting and Financing, CEFA, AFA

Previous position with AFA Insurance

# Sustainability Data

IN THIS SECTION:

- RETURN OVER TIME
- PORTFOLIO ALLOCATION OVER TIME
- KEY METRICS HR & ENVIRONMENT
- STAKEHOLDER DIALOGUES
- RISKS IN THE PORTFOLIO
- VOTING DATA
- CARBON FOOTPRINT
- TCFD TABLES
- AP4 AND THE UN'S GLOBAL GOALS

# Return over time

## Multi-period returns by asset class

Returns are calculated using the Time-Weighted Rate of Return (TWRR) method.

AP4's operative asset management is evaluated against the Dynamic Normal Portfolio (DNP), which is a benchmark portfolio established by the Board of Directors. The DNP is made up of a number of market indexes that are weighted together with set asset weights. The indexes used are standardised and hedged to Swedish kronor. Since 2022, the indexes are adjusted for any sustainability-based exclusions. The asset class Real assets is not measured against a market index, but instead against a real return target of the CPI + 3 percentage points. Active return is calculated as the difference in returns between the operative portfolio and the DNP benchmark portfolio.

In connection with decisions on the DNP, a medium-term return target over 10 years is also set, which is currently a 3% annual real return. The asset management is also compared with the development of the income index. A return that exceeds the income index contributes to a strengthening of the pension system's stability.

Asset class <sup>1</sup>	1 year (2023)	3 years (2021– 2023) <sup>6</sup>	5 years (2019– 2023) <sup>6</sup>	10 years (2014– 2023) <sup>6</sup>	Benchmark index <sup>7</sup>	Weight in DNP <sup>8</sup> , %
Global equities, %	17.7	5.0	10.3	8.0	MSCI All Countries	36
- of which, active return, <sup>2</sup> %	-2.2	-0.8	-0.2	0.3		
Swedish equities, %	18.3	3.3	15.4	12.4	SIX-RX	15
- of which, active return, %	-0.9	-5.3	0.7	1.1		
Defensive equities, <sup>3</sup> %	15.0	-	-	-	MSCI World factor index	5
- of which, active return, %	1.4	-	-	-		
Fixed income assets, <sup>4</sup> %	4.5	-0.6	0.9	1.4	Global fixed income: ICE GDP-weighted, 4-year duration	19
- of which, active return, %	1.2	1.8	1.3	0.3	Swedish fixed income: ICE, 4-year duration	8
Real assets, <sup>5</sup> %	-5.4	5.3	8.8	15.2	CPI + 3%	17
- of which, active return, %	-14.9	-2.3	1.5	9.5		
AP4 total portfolio, %	9.6	4.9	9.0	8.6	Dynamic Normal Portfolio (DNP)	100
- of which, active return relative to the DNP, %	-3.4	-1.5	0.3	1.1		
Income index, %	4.6	3.6	3.5	2.8		
Medium-term return target, %	7.5	10.0	7.6	6.4		

1. Returns in this table are before costs, as costs are not allocated by asset class. AP4's return after costs was 9.6% for 2023.

2. AP4 can use its tax status as a state pension fund, and in 2023 this made a positive contribution of 0.19 percentage points.

3. The defensive assets asset class was introduced in 2022, which is why data is not available for earlier years.

4. Fixed income assets consist of the two asset classes Global fixed income and Swedish fixed income investments and are managed as one portfolio.

5. Prior to 2018, real assets consisted only of real estate, and this was measured against the MSCI ACWI.

6. Pertains to average annual return over the respective time horizon.

7. Since 2022, the benchmark indexes are adjusted for sustainability-related exclusions.

8. Pertains to 31 December 2023.

# Portfolio allocation over time

The tables show how the fund capital was allocated at the end of each year with regard to asset classes, currency exposure and distribution between internal and external asset management.

External asset managers and their mandate at the end of 2023 are also presented. At year-end 2023, 79% of assets were managed internally and 21% were managed externally. AP4 allocates capital between internal and external asset management according to what is considered to provide the best net return after costs.

## External managers of listed assets

Asset manager	Mandate
AQR	Equities, emerging markets
Northern Trust	Equities, emerging markets
Blackrock	Equity-neutral equity, credit and interest rate strategies
Generation	Equities, Asia
EQT	Equities, Europe
Athanase	Equities, Europe

## Asset allocation over time

Asset class, %	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Global equities	34	31	40	40	39	39	41	40	39	42
Swedish equities	16	16	17	17	16	15	17	18	19	19
Defensive equities	5	5	-	-	-	-	-	-	-	-
Global fixed income	19	21	16	20	21	22	21	23	23	20
Swedish fixed income	9	9	12	11	11	12	12	11	11	14
Real assets	16	18	15	13	13	12	10	9	7	6

Currency exposure, %	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total currency exposure	21.6	19.3	20.9	21.0	19.8	18.4	18.4	26.9	27.0	28.1
- of which USD	10.0	9.1	12.6	10.1	9.7	8.0	14.2	16.9	17.2	20.0
- of which EUR	0.6	-1.0	-0.7	1.4	1.4	0.0	0.3	3.1	5.0	3.8
- of which GBP	-0.1	0.8	0.7	0.9	0.8	1.1	1.0	3.0	2.9	3.1
- of which JPY	4.1	2.3	1.3	1.3	1.0	1.1	1.4	2.1	2.0	2.0
- of which Other currencies	7.0	8.1	7.0	7.3	6.9	8.2	1.5	1.8	-0.1	-0.8

## Share of externally managed capital

Share of capital, %	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Internal management	79	80	84	86	85	84	83	77	78	75
External management	21	20	16	14	15	16	17	23	22	25





# Key metrics HR & Environment

## Key ratios – employees

	2023	2022	2021	2020	2019
Number of employees, average	66	61	62	61	56
Of whom, women, %	37	39	37	37	35
Number of persons in Executive Management, average	7	7	7	7	9
Of whom, women, %	43	43	32	33	44
Average age, yrs	45	47	46	44	45
Employee turnover, %	12	22	14	3	9
Sickness-related absence, %	3.0	1.1	1.3	2.3	2.5

## AP4's direct environmental impact

	2023	2022	2021	2020	2019
Electricity use in own offices, MWh	77	103	89	87	103
District cooling use in own offices, MWh	33	52	44	43	46
Use of heat in own offices, MWh	35	48	50	37	40
Water consumption, m3	468	443	375	262	433
Use of paper, tonnes	0.5	0.5	0.1	0.1	1.0
Ecolabelled paper as share of total paper use, %	100	100	100	100	100
Business travel by air, km 10,000s	57	34	2	11	54
Business travel by air, tonnes CO2 emissions	56	36	3	12	60

Stakeholder dialogues <sup>1</sup>	Stakeholder group	Stakeholders	AP4 is affected/impacts	Form of dialogue	Description	Material topics
Those we carry out our mission for	Principals	Swedish Parliament, government, pensions group	AP4 is affected by legislation, board appointments, annual evaluation.  AP4 impacts through dialogue, ongoing and annual evaluation, and as a consultative body.	Annual reporting and evaluation, meetings.	The government performs an annual evaluation of the AP Funds and submits a report to Parliament. The evaluation is based on the reporting of the AP Funds and an in-depth analysis. The government also appoints the auditor for the AP Funds.	Return, exemplary management, reporting, pension system.
	General public	Current and future pensioners	AP4 is affected by the expectation of a high return and exemplary management.  AP4 impacts by contributing to a robust pension system and responsible operations.	External reporting, meetings with representatives, website.	Information about AP4's work, both financial and on sustainability, through detailed reporting.	Return, exemplary management, pension system.
Those we carry out our mission with	Employees	Current and future employees	AP4 is affected by the work, commitment and participation of its employees.  AP4 impacts by being (and presenting AP4 as) an attractive employer.	Employee survey, performance review, internal and external surveys, website, social media (LinkedIn), talks and attending seminars.	Daily dialogue with employees, health and safety dialogue, safety inspections, employee reviews, incident follow-ups, regular employee surveys to achieve continuous improvements in the work environment.	Pay, conditions, working environment, development opportunities, responsible investor.
	Portfolio companies and external asset managers	Majority-owned companies, unlisted/listed directly owned companies, indirectly owned companies under external management, external asset managers.	AP4 is affected by these contributing to the Fund's return target and sustainability goals.  AP4 impacts through dialogue and active ownership.	Meetings, networks, evaluations, voting at general meetings, work in nomination committees, follow-up meetings with external asset managers.	Sustainability matters are discussed with portfolio companies and asset managers as part of ongoing investment operations.	Return, sustainability goals, strategies, corporate governance.
	Financial sector	Financial service providers  Counterparties  Collaborations	AP4 is affected through services and collaboration.  AP4 impacts by specifying requirements.  AP4 impacts through engagement.	Regular dialogue.	Networks with Swedish and international industry colleagues to examine common issues and exchange expertise, e.g. Council on Ethics, TPI and PRI.	Return, holdings, strategies, exemplary management, research.
	Suppliers	Offices, administration, IT services	AP4 is affected by the price and quality of goods and services.  AP4 impacts by specifying requirements in procurement.	Meetings, agreements and follow-up.	Information from suppliers is used in AP4's sustainability reporting.	Contract terms, quality, sustainability.
Those affected by our investments	Civil society and nature	Interest organisations	AP4 is affected by these drawing the Fund's attention to challenges and opportunities.	Meetings with organisations, media, website, external reporting such as the annual report.	Dialogue with organisations and experts with knowledge of the issues and local conditions, such as TPI, FAIRR and ChemSec.	Sustainability work, reporting, positions, research, new insights.
		Local communities	AP4 impacts through investments in companies and by working with them.		The Council on Ethics of the AP Funds invites interest groups to an annual meeting on the presentation of its report. At this meeting, the Council on Ethics provides information about its work and engages in dialogue with stakeholders.	
		Academia	AP4 is affected by scientific facts.			

1) The table describes AP4's stakeholder dialogues, read more on page 13.

# Risks in the portfolio

AP4's investment process includes identifying and managing economic, financial and sustainability-related risks that could affect the portfolio's long-term performance.

On top of these risks are also risks associated with AP4's internal operations, such as operational risks (e.g. personnel risks, systemic risks and process risks) and other business risks (such as reputational risks). Management of these is described on pages 13, 16–18 and 70–73, and in the Fund Governance Report on pages 79–83.

Risk areas		
	The pension system's long-term needs and structural socioeconomic factors	Medium-term economic performance and financial markets
<b>Identification</b>	Identifies long-term risks for the pension system over a 40-year period: <ul style="list-style-type: none"> <li>• Demographic development</li> <li>• Labour market development</li> <li>• Long-term return expectations in financial markets</li> <li>• This work takes the form of an ALM analysis, which is described in more detail on page 23.</li> </ul>	Identifies risks from a ten-year perspective with focus on the 5–15 year time span, which enables analysis of more detailed cyclical events: <ul style="list-style-type: none"> <li>• Macroeconomic scenarios</li> <li>• The financial markets' valuation levels</li> <li>• Climate transition</li> </ul>
<b>Governance</b>	Every three years AP4 conducts an ALM (Asset Liability Management) analysis, where the work is continuously reported to the Board, and where the following are determined: <ul style="list-style-type: none"> <li>• Long-term return targets</li> <li>• Decisions on the risk scope are expressed in terms of a range for the portion of equities, currency exposure and the fixed income portfolio's average duration.</li> </ul>	The Board receives continuous reports on the analysis of medium-term economic performance and the financial markets. Based on risks and opportunities, the Board decides annually on: <ul style="list-style-type: none"> <li>• The Dynamic Normal Portfolio (DNP), a benchmark portfolio comprising several market indexes</li> </ul>
<b>Management</b>	AP4 conducts a business environment analysis with various scenarios that affect the preconditions for the pension system. AP4 works according to the Swedish Pensions Agency's forecasts combined with own stress tests of the labour market, demographics and return expectations.	Scenarios for the macroeconomic development, including the climate transition's possible impacts on these scenarios, interest rate movements and equity valuations, are presented to the Board of Directors.
<b>Targets</b>	Striving for the combination of return targets and risk level that is best-suited for the pension system in the short- and long-term.	<ul style="list-style-type: none"> <li>• Medium-term return target 3%.</li> <li>• Active return target 1 percentage point.</li> <li>• Active risk scope 5 percentage points.</li> </ul>
<b>Results</b>	As a reflection of the pension system's current strength combined with the prevailing market situation with low expected returns and with maintained generation neutrality, the long-term real return target has been lowered, first in 2018 from 4.5% to 4.0% and starting in 2021 to 3.5%.	<ul style="list-style-type: none"> <li>• AP4's asset management is evaluated over different time horizons:</li> <li>• Total return has been evaluated since the start in 2001. AP4's total return for the period 2001–2023 has averaged 6.4% per year, compared with the long-term return target, which averaged 6.2%.</li> <li>• Ahead of 2022 the Board decided to introduce a new asset class, defensive equities, with an allocation of 5% of the DNP.</li> <li>• Active return on top of the DNP is measured over a rolling 5-year period and averaged 0.3 percentage points per year during the period 2019–2023, compared with the target of 1.0 percentage points per year.</li> </ul>

Risk areas	
	Climate risks, climate transition and other environmental risks
	Human rights and social conditions
<b>Identification</b>	<ul style="list-style-type: none"> <li>Climate change and the climate transition are systemic risks with global impacts on society, economies and expected returns. Climate risks consist of physical risks (including temporary risks such as extreme weather and flooding as well as permanent risks such as rising sea levels) and transitional risks. Risks such as changes in tax rules, sector requirements and demand may lead to poorer competitiveness for certain companies and sectors, and lead to higher costs in the form of taxes, insurance premiums and continuous investments.</li> </ul>
<b>Governance</b>	<ul style="list-style-type: none"> <li>The Board of Directors has addressed the significance by establishing Climate &amp; Environment as one of two focus areas in the asset management. Corporate Governance is the other focus area, which stipulates that AP4 shall work as an active and engaged owner to contribute to the portfolio companies' work on managing climate and environmental risks. It is also one of the focus areas for the Council on Ethics.</li> </ul>
<b>Management</b>	<ul style="list-style-type: none"> <li>AP4 mitigates risk through optimisation strategies where company weightings in the respective sectors are adjusted based on the companies' carbon intensity. AP4 makes thematic investments that contribute to and benefit from the climate transition and influence companies as an owner. AP4 is an active owner and engages companies in dialogue, internationally through the Council on Ethics or other collaboration bodies for investors.</li> </ul>
<b>Targets</b>	<ul style="list-style-type: none"> <li>AP4 supports the Paris Agreement and is striving to reduce the portfolio's carbon footprint in line with the Paris Agreement's goal to limit temperature change. AP4 aims to halve the carbon footprint of its portfolio by 2030 and have net zero emissions by 2040 at the latest.</li> </ul>
<b>Results</b>	<ul style="list-style-type: none"> <li>Since 2010, the portfolio's carbon emissions have decreased by 65%. AP4's equity portfolio has carbon emissions that are 59% lower than a broad global equities index (MSCI ACWI). Based on its screening of the portfolio, the Council on Ethics registered 76 confirmed cases or cases with a risk of violations during 2023. At year-end, the Council on Ethics conducted 54 reactive company dialogues, of which environmental issues were the focus for 9% of these.</li> </ul>

## Risk areas

### Corruption

<b>Identification</b>	<ul style="list-style-type: none"> <li>Corruption is a global problem that exists in many countries and industries. It is harmful and costly for society, it skews sound competition and undermines asset values as well as people's trust in political and economic systems. Various forms of corruption constitute commonly prevalent sustainability risks for many companies. With broad equities exposure, corruption is a threat to the portfolio's long-term return.</li> </ul>
<b>Governance</b>	<ul style="list-style-type: none"> <li>AP4, together with AP1–AP3, has formed the Council on Ethics of the AP Funds, which is responsible for systematic business intelligence monitoring of approximately 3,400 companies and regularly analyses the portfolio to identify any cases of corruption.</li> </ul>
<b>Management</b>	<ul style="list-style-type: none"> <li>The Council on Ethics conducts reactive dialogues with companies in cases of confirmed corruption as well as proactive projects aimed at countering corruption in industries and countries where it is a pervasive problem. AP4 makes demands for transparency and discusses with companies how, for example, policies, guidelines and routines for preventing corruption are designed and how follow-up is conducted. Tools that can reduce and prevent corruption include greater transparency, whistleblower functions and improved monitoring of companies' internal rules. AP4 eagerly cooperates with other investors in this work and votes in line with this work at company shareholder meetings.</li> </ul>
<b>Targets</b>	<ul style="list-style-type: none"> <li>AP4 is working to increase knowledge in its asset management about the risk for corruption and to proactively identify these risks. Through the Council on Ethics' work, AP4 aims to identify serious incidents of corruption in companies in the portfolio and to work to ensure that the companies remedy these and work preventively to prevent corruption. Through its proactive work, the Council on Ethics strives to support companies in their work with combating corruption.</li> </ul>
<b>Results</b>	<ul style="list-style-type: none"> <li>Based on its screening of the portfolio, the Council on Ethics registered 76 confirmed cases or cases with a risk of violations during 2023. During the year, the Council on Ethics conducted 54 reactive company dialogues, of which corporate governance including business ethics and corruption was the focus for 26% of these.</li> </ul>



## Description of sustainability risks

AP4's mission and long-term investment perspective require it to identify risks and opportunities relating to sustainability matters. In 2023, AP4 conducted an analysis of sustainability risks in the portfolio based on the two perspectives of impact materiality (how the portfolio affects the outside world) and financial materiality (how the outside world affects the portfolio's financial position). The risks identified are presented in the table. The biggest risks from both perspectives were considered to be climate, biodiversity, labour in the value chain (human rights) and business ethics (corruption).

### Climate risks

Today AP4's largest sustainability risks lie in climate changes and the transition that is needed to address these. A reduced climate impact is a precondition for stable and foreseeable economic development and thereby also for AP4's opportunities to succeed with its mission. In the transition to a society that uses fossil fuels to a lesser extent, emitting greenhouse gases will be increasingly more costly. This means that companies that cause large emissions will be valued and priced differently compared with today. This is why climate risks must be taken into account in AP4's long-term assessments of entire sectors and individual companies.

AP4 has identified a number of themes that are essential for the climate transition. AP4 identifies and invests in such companies that can contribute to – and benefit from – the ongoing climate transition, something that over time will create significant opportunities for the portfolio's performance.

The decision that AP4 shall not have ownership in certain fossil-based companies as well as the decision to invest in accordance with low-carbon strategies are together contributing to a reduction in the portfolio's total carbon footprint. These decisions are also reducing AP4's exposure to short-term market risks as well as more long-term risks related to the transition.

### Human rights

Shortcomings in and violations of human rights occur in many different industries, especially those with long supply chains that are hard to

oversee. Shortcomings and violations also occur in countries with weak legal systems. It is thus a sustainability risk when AP4 has ownership in a company domiciled in a country with weak laws. The same applies when companies from countries with strong laws, such as Sweden, operate in such countries.

The United Nations Guiding Principles on Business and Human Rights (UNGP) is the UN's framework for how both states and companies are to act to avoid and prevent negative impacts or violations of human rights. Under the UNGP, companies are to adopt processes to identify and remedy negative impacts or human rights violations. In this area AP4 works both through the Council on Ethics of the AP Funds and together with other investors and stakeholders to influence foreign companies so that they address violations and prevent future negative impacts.

### Corruption

Corruption is a global problem that exists in many industries and countries. Corruption costs society large amounts of money, destroys the conditions for sound competition and undermines citizens' trust in political and economic systems. Corruption is a pervasive sustainability risk for many companies and thus also for AP4, which invests in listed companies all over the world.

Preventing and combating corruption is an important sustainability matter, which is why the question of how anticorruption work is progressing is almost always included in the proactive dialogues that AP4 – through the Council on Ethics – conducts with the companies it has ownership in. The shared goal of the Council on Ethics' dialogues and of AP4's work against corruption, where AP4 votes at shareholder general meetings and supports global initiatives, is that the portfolio companies will strengthen their anticorruption work. In these dialogues AP4 discusses with its portfolio companies how the policies, guidelines and routines that are aimed to prevent corruption are designed and how they are followed up. These include tools that can reduce or prevent corruption, such as increased transparency, implementation of whistleblower functions and improved follow-up of internal rules.

Sustainability area	Impact materiality: Risk of impact of AP4's investment portfolio on the external environment	Financial materiality: Risk of external impact on AP4's investment portfolio
Climate change	●	●
Emissions	●	●
Water and marine resources	●	●
Biodiversity and ecosystems	●	●
Circular economy	●	●
Own workforce	●	●
Labour in the value chain	●	●
Impact on communities	●	●
Consumers and end-users	●	●
Business ethics	●	●

● Assessed as higher risk   ● Assessed as medium risk  
● Assessed as lower risk

# Voting data

## Summary of AP4's voting on individual issues at general meetings of Swedish companies in 2023

Issue <sup>1</sup>	Board recommendations			Shareholder proposals		
	Number	AP4 for	AP4 against	Number	AP4 for	AP4 against
Directors and discharge from liability <sup>2</sup>	-	-	-	1,587	100%	0%
Incentive programmes						
- of which, for employees	71	97%	3%	-	-	-
- of which, for directors	-	-	-	1	0%	100%
Adoption of financial statements, election of auditor, etc. <sup>3</sup>	836	100%	0%	106	100%	0%
Capital structure, organisation, acquisitions	162	96%	4%	-	-	-
- of which, new issues without preferential rights	85	91%	9%	-	-	-
Environment and health	-	-	-	2	0%	100%
Social and human rights	-	-	-	3	0%	100%
Other	-	-	-	4	0%	100%

- AP4 voted at general meetings of 131 Swedish companies in 2023. The table above shows how AP4 voted at the meetings, broken down by type of issue and proposals submitted to the meeting by the board of directors or individual shareholders.
- Proposals to discharge directors from liability are addressed in accordance with statutory requirements at general meetings. However, formally it is neither the board nor shareholders who submit such proposals.
- The large number of individual resolution points in this category consist of formal issues such as election of a chair to preside over the general meeting, appointment of persons to sign and check the minutes, drawing up and approval of voting registers, approval of the minutes and determination of whether the general meeting has been duly convened. Proposals for auditors are submitted by the nomination committee.

## Summary of AP4's voting on individual issues at general meetings of foreign companies in 2023

Issue <sup>1</sup>	Board recommendations			Shareholder proposals		
	Number	AP4 for	AP4 against	Number	AP4 for	AP4 against
Directors and discharge from liability	10,191	81%	16%	106	75%	22%
Incentive programmes	2,460	53%	31%	48	48%	52%
Adoption of financial statements, election of auditor, etc.	2,652	78%	20%	48	42%	58%
Protection against takeover	119	38%	62%	-	-	-
Capital structure, organisation, acquisitions	1,162	60%	40%	-	-	-
Environment and health	13	77%	23%	87	86%	14%
Corporate governance	-	-	-	40	80%	20%
Social and human rights	72	99%	1%	245	78%	22%

- AP4 voted at general meetings of 1,216 foreign companies in 2023. The table above shows how AP4 voted at the meetings, broken down by type of issue and proposals submitted to the meeting by the board of directors or individual shareholders. In cases where the number of votes does not sum up to 100%, this is because AP4 chose to abstain from voting.

# Carbon footprint

In 2023, AP4 reduced the listed equity portfolio's greenhouse gas (GHG) emissions by 11%. Since 2010, these emissions have decreased by a total of 65%, which is helping to reduce climate risk in the portfolio. AP4 measures and reports GHG emissions in accordance with uniform guidelines established for the AP Funds. These pertain to listed equities, which made up 57% of AP4's portfolio at year-end 2023.

In addition, AP4 also reports emissions for the unlisted real estate portfolio, which makes up a further 9% of the total fund capital, as well as the emissions of the liquid credit portfolio, which makes up 4% of the portfolio. These are reported on the following page.

AP4 works continually to evaluate access to qualitative data to be able to broaden its measurement to an even larger share of the portfolio. In 2023, the AP Funds together further developed the metrics for carbon footprint reporting. This is described in more detail on page 40.



## Carbon footprint of the listed equity portfolio

Metrics	Metrics based on EVIC <sup>5</sup>		Metrics based on share of ownership <sup>5</sup>					
	2023 (EVIC)	2023 (Ownership share)	2022	2021	2020	2019	2015	2010
Carbon emissions, Scope 1 & 2 (millions tCO <sub>2</sub> e) <sup>1</sup>	0.84	1.23	1.38	1.42	1.84	2.16	2.45	3.52
Change in portfolio's total carbon emissions compared with preceding year, %	-	-11%	-3%	-23%	-15%	-11%	-13%	-
- of which, due to changes in portfolio holdings, %-pts	-	-9%	-5%	-18%	-12%	-16%	-	-
- of which, due to changes in companies' emissions, %-pts	-	-2%	3%	-5%	-3%	5%	-	-
Carbon emissions, Scope 3 (millions tCO <sub>2</sub> e)	1.69	2.77	-	-	-	-	-	-
Relative carbon emissions, Scope 1 & 2, (tCO <sub>2</sub> e/SEKm) <sup>2</sup>	3.0	4.4	5.3	4.2	6.8	8.8	14.0	-
Portfolio-weighted carbon intensity (WACI) (tCO <sub>2</sub> e/SEKm) <sup>3</sup>	5.4	5.3	6.3	6.8	8.7	10.3	-	-
Change in portfolio's carbon intensity (WACI) compared with preceding year, %	-	-16%	-7%	-23%	-15%	-28%	-	-
- of which, due to changes in portfolio holdings, %-pts	-	-6%	5%	-22%	-9%	-21%	-	-
- of which, due to changes in companies' carbon intensity, %-pts	-	-10%	-13%	-1%	-6%	-6%	-	-
Identified market value as share of total fund capital, %	57%	57%	56%	64%	60%	59%	56%	-
Identified market value as share of total equities, %	100%	100%	100%	100%	100%	100%	100%	-
Share of market value for which reported emissions data is available <sup>4</sup>	84%	84%	78%	72%	66%	60%	-	-

1. Sum of owned portion of portfolio companies' respective carbon emissions.

2. Sum of owned portion of portfolio companies' respective carbon emissions in relation to the portfolio's market value.

3. This metric sums up the portfolio companies' respective carbon intensity, i.e. a company's carbon emissions relative to its sales, weighted based on the respective companies' share of the portfolio (arithmetic mean).

4. For the remainder of the portfolio, emissions data is estimated.

5. From 2023 onwards, CO<sub>2</sub> emissions are reported based partly on the total value of the companies (EVIC) and partly on the share of ownership in the companies. See page 40 for a description of the updating of the AP Funds' reporting of CO<sub>2</sub> emissions.

### Carbon footprint of unlisted real estate

Since 2019, AP4 measures and reports the CO<sub>2</sub>e emissions for unlisted real estate investments. In these companies, AP4 is typically a significant investor with a sizeable share of ownership and opportunities to influence. In 2020, a dialogue was begun with the companies on their respective climate strategies and climate risks as well as on their work to further reduce their CO<sub>2</sub>e emissions going forward, which is followed up with a one- to two-year frequency. Both Vasakronan and Rikshem, AP4's two largest shareholdings in this asset class, have set targets to be climate-neutral by 2030.

Since 2021, AP4 has been measuring and reporting CO<sub>2</sub>e emissions in the unlisted infrastructure portfolio. This work is a natural part of the expansion of AP4's holdings of real assets and is conducted in collaboration with the external managers of these assets. In 2022, AP4 joined the ESG Data Convergence Initiative, an industry coalition of private equity investments for coordination and cooperation regarding standardised reporting of sustainability data on the climate as well as other sustainability areas.

### Carbon footprint of liquid credits

Since 2023, AP4 measures and reports the CO<sub>2</sub>e emissions for the liquid credit portfolio. This reporting is based on the AP Funds' updated guidelines for CO<sub>2</sub> reporting, which, as for listed assets, are based on a company's emissions being distributed across the entire capital structure (Enterprise Value Including Cash – EVIC), both across equities and the companies' debt financing.

### Carbon footprint of the unlisted real estate portfolio

Metrics (based on share of ownership<sup>5</sup>; for explanatory notes, see preceding page)

	2023	2022	2021	2020	2019
Total carbon emissions, Scope 1 & 2 (millions tCO <sub>2</sub> e) <sup>1</sup>	0.015	0.018	0.019	0.019	0.032
Total carbon emissions, Scope 3 (millions tCO <sub>2</sub> e) <sup>1</sup>	0.26	-	-	-	-
Relative carbon emissions, Scope 1 & 2, (tCO <sub>2</sub> e/SEKm) <sup>2</sup>	0.3	0.4	0.5	0.5	0.8
Portfolio-weighted carbon intensity (WACI) (tCO <sub>2</sub> e/SEKm) <sup>3</sup>	2.7	3.2	3.7	4.3	5.6
Identified market value as share of total fund capital, %	9%	11%	9%	9%	9%
Identified market value as share of unlisted properties, %	100	100%	100%	100%	100%
Share of market value for which reported emissions data is available <sup>4</sup>	95	96%	97%	97%	91%

### CO<sub>2</sub>e emissions of the liquid credit portfolio

Metrics (based on EVIC<sup>5</sup>; for explanatory notes, see preceding page)

	2023
Carbon emissions, Scope 1 & 2 (millions tCO <sub>2</sub> e) <sup>1</sup>	0.05
Carbon emissions, Scope 3 (millions tCO <sub>2</sub> e) <sup>1</sup>	0.10
Relative carbon emissions, Scope 1 & 2, (tCO <sub>2</sub> e/SEKm) <sup>2</sup>	2.9
Portfolio-weighted carbon intensity, Scope 1 & 2 (WACI) (tCO <sub>2</sub> e/SEKm) <sup>3</sup>	6.8
Identified market value as share of total fund capital, %	4%
Identified market value as share of credits, %	100%
Share of market value for which reported emissions data is available <sup>4</sup>	81%

1. Sum of owned portion of portfolio companies' respective carbon emissions.

2. Sum of owned portion of portfolio companies' respective carbon emissions in relation to the portfolio's market value.

3. This measure sums the portfolio companies' respective carbon intensity, i.e., a company's carbon emissions in relation to its sales, weighted based on the respective companies' share of the portfolio (arithmetic mean).

4. For the remainder of the portfolio, emissions data is estimated.

5. From 2023 onwards, CO<sub>2</sub> emissions are reported based partly on the total value of the companies (EVIC) and partly on the share of ownership in the companies. See page 40 for a description of the updating of the AP Funds' reporting of CO<sub>2</sub> emissions.

# TCFD tables

A central part of the TCFD's recommendations entails evaluating and reporting climate-related risks. These are reported in accordance with the proposed structure in table A1 below. The table includes examples of risks that companies must take into account and manage in their operations and in investment analyses, and how it is believed that the risks may affect investments in companies/sectors/geographic markets. The risks are assessed with an investment horizon of up to ten years.

## Adapted TCFD table A1 with examples of climate-related risks

Climate-related risks	Potential financial impact	AP4
<b>Regulatory risks</b>		
<ul style="list-style-type: none"> <li>Higher pricing of GHG emissions</li> <li>Higher demands on climate reporting</li> <li>Increased regulations governing products and services</li> <li>Higher exposure to lawsuits</li> </ul>	<ul style="list-style-type: none"> <li>Higher operating expenses (e.g. costs for compliance, insurance premiums)</li> <li>Depreciation, impairment losses and early phase-out of existing assets due to regulatory changes</li> <li>Higher costs and/or lower demand for products and services as a result of fines and rulings</li> <li>Reputational risk that affects demand and pricing</li> </ul>	<p>Since 2012, AP4 has been investing in a way that reduces climate risk in the portfolio. This is done by applying quantitatively managed low-carbon strategies in the equity portfolio, which reduces exposure to companies with high carbon intensity and whose goals and plans are not considered to be aligned with the Paris Agreement and have a limited ability to manage higher carbon pricing. This pertains above all to companies with considerable operations in thermal coal and oil sands, which AP4 divested in 2018. Moreover, in the resource-intensive energy, utilities and commodities sectors, AP4 exercises fundamental company selection, which enables it to identify companies that are expected to be affected by higher regulatory risks. Together, these portfolio changes have reduced AP4's carbon footprint to a level that is 41% of that of a broad global equities index. In the credit portfolio, too, exposure is being reduced to companies that are not considered to be aligned with the ongoing climate transition for achieving the goals of the Paris Agreement.</p>
<b>Technical risks</b>		
<ul style="list-style-type: none"> <li>Substitution of current products and services with alternatives with lower carbon emissions</li> <li>Unsuccessful investments in new technology</li> <li>Costs for transition to low-carbon technologies</li> </ul>	<ul style="list-style-type: none"> <li>Depreciation and early phase-out of existing assets</li> <li>Lower demand for products and services</li> <li>Costs for research and development of new and alternative technologies</li> <li>Investments in technical development</li> <li>Costs for adapting/using new methods and processes</li> </ul>	<p>AP4 has a long-term investment horizon, which favours opportunities to include technical risks associated with the climate transition in its investment assessments. This is done in AP4's thematic sustainability analysis, which seeks to identify sustainability trends along with their strengths and time perspectives with the goal to gain an understanding of which value chains will be affected, to identify winners and losers, and by extension to find investable themes for AP4's operative management. Technical risks are also mitigated through the low-carbon strategies described under regulatory risks above.</p>

TRANSITION RISKS

Climate-related risks	Potential financial impact	AP4
<b>Market risks</b>		
<ul style="list-style-type: none"> <li>Changes in customers' preferences</li> <li>Uncertainty in market signals</li> <li>Rising costs for commodities</li> </ul>	<ul style="list-style-type: none"> <li>Decreasing demand for products and services due to changed customer preferences</li> <li>Rising production costs due to changed commodity prices and requirements for waste management</li> <li>Sudden and unexpected changes in energy costs</li> <li>Changed revenue mix, leading to lower revenue</li> <li>Changed pricing of assets (e.g. fossil fuel reserves, land and securities)</li> </ul>	<p>Market risks are managed through the thematic analysis that is described for technical risks above and through the low-carbon strategies described under regulatory risks above. In addition, in selected resource-intensive sectors, fundamental selection is exercised, such as in the commodities sector.</p>
<b>Reputational risks</b>		
<ul style="list-style-type: none"> <li>Changed consumption preferences</li> <li>Stigmatisation of sectors</li> <li>Greater worries among stakeholders or negative feedback from stakeholders</li> <li>Higher exposure to lawsuits</li> </ul>	<ul style="list-style-type: none"> <li>Lower revenues due to lower demand for products/services</li> <li>Lower revenues due to reduced production capacity (e.g. permitting delays, supply chain disruptions)</li> <li>Lower revenues due to negative impact on, for example, the ability to attract and retain employees</li> <li>Reduced access to capital</li> </ul>	<p>AP4 believes that over time companies cannot be successful and generate a stable return for their owners unless sustainability aspects are given adequate and prioritised attention by their respective boards and managements. Brand risk is therefore a significant sustainability risk that is naturally integrated in AP4's investment analyses and processes.</p>
<b>Acute risks</b>		
<ul style="list-style-type: none"> <li>Serious, extreme weather events such as hurricanes and floods</li> </ul>	<ul style="list-style-type: none"> <li>Lower revenues due to reduced production capacity (e.g. transport and supply chain disruptions)</li> <li>Lower revenues and higher costs due to negative impact on employees (e.g. health, safety, absenteeism)</li> </ul>	<p>Based on studies of current research, AP4 has determined that there is a negative connection between climate change and growth, especially for individual areas, but also at an aggregated level. It is estimated that half of the impact on growth from climate change could be alleviated through adaptation measures. The connection between changed precipitation volumes and growth is more apparent in more arid countries. The impacts on growth of extreme weather and natural disasters may be positive as well as negative. The economic impacts of rising sea levels are negative. However, the causal connections are so numerous and uncertain that it is hard to say anything more specific concerning the growth and return potential, or for that matter using insights at present for concrete reallocations in the portfolio. Physical climate risks are also included in the climate scenario analysis, and the assessment is that the most apparent risk is stagflation due to negative supply shock.</p>
<b>Long-term risks</b>		
<ul style="list-style-type: none"> <li>Changes in precipitation patterns and extreme variations in weather patterns</li> <li>Rising average temperature</li> <li>Rising sea levels</li> </ul>	<ul style="list-style-type: none"> <li>Depreciation and early phase-out of existing assets (e.g. damage to property or assets in high-risk areas)</li> <li>Rising operating expenses (e.g. water shortages at hydro power plants and cooling water for fossil-based and nuclear power plants)</li> <li>Higher capital costs (e.g. damage to production plants)</li> <li>Lower revenues due to lower sales/production</li> <li>Rising insurance premiums and risk of reduced access to insurance of assets in high-risk areas</li> </ul>	

TRANSITION RISKS

PHYSICAL RISKS

A central part of the TCFD's recommendations entails evaluating and reporting climate-related opportunities. These are reported in accordance with the proposed structure in table A2 below. The table includes examples of opportunities that companies are to take into account in their operations. In its investment analyses, AP4 takes into account how such opportunities are handled and how it is believed they may affect investments in companies/sectors/geographic markets. The assessment is made with an investment horizon of up to ten years.

### Adapted TCFD table A2 with examples of climate-related opportunities

Climate-related opportunities	Potential financial impact	AP4	Climate-related opportunities	Potential financial impact	AP4
<b>Resource efficiency</b>			<b>Products and services</b>		
<ul style="list-style-type: none"> <li>Use of more efficient modes of transport</li> <li>Use of more efficient production and distribution processes</li> <li>Reuse</li> <li>Relocation to more energy-efficient buildings</li> <li>Reduced water use and water consumption</li> </ul>	<ul style="list-style-type: none"> <li>Lower operating expenses (e.g. through efficiency gains and cost reductions)</li> <li>Increased production capacity, which leads to higher revenues</li> <li>Growth in value of fixed assets (e.g. energy-efficient buildings)</li> <li>Benefits for employees (e.g. improved work environment with respect to health and safety, more satisfied employees), which leads to lower costs</li> </ul>	<p>AP4's analysis of sustainability themes has identified broad areas. Based on the thematic analysis, AP4 has made investments in unlisted assets in the area of resource efficiency. In listed companies globally, within the energy sector AP4 has focused its investments on companies that are on track to becoming integrated energy companies with a growing share of investments in renewable energy. With respect to utilities, focus is on producers of renewable energy, electricity distribution companies, which are benefiting from electrification, and hydro power companies, which have low carbon emissions. Key themes for the companies in which AP4 continues to invest in the commodities sector are recycling, production of materials that are replacing carbon-intensive materials, and forest-owning companies. In the transport sector, focus is on rail operators, logistics companies and shipping companies.</p>	<ul style="list-style-type: none"> <li>Development of and/or expansion in products and services with low emissions</li> <li>Development of solutions for climate adaptation and insurance solutions</li> <li>Development of new products through research and development</li> <li>Ability to diversify business activities</li> <li>Changes in consumption preferences</li> </ul>	<ul style="list-style-type: none"> <li>Higher revenues through greater demand for products and services with lower carbon emissions</li> <li>Higher revenues by meeting new needs that arise in the transition (e.g. insurance solutions)</li> <li>Improved competitive position that reflects changed consumption patterns and leads to higher revenues</li> </ul>	<p>AP4 searches for, evaluates and makes thematic, proactive investments in specific sustainability areas. Examples of such investments are green bonds, alternative investment funds with a pronounced sustainability focus, and directly owned companies with a distinct sustainability focus as part of their business strategies, such as in real estate and infrastructure.</p>
<b>Energy sources</b>			<b>Markets</b>		
<ul style="list-style-type: none"> <li>Use of lower-emission energy sources</li> <li>Policies that support the transition</li> <li>Use of new technologies</li> <li>Participation in carbon pricing markets</li> <li>Decentralised electric power generation</li> </ul>	<ul style="list-style-type: none"> <li>Lower manufacturing costs</li> <li>Reduced exposure to rising prices for fossil-based energy</li> <li>Reduced exposure to greenhouse gas emissions and therefore less sensitivity to higher costs for carbon emissions</li> <li>Return on investment in low-emitting technologies</li> <li>Greater access to capital (due to more investors preferring low-emitting producers)</li> <li>Improved reputation, leading to higher demand for products/services</li> </ul>	<p>AP4's thematic analysis has identified broad areas. Based on the thematic analysis, AP4 has made investments in unlisted assets in the areas of energy transition and renewable energy.</p>	<ul style="list-style-type: none"> <li>Access to new markets</li> <li>Use of public sector incentives</li> <li>Access to new assets and sites that need insurance protection</li> </ul>	<ul style="list-style-type: none"> <li>Higher revenues through access to new and growing markets (e.g. through partnerships with governments and development banks)</li> <li>Greater diversity of financial assets (e.g. green bonds and infrastructure)</li> </ul>	<p>AP4 searches for and invests in dedicated sustainability investments in various markets and asset classes that can contribute to and benefit from the ongoing climate transition.</p>
			<b>Resilience and ability to recover</b>		
			<ul style="list-style-type: none"> <li>Participation in renewable energy programmes and application of more energy-efficient methods</li> <li>Replacement/diversification of various resources</li> </ul>	<ul style="list-style-type: none"> <li>Higher market value through planning for management of climate-related risks (e.g. infrastructure, land, buildings)</li> <li>Greater reliability in supply chain's ability to work under varying conditions</li> <li>Higher revenues through new products and services for addressing climate change and its risks</li> </ul>	<p>AP4 searches for and invests in dedicated sustainability investments in various markets and asset classes that can contribute to and benefit from the ongoing climate transition.</p>

# AP4 and the UN's Global Goals

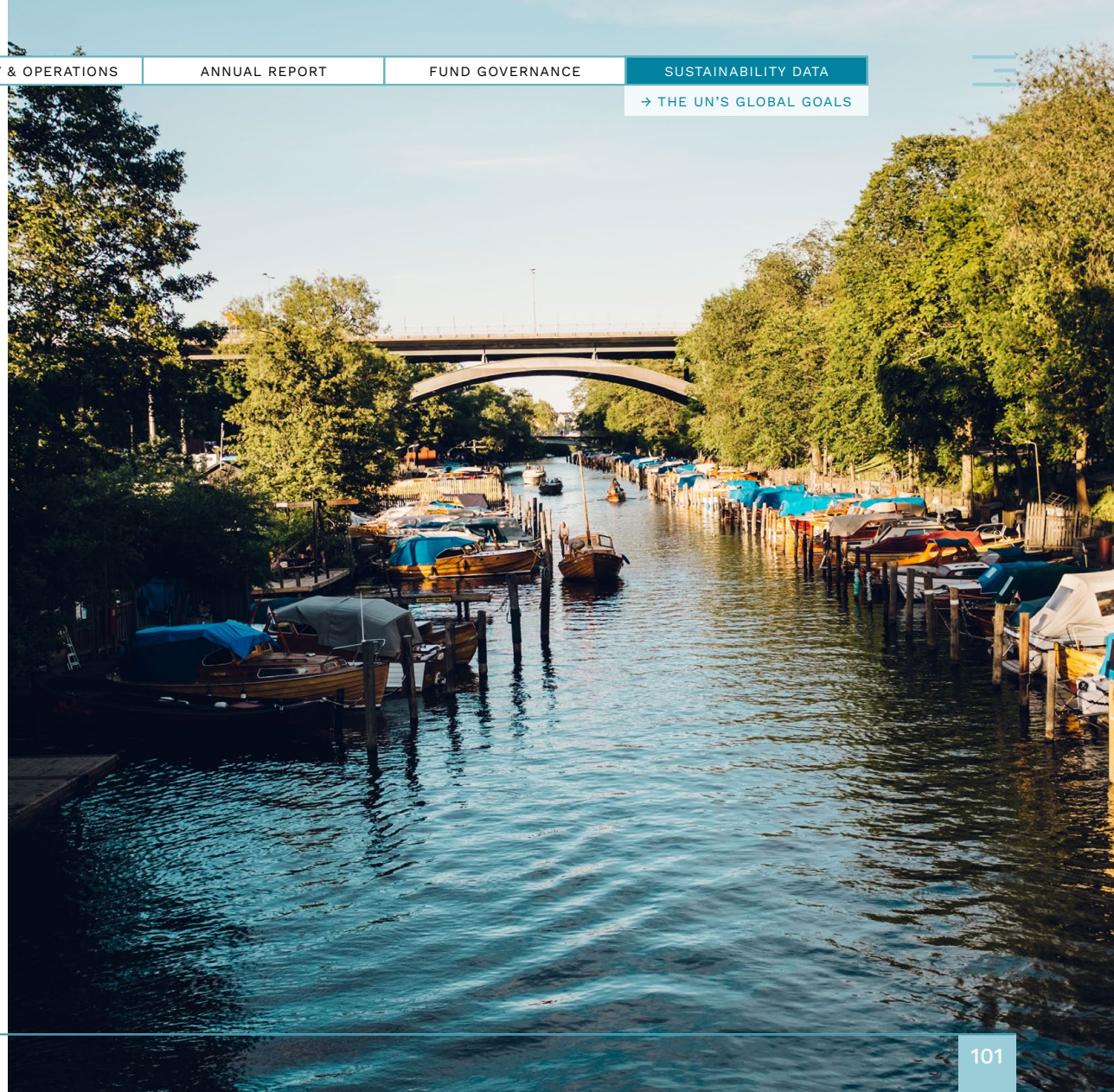
The UN's 2030 Agenda along with the 17 Global Goals provides a plan of action to end extreme poverty, combat inequalities and deprivations, promote peace and justice, and solve the climate crisis in the world by 2030. There is a clear expectation that everyone – states, civil society and business – will actively work to achieve the Global Goals.

## AP4's work linked to the Global Goals

AP4 is working to identify sustainability areas and global trends in which investments can generate expected favourable returns and contribute to sustainable development. The Global Goals along with their underlying targets and key ratios are mainly intended to serve as support for the work conducted by nations rather than by individual companies, which makes it more difficult for companies to link investments to individual goals and measure their contributions. As a state pension fund, AP4 focuses on the Global Goals that have been deemed to have investment potential. Most of AP4's sustainability-oriented investments are considered to contribute to several of the Global Goals in a direct or indirect way.

## The business sector's positive contributions to the Global Goals

A private business sector with well-managed companies that are run responsibly, together with well-functioning stock markets, are key components of a socioeconomic system that can provide greater prosperity for all citizens. The companies that AP4 invests in around the world therefore contribute at an overarching level to economic development and thereby also to promotion of the Global Goals.



**Below follows an account of the Global Goals with the clearest links to AP4's investments:**



**1. No poverty**

AP4 invests in funds that invest in companies and assets that develop and provide renewable energy, water, wastewater management and transportation infrastructure in Africa, which in turn is contributing to improved living conditions in African countries.

**2. Zero hunger**

AP4 invests in a fund that is building and owns advanced greenhouses mainly in North America, focusing on sustainable food supply. Growing in controlled environments has significant sustainability advantages compared with traditional growing, including considerably lower water consumption, less land use, and lower use of chemicals and pesticides. In addition, AP4 is invested in a fund focusing on growth companies in sustainable food supply, such as alternative proteins and fats, regenerative agriculture and healthy diets.

**3. Good health and well-being**

AP4's Swedish equity management includes a large number of companies in the health sector, from small R&D firms to established, market-leading companies. AP4 has been an early investor in the health sector and provides funding to promote the development and establishment of new medicines, equipment and health services. In the unlisted portfolio, AP4 invests in funds focused on medical technology, among other areas.

**5. Gender equality**

AP4 influences as an investor, owner and representative on nomination committees for greater diversity and gender equality on company boards and organisations. This is an expressly stated objective for AP4's Corporate Governance focus area. AP4 supports

international investor initiatives for greater gender equality and human rights.

**6. Clean water and sanitation**

AP4 invests in funds that develop and provide water infrastructure in Europe and Africa.

**7. Affordable and clean energy**

Greater access to renewable energy is a precondition for the climate transition. Investments are made in Sweden through Polhem Infra, which is jointly owned with AP1 and AP3. Polhem Infra has investments in bioenergy, wind power and digital infrastructure. Internationally, investments are made through a number of funds and investment companies that invest in unlisted companies and assets with a focus on sustainable infrastructure, including renewable forms of energy such as wind power, solar power, geothermal energy and bioenergy.

**8. Decent work and economic growth**

AP4 participates in international owner initiatives and – through the Council on Ethics of the AP Funds – engages companies in dialogues to promote decent working conditions, protect workers' rights, promote a safe and secure work environment, and combat forced labour, child labour and modern slavery. These are also issues of significant importance in the screenings that are made prior to decisions on investments in unlisted companies.

**9. Industry, innovation and infrastructure**

In the unlisted portfolio, AP4 makes thematically oriented investments in funds that invest in companies whose operations are focused on supporting and accelerating the transition to a sustainable economy, such as through innovative business models,

manufacturing methods, products or services. Through its work as an active owner, AP4 urges companies in the unlisted portfolio to accelerate their sustainability transitions through development and innovation. The Council on Ethics works within the framework of Climate Action 100+ in sector dialogues to help individual companies in their transitions. dialogues to help individual companies in their transitions.

**11. Sustainable cities and communities**

AP4's unlisted real estate companies work with sustainability in an integrated way, including reducing their carbon footprints. Both Vasakronan and Rikshem, AP4's two largest real estate company shareholdings, are working actively with the climate transition. Vasakronan has set a goal to be climate-neutral in the entire value chain by 2030, and Rikshem's goal is to have climate-neutral facility management by 2030. The unlisted investments in electrification and digital infrastructure are also making a positive contribution.

**12. Responsible consumption and production**

Sustainable food production is a precondition for the ability to feed growing populations. In the unlisted portfolio, AP4 has, for example, invested in a fund that builds and owns advanced greenhouses. Another example is a fund that invests in early-stage companies with a focus on creating sustainable food chains through alternative proteins, healthy diets, circular value chains and regenerative agriculture.

**13. Climate action**

Achieving development that is in line with the Paris Agreement and combating climate change require substantial investments in fossil-free energy at the

same time as resource-intensive companies in the areas of energy, power and commodities need to undergo a significant transition. AP4 invests in listed companies in these sectors that are currently undertaking a journey of change and which themselves are investing heavily in the climate transition. Focus is also on companies that are at the forefront with respect to renewable and recyclable resources. On a sector-independent basis, AP4 invests in listed global companies that are continuously developing their sustainability work in order to align themselves with the Paris Agreement. In the unlisted portfolio, AP4 makes investments in Sweden and internationally in renewable energy and electrification via funds and investment companies such as Polhem Infra. AP4 urges companies to refrain from negative climate lobbying. AP4 urges stock markets around the world to apply sustainability reporting guidelines and supports initiatives calling for resource-intensive companies to work to reduce their negative environmental impacts. AP4 does not have ownership in companies that derive a significant share of their revenue from thermal coal or oil sands.

**15. Life on land**

Climate change is the issue at global level that is considered to have the greatest impact on biodiversity. At regional level, AP4 works together with other investors, often through the Council on Ethics of the AP Funds, on projects that support biodiversity. Examples of such projects include deforestation in the Amazon and Asia, and sustainable meat production. At local level, AP4 works through the Council on Ethics to ensure that individual facilities such as hydroelectric dams, mines and fossil fuel extraction will have as limited environmental impact as possible.



