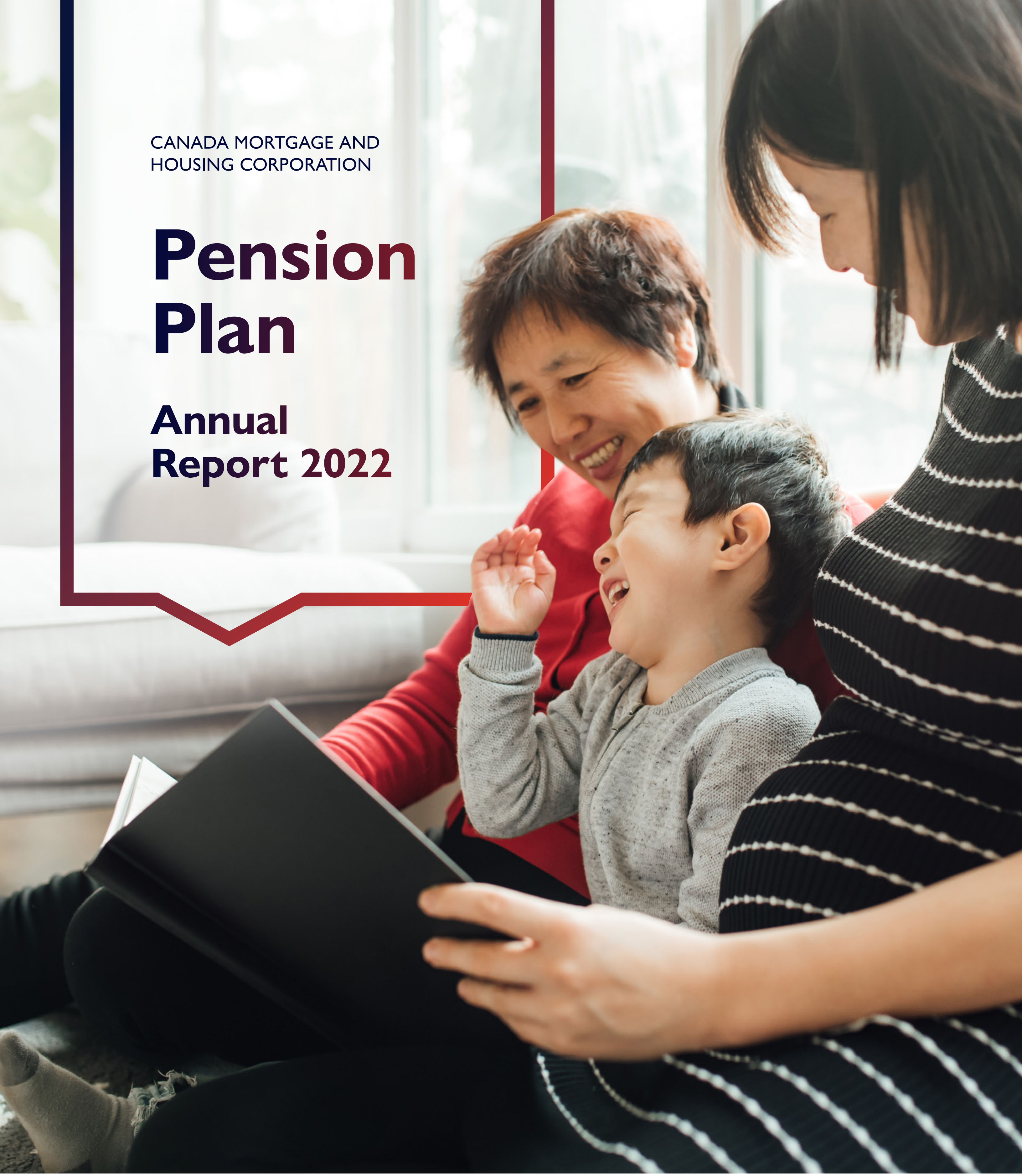
CANADA MORTGAGE AND
HOUSING CORPORATION

# Pension Plan

## Annual Report 2022



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# Our mission

The mission of the Canada Mortgage and Housing Corporation (CMHC) Pension Plan ("the Plan") is to provide its members and beneficiaries with pension benefits in accordance with the provisions of the Plan. This is accomplished through efficient administration and prudent investment of the Plan's assets to maximize returns while safeguarding assets.

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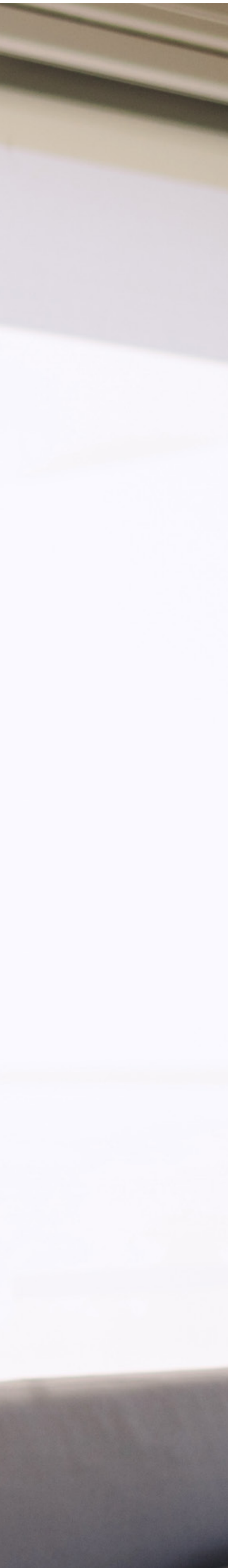

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# Message from the Chair

The most valuable CMHC asset is its people. We create extraordinary value for Canadians, provide stability to the financial system, and support the creation and maintenance of affordability in housing. Providing a stable and successful pension plan is one of the ways we show our appreciation for the great work our employees do, and how we continue to attract and retain talent.

So on behalf of the Trustees of the Pension Fund, it is my pleasure to present the Pension Plan Annual Report for 2022. The Plan was fully funded in 2022 on a going concern basis at 142.5%, as reported in the latest actuarial valuation, and CMHC intends to make full normal contributions in 2023. As part of its annual review of the level of conditional indexation of benefits for post-2017 service, and based on the actuarial valuation results, CMHC's Board of Directors decided that, as at January 1, 2024, these benefits would be indexed at 100% of the increase in the Consumer Price Index.

The Plan was not spared from the economic turmoil the world experienced in 2022. Though worldwide economic growth slowed, linked to factors such as inflation and the conflict in Ukraine, indicators such as consumer spending and labour markets have been resilient. In 2022, the Pension Fund's total investment return was -10.9% including leverage and -7.1% excluding leverage, compared to its benchmark return of -7.0%. However, looking at the longer term, the Fund's performance excluding leverage has exceeded its benchmark by about 0.3% on an annualized basis over the last 10 years. The takeaway is that the Plan was resilient, even in the face of 2022's economic turbulence. It is well-positioned to continue thriving in the year to come.

Climate change is one of the biggest threats facing the global economy today, and in the future. Actions were taken in 2022 to respond to the challenge. For example, in 2022, the Plan published its inaugural Task Force on Climate-Related Financial Disclosures (TCFD) Report. This builds on the framework developed by the task force in 2017 regarding climate-related risk management and disclosure. And as reported last year, we continue to apply a climate lens to asset allocation to ensure that we are managing risks to investments posed by climate change and exploring opportunities created by the transition to a lower-carbon economy.

Each year, the Board of Directors determines the level of contributions required to sustain the Plan in light of the Plan's financial position. In 2022, CMHC contributed 9.2% of total employee base salaries to the Plan, while employees contributed 11.8% of total employee base salaries.

We are committed to keeping plan members like yourself up to date on these and other changes—ongoing communication with members is part of the sound management of this, and any, pension plan. In the past year, eight financial wellness webinars tailored to the needs and concerns of CMHC employees were presented, and were followed with additional resources such as videos and articles. CMHC sent special communications to plan members on contribution rate changes and indexation. These are on top of our regular, ongoing communication activities, including the annual report you have before you.

It is an honour and privilege to also serve as chair of the Pension Fund Trustees. I would like to acknowledge the hard work of my fellow trustees and the members of the Pension Plan Investment Committee, as well as the support provided by CMHC's Board of Directors, Executive Committee and staff.

We are, as a team, pleased to dedicate ourselves to ensuring the health of the Plan for the benefit of current and future retirees.

**Derek Ballantyne**
Chair, Pension Fund Trustees

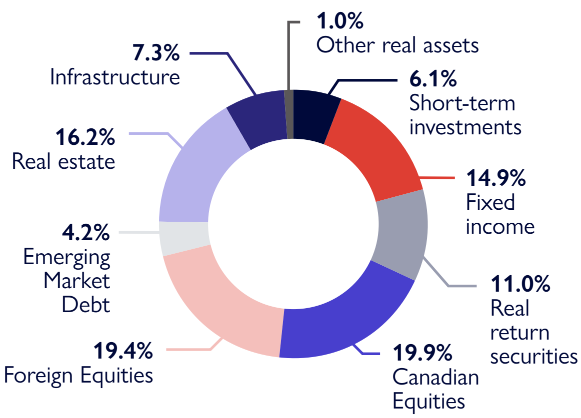
# 2022 Financial Highlights

**$2,272 Million**
**Net assets available for benefits**
**(2021 - $2,619 million)**

**142.5%**
**Fully funded on a going-concern basis**
**(2021 – 124.6%)**

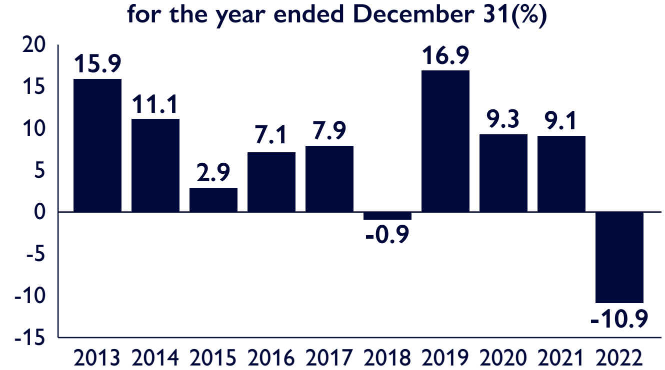
**102.4%**
**Solvency ratio increased**
**(2021 – 94.7%)**

## ASSET MIX




## RATE OF RETURN

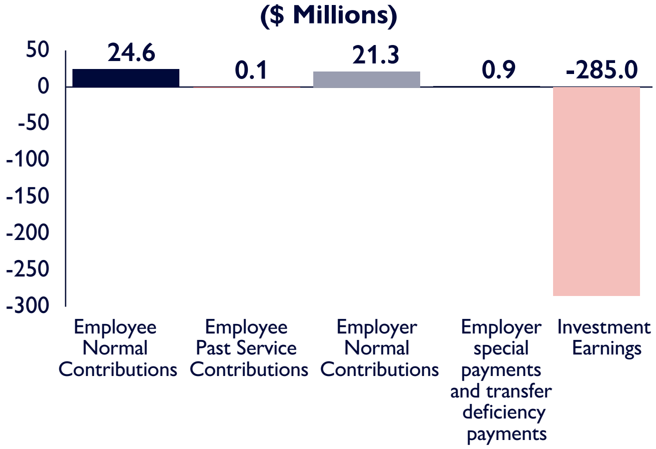
for the year ended December 31(%)




**Annualized rate of return (gross, nominal)**
Four-year: 6.1% Ten-year: 6.8%

## CONTRIBUTIONS AND INVESTMENT PERFORMANCE

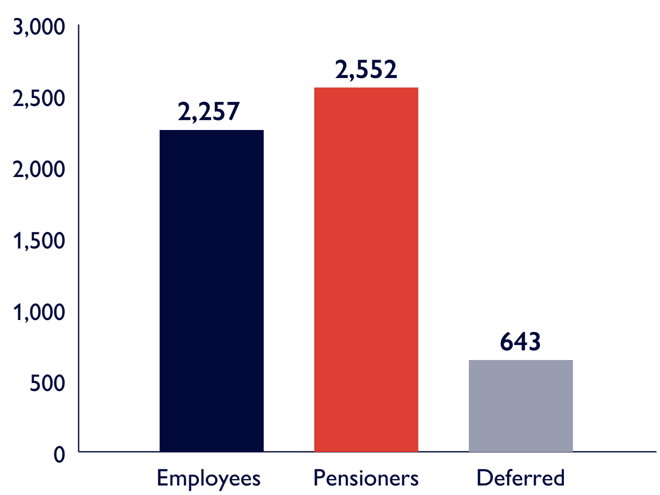
**($ Millions)**




The total investment return was -10.9% including leverage and -7.1% excluding leverage compared to its benchmark return of -7.0%.

## PLAN MEMBERSHIP

(Number of persons)



# Your Plan

The Plan is a defined benefit pension plan. This means that retirement income from the Plan is calculated using a specific formula that takes into account earnings history, pension benefit options, age, credited service and benefit service. The Plan includes provisions, among others, on early retirement, unreduced pension, survivor benefits, guaranteed indexation for service accrued up to December 31, 2017 and conditional indexation for service accrued from January 1, 2018.

The Plan provides members the opportunity to choose between two options. The option chosen affects how much members contribute to the Plan and how much they will receive from the Plan when they leave or retire from CMHC. Each year, members have an opportunity to change their pension benefit option.

## Contributions

In 2022, the employee contribution rates were:

| | | Pre – July 1, 2022 | Post – July 1, 2022 |
|---|---|---|---|
| **Option A** | Up to the YMPE[1] | 9.90% of salary | **8.75%** of salary |
| | Over the YMPE | 13.40% of salary | **11.50%** of salary |
| **Option B** | Up to the YMPE[1] | 6.70% of salary | **6.00%** of salary |
| | Over the YMPE | 10.00% of salary | **8.75%** of salary |

[1] The year's maximum pensionable earnings (YMPE) under the Canada/Quebec Pension Plan was $64,900 in 2022.

In total, employees contributed $24.6 million to the Plan.

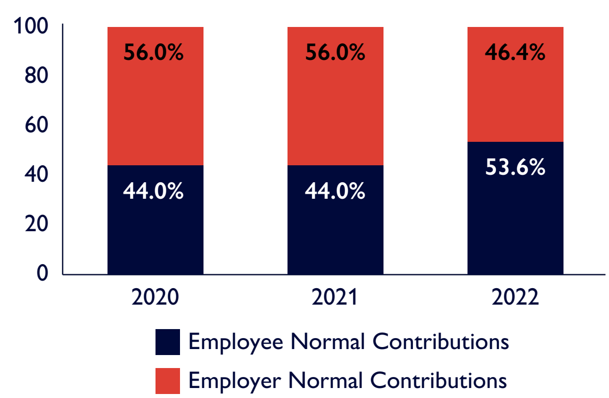
CMHC's total contributions to the Plan in 2022 were $22.1 million. This included full normal contributions of $21.2 million as well as solvency special payments of $0.9 million related to the solvency deficit reported by the actuarial valuation as at December 31, 2021.

**Employee and Employer Contributions ($ millions)**

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| **Employee Normal Contributions** | 15.5 | 17.2 | 17.8 | 21.6 | 24.5 |
| **Employee Past Service Contributions** | 0.3 | 8.7 | 2.0 | 2.4 | 0.1 |
| **Employer Normal Contributions** | 22.4 | 15.8 | 22.7 | 27.5 | 21.2 |
| **Employer Special Payments** | 23.9 | 13.7 | 0.6 | 37.1 | 0.9 |

On an annual basis, CMHC reviews the level of employer and employee contributions to the Plan with regards to the financial status of the Plan. The goal is to maintain a 50:50 cost-sharing ratio between employer and employee as outlined by Government of Canada directive (P.C. 2014-1380) pursuant to Section 89 of the *Financial Administration Act*, to align Crown corporation pension plans with those available to federal employees.

**Employee and Employer Contributions ($ millions)**



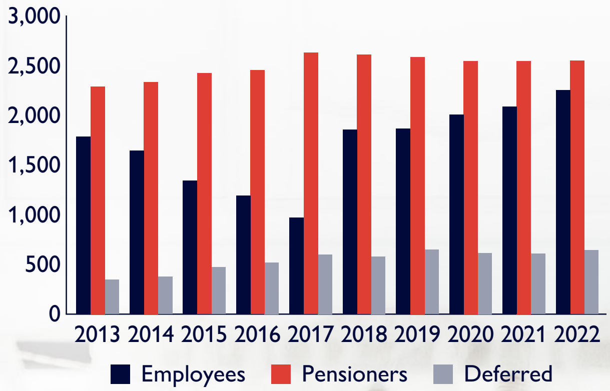
In March 2023, the Board approved the results of the actuarial valuation as at December 31, 2022. The actuarial valuation reported that the Plan was fully funded on both a going concern and solvency basis and CMHC intends to make full normal contributions in 2023.

However, the valuation reported that the Plan continues to have a three-year average solvency deficit and CMHC is required to make special solvency payments to the Plan. As permitted under section 9.16 of the *Pension Benefits Standards Act*, 1985 (PBSA) and its Regulation, CMHC has received approval from the relevant Ministers to reduce its required solvency special payments.

# Membership

At year-end, the Plan had 5,452 members including 2,257 active employees, 2,552 pensioners and beneficiaries, and 643 members with deferred vested benefits.

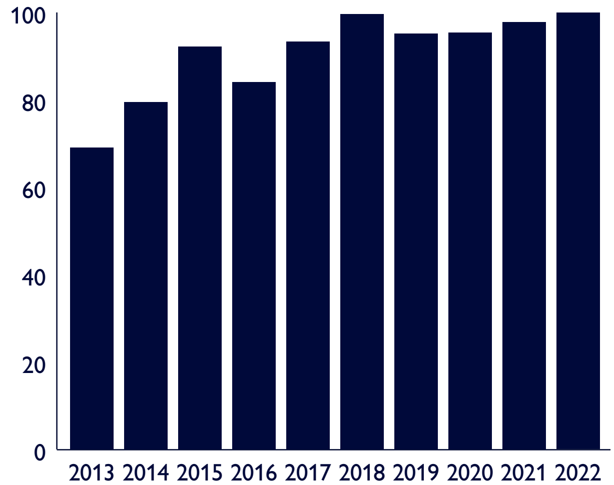
**Plan Membership (Number of Persons)**




# Total Benefits Paid in 2022

A total of $101.0 million in pension benefits were paid to Plan members in 2022.

**Benefits Paid and Net Contributions Transferred or Refunded ($ Millions)**




On January 1, 2023, pension benefits were increased in accordance with the indexation formula in the CMHC Pension Plan Rules as outlined below:

- For pensions earned for pre-2018 service, an increase of 6.3% (100% of 2022 inflation) and;
- For pensions earned for post-2017 service:
  - An increase of 57% of 2021 inflation (2.4%) to catch-up on the missing indexation in 2022. For pensions paid throughout the full 2022 year, this represents approximately 1.35% and;
  - 6.3% (100% of 2022 inflation)

# General Information

## Regulatory Authorities

As a federally registered pension plan, the CMHC Pension Plan is subject to the PBSA and its regulations, and to the *Income Tax Act* (ITA). The Plan is registered with the Office of the Superintendent of Financial Institutions (OSFI) and the Canada Revenue Agency (CRA). The Plan rules, as well as the Plan's funding and operations, must comply with the standards prescribed by the PBSA and ITA.

## Communications

One of CMHC's key objectives is to promote increased awareness and understanding of the Plan and the benefits it provides, while facilitating opportunities for member feedback.

CMHC's financial wellness education provider, facilitated a series of webinars to give employees the information and tools they need to start on a path to financial wellness. This year, eight webinars with greater emphasis on topics and issues that are of particular focus to employees based on where they are in their career and life stages were presented. Additional resources like a video and articles were also provided.

Other ongoing Plan member communication activities include the annual statement of pension benefits and the annual CMHC Pension Council Meetings Highlights. In addition, in 2022, CMHC sent special communications on contribution rate change and indexation.

## Plan Documents

Information related to the Plan is available on CMHC's website, including a description of the governance of the Plan and key roles and responsibilities under its governance structure.

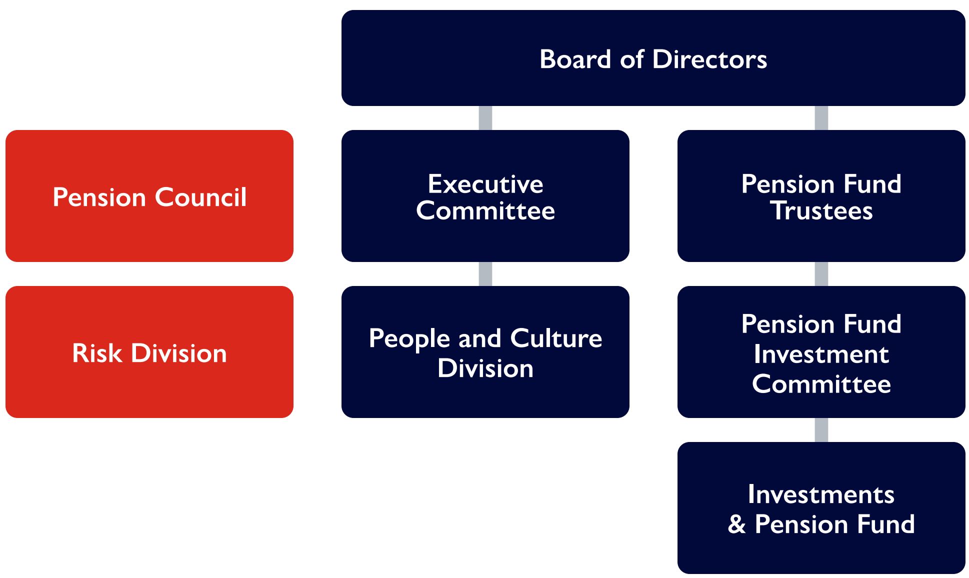
Additional information concerning the Plan can be obtained by calling the CMHC Pay and Benefits Centre at 1-800-465-9932 and following the instructions to contact Aon.

# Plan Governance

The concept of Plan governance is commonly defined by pension authorities as the structures and processes for overseeing, managing and administering a pension plan to ensure all obligations of the Plan are met.

Good corporate governance is at the heart of all of CMHC's activities and successes and is included in the governance framework for the Plan. A sound framework ensures that the ongoing obligations of the Plan to its stakeholders can be met, with effective decision-making processes, prudent and efficient management of resources, and regular communication. The governance structure of the Plan is outlined below. More information regarding the roles and responsibilities of the key governance components of the Plan can be found in the Pension Governance section on CMHC's website.

The following represents CMHC's Plan governance structure:




The Board of Directors established the Pension Fund ("the Fund") to manage the assets of the Plan and appointed the Pension Fund Trustees to oversee the management and administration of the Fund. Our Risk Division provides independent oversight over the Plan's risk and reports quarterly to the Board, Trustees and Investment Committee.

The Pension Council comprises elected employees and retired members of the Plan. Its functions are to promote awareness and understanding of the Plan among members, and receives information on the financial, actuarial and administrative aspects of the Plan.

# Trustees of the CMHC Pension Plan

**Derek Ballantyne**

Chair, Pension Fund Trustees and Member of the Board of Director

**Romy Bowers**

President and Chief Executive Officer

**André Charbonneau**

Deputy Chief Financial Officer

**Anju Gupta**

Employee Trustee

**Guy-Anne Duval**

Employee Trustee

**Mark McInnis**

Pensioner Trustee

**Neil Levecque**

Vice-President, Operations
– Multi-Unit

**Pam Hine**

Vice-President
Housing Solutions – Multi-Unit

# Pension Council

### Chair
Dominic Olivier

### Employee Representatives
Leesa Parry
Anju Gupta
Guy-Anne Duval
Steve Ressler
Wendy Pollard
Yann Venne

### Pensioner Representatives
Marie Murphy
Ken Taylor
Mark McInnis

# Pension Fund Investment Committee

### Chair
Mark Chamie

### Members
Dirushan Naidu
Elizabeth Leblanc
Beatriz Peraza Lopez
Monika Skiba (External Advisor)
Michael Borden (External Advisor)

### Advisors
Senior Advisor, Legal Services
Manager, Audit (observer)
Transactional Audit Analyst (observer)

# Investments and Asset Performance

## Overview

The Fund is resilient and funding ratios improved during the year despite negative investment returns due to the increase in yields. The uncertainty around economic growth, geopolitical events and monetary tightening due to inflation impacted investment returns adversely.

## Economic Environment

In 2022, global gross domestic product (GDP) is estimated to have grown by 3.4%, a decline from 5.9% in 2021, according to the International Monetary Fund's January 2023 World Economic Outlook. Despite the fall in economic growth, the global economy has shown resilience in the face of global monetary policy tightening by central banks and the impact of the conflict in Ukraine, which has weighed on economic activity. Consumer spending has been stronger than most anticipated and labor markets have been resilient.

In addition, easing global supply chains and a reduction in transportation costs have reduced price pressures. Global headline inflation seems to peak in the second half of 2022; however, inflation in the service sector remains quite high due to tight labor markets. Concerns of about slowing economic growth, led by monetary tightening and the impact of the conflict in Ukraine, has impacted equity markets in particular.

## Investment Framework

The overall long-term investment objective of the funds maintained for the Fund is to achieve a total rate of return that will provide for pension benefit obligations with an acceptable level of volatility of expected contribution requirements. In pursuing this long-term objective, the Fund strives to maximize returns on investments within approved policies, which specify the limits and parameters within which risk may be taken.

The Statement of Investment Policies and Procedures (SIP&P) defines the investment framework of the Fund. The SIP&P established by the Trustees for the Fund sets out the policies necessary for the management and administration of the Fund. It includes further definition of permitted investments as well as requirements for diversifying investments and managing risks. The SIP&P also includes policies for measuring, monitoring, and reporting on the performance of the Fund.

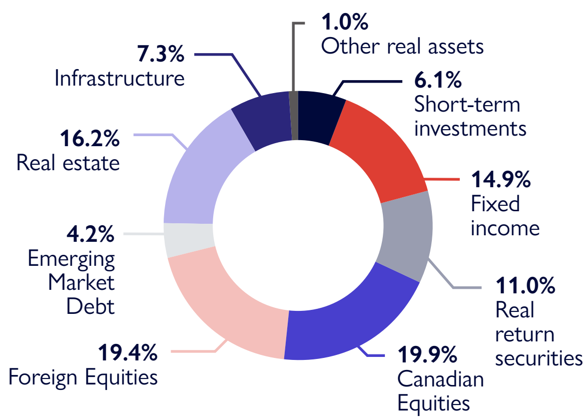
The Fund's strategic asset allocation (SAA), recommended by Trustees and approved by the Board, is a key driver of Fund returns and contribution requirements. The asset allocation is based on the principle of diversification of investments among various asset classes in helping manage the asset-liability risk of the Plan and is reviewed at least every five years.

In 2021, the Board of Directors reviewed and approved a new strategic asset allocation policy, which we expect to fully adhere to by 2026.

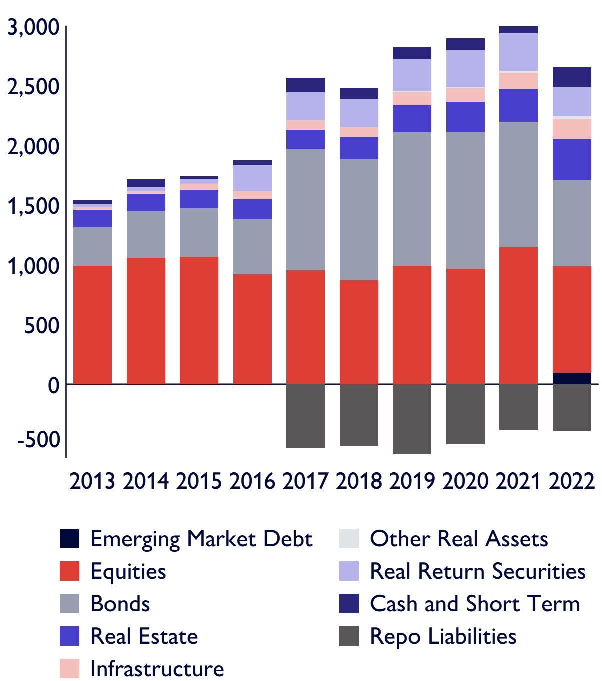
The asset allocation policy has been established at 37% public equity investments, 29% fixed income securities, 21% real estate and infrastructure, 5% private equity, 3% private debt, and 5% US dollar-denominated emerging market debt, on a net asset basis. The asset allocation policy includes a permissible range around these percentage weights.

In 2022, in accordance to the asset allocation policy, the transition to global equity was primarily completed. However, the transition to private equity and private debt will commence in 2023.

**Asset Mix**




**Net Assets of the Fund ($ Millions)**




# Risk Management

The risk parameters under which the Fund is managed are established by the Fund's Risk Appetite statement and asset allocation policy.

The Board of Directors' specific requirements for managing these risks are addressed by a range of established policies and practices.

More information relating to financial risks is provided in the notes to the financial statements.

Regular measurement and reporting of Fund performance is also vital. Processes are in place to monitor and evaluate the investment performance of the Fund (including performance measures for the overall Fund and for individual asset classes net of liabilities). An extensive set of risk and return indicators are used to measure the Fund's ongoing performance. The Investment Committee and Trustees review indicators of the Fund's performance as well as its compliance against investment and risk management policies.

# Climate Change

Mitigating the risks of climate change is an important priority as climate change poses systemic risks to the global economy and the Plan, impacting economic growth, inflation and investment returns. In 2022, the Plan published its inaugural Task Force on Climate-Related Financial Disclosures Report (see page 42).

The Financial Stability Board created the Task Force on Climate-related Financial Disclosures (TCFD) in 2015. In 2017, the TCFD published a climate-related risk management and disclosure framework including four main themes: Governance, Strategy, Risk Management, and Metrics and Targets. We voluntarily refer to the framework to help guide the structure and content of our climate-related disclosures.

## OSFI Consultation on climate-related risks in the financial sector

On January 14, 2022, OSFI issued a letter indicating that they will continue collaborating with the Canadian Association of Pension Supervisory Authorities (CAPSA) to develop guidance on integrating Environmental, Social and Governance (ESG) factors in pension fund investment and risk management. OSFI will assess the need for additional Federally Regulated Pension Plans (FRPP) guidance thereafter.

# Performance of the Fund

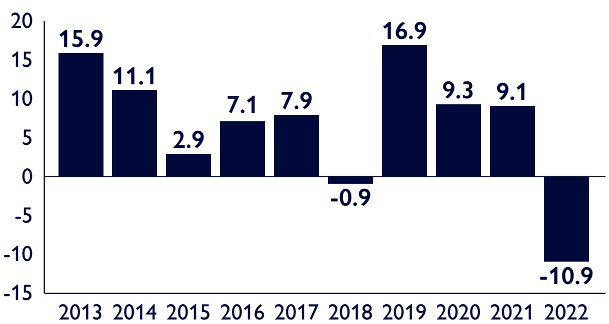
Internal investment managers actively manage the majority of the Fund's investments. Trustees also appoint external investment managers with a range of active and passive investment mandates. Portfolio managers are responsible for individual security selection within their mandates.

The Fund's net assets available for benefits at December 31, 2022 were $2,272 million, compared to $2,619 million at the end of 2021. The decrease in net assets was mainly attributable to an increase in yields and a decline of equity markets

The Fund's performance is measured against a passive benchmark portfolio that is based on the SAA. The total investment return was -10.9% including leverage and -7.1% excluding leverage compared to its benchmark return of -7.0%.

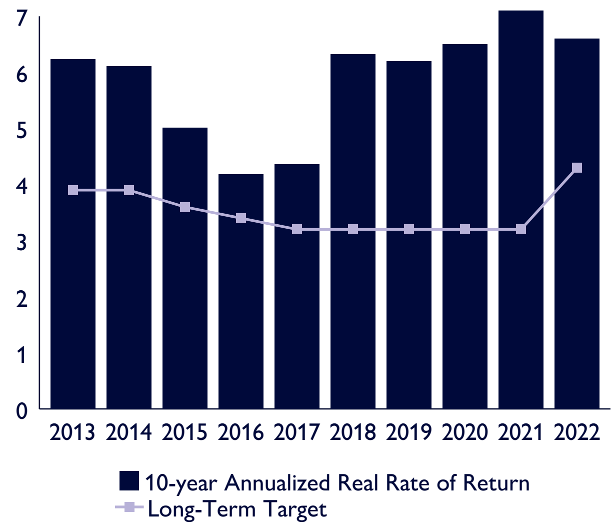
Over the past 10 years, the Fund's performance excluding leverage has exceeded its benchmark by about 0.3% on an annualized basis.

**Rate of Return for the Year Ended December 31 (%)**




The real rate of return is the nominal rate of return less inflation. The Fund's 10-year annualized real rate of return was 6.6%, which is higher than the long-term real rate of return objective and actuarial assumption of 4.3%.

**Long-Term Real Rate of Return**




# Performance by Asset Class

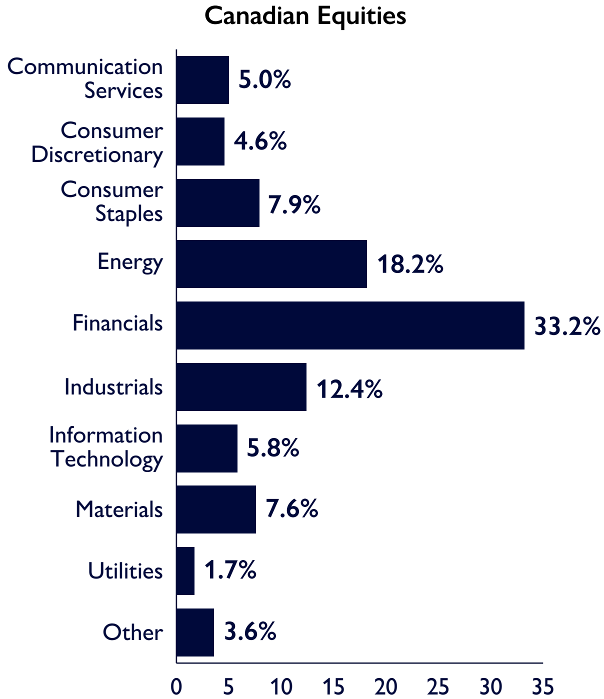
The Fund is well-diversified with exposure to a broad range of asset classes. Each asset class is assigned a benchmark to measure the effectiveness of individual investment strategies, to carefully monitor investment activities, and to evaluate whether those objectives are being met.

## Canadian Equities

The investment managers invest in equities based on fundamental factors, striving to select companies with long-term growth potential and reasonable valuations. The portfolio is intended to be well balanced across sectors and provide predictable dividend distributions.

The portfolio generated a return of -1.4% in 2022 compared to the benchmark return of -5.8%. The returns across sectors in the portfolio were mixed, with Energy and Consumer Staples being the best performing sectors, posting double digit returns. Information Technology and Consumer Discretionary sectors were negatively impacted by inflation and rising interest rates, generating negative returns. Overall, the portfolio benefited from diversification in a volatile year.

The portfolio remains weighted toward companies with attractive and sustainable growth prospects. This allocation has benefited the portfolio's performance relative to the index over a long-term horizon.




## Foreign Equities

In 2022, the foreign equities portfolio was transitioned from a regionally allocated portfolio to a 100% actively managed global equity portfolio benchmarked against Morgan Stanley Capital International (MSCI) All Country World index (ACWI), in accordance with the approved SAA for the Fund.

As a first step of this major transition process, in the first half of 2022, all United States (US) and Europe, Australasia and Far East (EAFE) equity portfolios were terminated, and all proceeds were temporarily invested in a passively managed ACWI index fund. When the manager selection process for active global equity managers is finalized, the second step of the transition process will be to sell the passive ACWI index fund and invest in the newly selected active global equity fund managers in January 2023.

Foreign equities broaden exposures beyond what is available in the Canadian market. As of December 31, 2022, the foreign equity portfolio was comprised entirely of ACWI investments:

- One actively managed global equity strategy – Morgan Stanley Global Opportunity – representing 1.5% of the total Fund assets (invested during the whole 2022)
- One passively managed global equity ACWI Index Fund managed by BlackRock and representing 18.7% of the total Fund assets (invested since mid-2022)

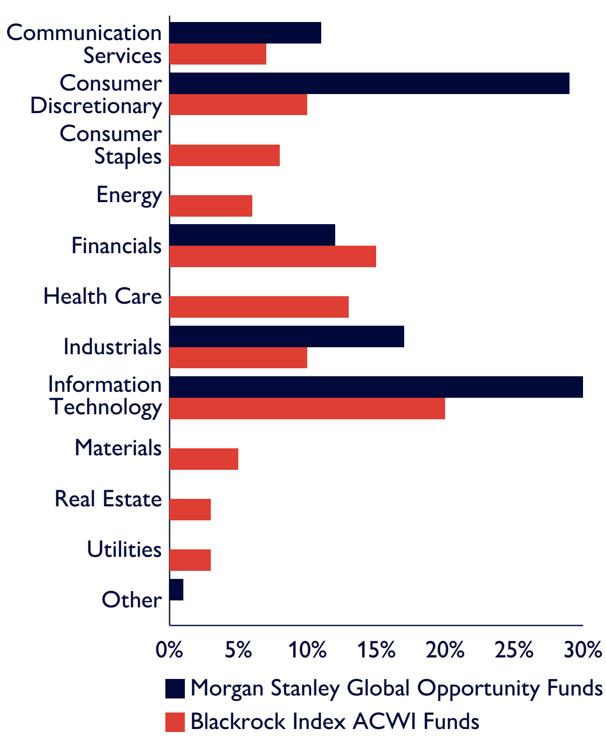
Equity markets in general were quite volatile in 2022, including international markets.

In 2022, the overall ACWI equity portfolio returned -35.3% compared to the benchmark of -12.4%. Although we use a time-weighted return basis to measure the returns of all our asset classes, it does not take into account the size and timing of cashflows that occurred during the year. This is only relevant to the ACWI equity portfolio in 2022 as there were significant cash inflows into the portfolio as we transitioned to the new SAA that skewed the results. Taking this into consideration, and to properly reflect the returns of the investment, on a money weighted return basis, the overall ACWI portfolio return is 4.4%.

The overall EAFE portfolio returned -17.8% compared to the benchmark return of -16.8%. The EAFE portfolio was terminated in mid-year 2022 and the return numbers reflect the performance for the first half of the year only.

The overall US portfolio returned -14.3% compared to its benchmark return of -14.5%. The US portfolio was terminated in mid-year 2022 and the return numbers reflect the performance for the first half of the year only.

**Foreign Equities**[1]



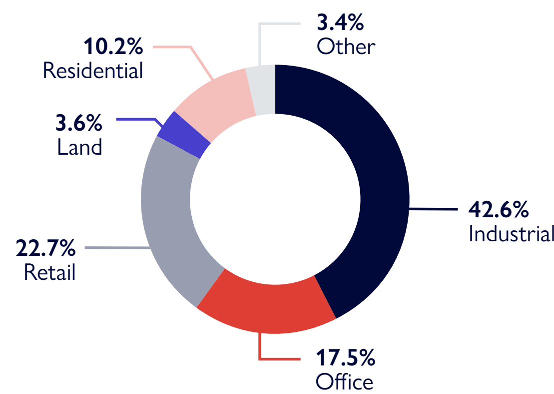

[1] As of December 31, 2022, the total ACWI portfolio consists of actively managed Morgan Stanley Global Opportunity Funds (7.4%) and passively managed BlackRock Index ACWI Funds (92.6%)

## Real Assets

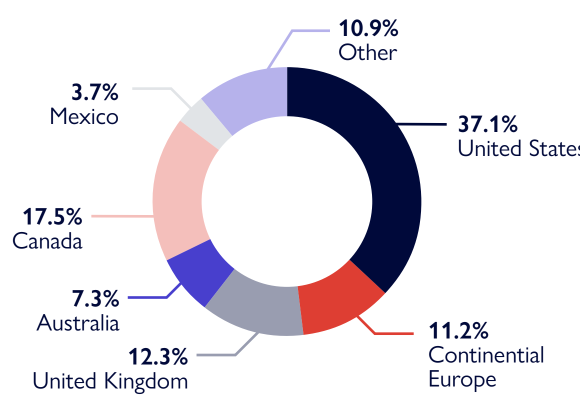
Real assets are diversified across real estate, infrastructure and other real assets. The process of selecting real asset investment opportunities involves analysis of the regulatory environment, legal and taxation implications, climate risk, relative returns, and other portfolio construction considerations. Real estate and infrastructure holdings are well diversified across sectors and markets with significant exposure to Canada, the United States, Europe, and the United Kingdom. During 2022, the Fund continued to focus on expanding its exposure to the non-Canadian residential sectors for the real estate portfolio.

The Real assets portfolio returned 18.9% in 2022 compared to the benchmark return of 24.7%. Real assets performance is lagged by one quarter (September to September return comparison).

**Real estate Investment by Sector**




**Infrastructure Geographic Location**



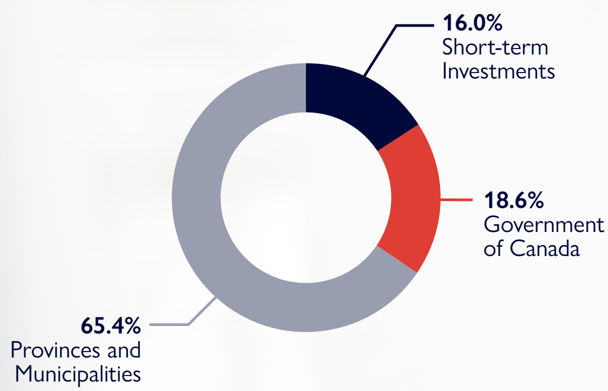
## Fixed Income

The fixed income portfolio comprises nominal and real return bonds. Whereas a nominal bond pays a fixed coupon over time, real return bonds pay a coupon that is periodically adjusted for inflation and therefore provides better protection against the risk of inflation. The Fund's allocation to fixed income reduces overall portfolio volatility, provides investment income, and limits the interest rate risk inherent in the Plan's liabilities. The Fund invests in securities issued by the Government of Canada and Provincial governments.

Strip bonds issued by the Government of Canada and Canadian provinces became part of the fixed income allocation in late 2021. The portfolio was built up progressively in 2022 to help achieve a desired duration profile of the overall fixed income allocation.

The strip bonds, and real return portions of the Fund's fixed income portfolio returned -36.0% and -19.3% respectively while the long government bonds returned -22.2%, in line with its benchmark.

**Fixed income Nominal Bonds**



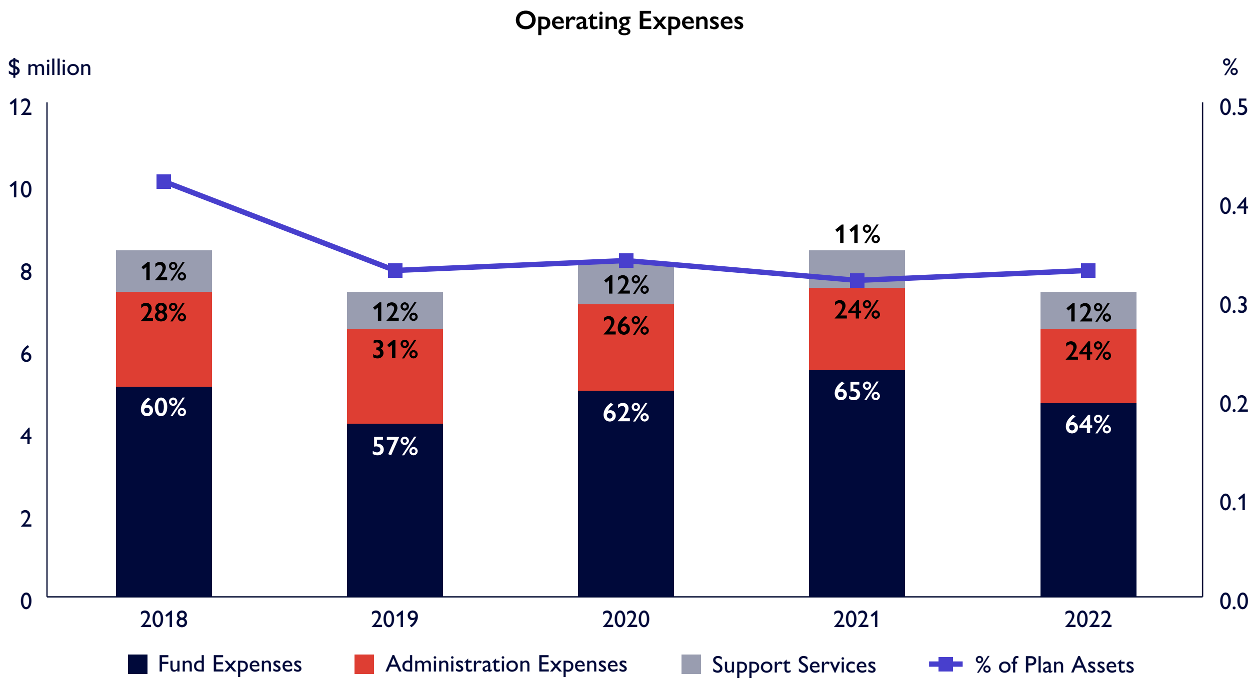

## Fixed Income – Emerging Market Debt

In 2022, in accordance with the approved SAA for the Fund, an Emerging Market Debt (EMD) allocation was implemented.

In the fourth quarter of 2022, the existing Canada Bond Universe investment was terminated, and the proceeds were used to invest in two actively managed EMD funds, which in combination represents 4.3% of the total assets of the Fund as of year-end. The investment in EMD, initiated in November 2022, performed strongly with a return of 11.6% versus the benchmark return of 6.8%.

# Operations Management

Expenses as a percentage of total Plan assets remained consistent with the prior year.




Fund expenses include costs to manage the Funds' assets which include internal salaries and investment management fees, administration expenses include pension plan administrative costs such as third party service providers and internal salaries and support services include legal, finance and operating services. Our operating costs remain stable as a percentage of plan assets from prior year.

Employee and employer contributions play an important role in the funding of the Plan and add to the growth of the Plan's assets. In 2022, the total contributions to the Plan totaled $46.7 million (2021 - $88.6 million). The decrease is primarily due to a decrease in solvency special payments to nil (2021 - $36.2 million) as we reached our internal solvency target ratios and received approval from the relevant Ministers to reduce the required solvency special payments. The employer contribution rates are determined on the basis of our actuarial valuation results with the goal of maintaining a 50:50 cost-sharing ratio.

A total of $101.0 million (2021 - $98.3 million) in pension benefits was paid to Plan members in 2022.

# Actuarial Valuation

All federally registered pension plans are required to undertake an actuarial valuation annually for regulatory purposes unless the solvency ratio is greater than 120%. The principal purposes of an actuarial valuation include determining the financial position of a plan and providing the basis for contributions from the employer.

An independent external actuary completes an actuarial valuation that must meet stringent legislative standards. It addresses long-term demographic trends, retirement experience and a wide variety of other factors that are analyzed in depth to determine whether changes in the Plan's basic assumptions are needed. Management reviews the valuation report, which is then approved by the Board of Directors and filed with OSFI and CRA.

Any differences between actuarial assumptions and future experience will emerge as gains and losses in future valuations, and will affect the financial position of the Plan and the contributions required to fund it at that time.

The actuarial valuation focuses on two fundamental aspects of the funded status of CMHC's registered defined benefit plan: going concern and solvency. These measure the sufficiency of the Fund's assets to meet the Plan's liabilities from two different perspectives.

The going concern valuation assumes that the Plan continues indefinitely. This valuation uses the expected long-term investment return associated with the Fund's diversified mix of assets at the valuation date to value the Plan.

The solvency valuation assumes a hypothetical immediate termination of the Plan and that no further contributions are made. This valuation uses the interest rates prevailing at the valuation date to value the Plan based on an assumption that all assets are invested only in high quality fixed income-related investments.

The December 31, 2022 valuation reported that the Plan had a surplus on a going concern basis of $746 million and a going concern funded ratio of 142.5%. As at December 31, 2022, the value of net assets was $2,499 million and the value of liabilities was $1,754 million.

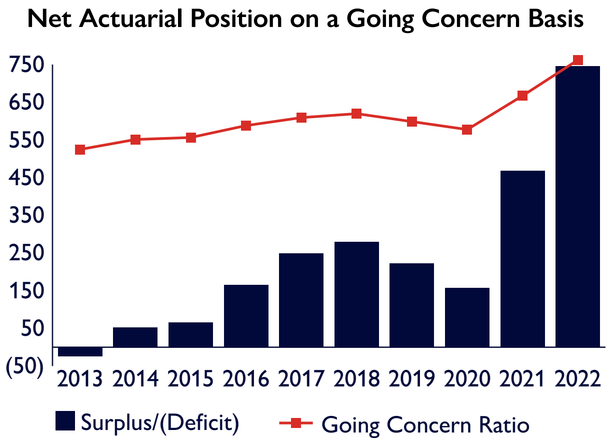
As permitted by the PBSA, the actuarial value of assets used for the determination of the going concern funded position is determined through a method that smooths fluctuations in actual investment returns relative to expected investment returns over five years. The going concern funded ratio increased from last year's valuation as a result of a higher discount rate.

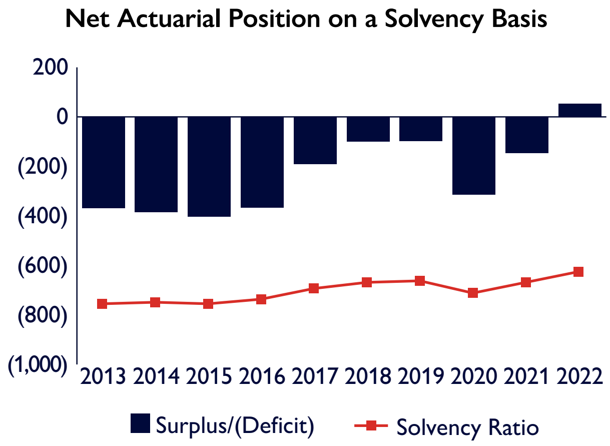
The funded position of the Plan on a going concern and solvency basis, as determined by the actuarial valuations filed with regulators, are shown in the charts below.

The December 31, 2022 valuation also reported that the Plan had a surplus on a solvency basis of $54 million and a solvency funded ratio of 102.4%. The solvency funded ratio improved from 2021 as a result of a higher discount rate. The value of net assets in this valuation is based on the Fund's market value of net assets at December 31, 2022 and was $2,268 million (net of termination costs of $4 million). The value of liabilities on a solvency basis was $2,214 million.

## OSFI Instruction Guide on the Preparation of Actuarial Reports for Defined Benefit Pension Plans ("Revised Guide")

OSFI released its Revised Guide that will be applicable for actuarial valuations on and after December 31, 2022. The Revised Guide reflects revisions made to Part 3000 of the Canadian Institute of Actuaries Standards of Practice, updated requirements regarding maximum going concern discount rate and greater clarity on disclosure requirements for plans using a replicating portfolio approach and on other expectations. We have determined that the changes prescribed by OSFI do not have a material impact on the solvency liability of CMHC's Plan.


Net Actuarial Position on a Going Concern Basis
750
650
550
450
350
250
150
50
(50)
2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Surplus/(Deficit)
Going Concern Ratio


Net Actuarial Position on a Solvency Basis
200
0
(200)
(400)
(600)
(800)
(1,000)
2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Surplus/(Deficit)
Solvency Ratio

# Actuarial Opinion

Mercer (Canada) Limited was retained by Canada Mortgage and Housing Corporation to perform an actuarial valuation of the CMHC Pension Plan for purposes of determining the pension obligations of the Plan, and changes therein, for the year ended 31 December 2022, for inclusion in the Plan's financial statements prepared in accordance with Section 4600 of the Chartered Professional Accountant Handbook. The objective of the Plan's financial statements is to fairly present the financial position of the Plan as at 31 December 2022 on a going concern basis. The results of our valuation might not be appropriate for and should not be relied upon or used for any other purposes.

We have reviewed the net assets available for benefits as of 31 December 2022 for internal consistency and we have no reason to doubt its substantial accuracy. We have also tested the membership data received from CMHC for the year ended 31 December 2022 and found the results of these tests to be satisfactory.

To our knowledge, the actuarial valuation as at 31 December 2022 reflects the Plan's provisions at that date. The actuarial method prescribed by the *Chartered Professional Accountant Handbook* was used. The actuarial assumptions were selected by CMHC as their best long-term estimates of future events, in consultation with Mercer. Nonetheless, the future experience of the Plan will inevitably differ, perhaps significantly, from the assumptions and will result in gains or losses which will be revealed in future valuations.

In our opinion, the data on which the valuation is based is sufficient and reliable for the purposes of the valuation and the actuarial assumptions are in accordance with accepted actuarial practice in Canada.

Our valuation and related report were prepared, and our opinions given, in accordance with accepted actuarial practice in Canada.

Mercer

Actuaries of the CMHC Pension Plan
Ottawa, Ontario
February 24, 2023

Pascal Berger, FCIA, FSA
*Principal*

Greg Petretta, FCIA, FSA
*Principal*

# Additional Information

## Plan and Fund Administration

### Human Resources

Caroline Bilodeau
Vice-President, People and Culture and Human Resources Operations

### Investments and Pension

Mark Chamie
Vice-President, Investments and Treasury

### Legal Advisor

Louise Michel
Director, Legal Services

### Pension Consultant and Actuary

Mercer (Canada) Limited
Ottawa, Ontario

### Auditors

Ernst & Young LLP
Chartered Professional Accountants Licensed Public Accountants
Ottawa, Ontario

### Benefits Administrator

Aon

## For Answers to Your Pension Questions

For information regarding your pension, please contact the CMHC Pay and Benefits Centre at 1-800-465-9932 or visit the CMHC Pay and Benefits Centre Web Portal by typing the following address into your browser's address bar: www.cmhc.ca/employee

## To Provide Feedback on this Report

The CMHC Pension Plan Annual Report provides all members with financial and operational information on the Plan and Fund. Your feedback on this Report would be welcomed. Please address your comments or suggestions to:

Senior Manager, Financial Reporting
Canada Mortgage and Housing Corporation
700 Montreal Road
Ottawa, ON K1A 0P7

# Management's Responsibility for Financial Reporting

**Year ended 31 December 2022**

Management is responsible for the integrity and objectivity of the financial statements and related financial information presented in this Annual Report. The financial statements have been prepared in accordance with Canadian accounting standards for pension plans and, consequently, include amounts that are based on the best estimates and judgment of Management. The financial information contained elsewhere in this Annual Report is consistent with the financial statements.

In carrying out its responsibilities, Management maintains appropriate financial systems and related internal controls to provide reasonable assurance that financial information is reliable; assets are safeguarded; transactions are properly authorized and are in accordance with the relevant legislation and Government directives; resources are managed efficiently and economically; and operations are carried out effectively.

Pursuant to a Trust Agreement, the Board of Directors of Canada Mortgage and Housing Corporation (CMHC) has delegated the management and administration of the Pension Fund to the Trustees of CMHC's Pension Fund (the Trustees). The Trustees have approved these audited financial statements and the CMHC Board of Directors has approved this Annual Report. In addition, Mercer (Canada) Limited performs an actuarial valuation of the Pension Plan's assets and going-concern obligation in accordance with regulatory requirements.

Ernst & Young LLP has audited the financial statements in accordance with Canadian generally accepted auditing standards. The auditors have full access to the Trustees to discuss their audit and related matters.

**Derek Ballantyne**
Chair, Pension Fund Trustees

**Michel Tremblay, CPA, CA**
Chief Financial Officer & Senior Vice President,
Corporate Services

# Independent Auditor's Report

**To the Trustees of Canada Mortgage and Housing Corporation Pension Fund**

## Opinion

We have audited the financial statements of the **Canada Mortgage and Housing Corporation Pension Plan** [the "Plan"], which comprise the statement of financial position as at 31 December 2022, and the statement of changes in net assets available for benefits and statement of changes in pension obligations for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects the financial position of the Plan as at 31 December 2022, and its changes in net assets available for benefits and its changes in pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

## Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report. We are independent of the Plan in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for pension plans, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Plan's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Plan or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Plan's financial reporting process.

## Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements 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 is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control 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 Plan's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Plan'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 financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Plan to cease to continue as a going concern.
- Evaluate the overall presentation, structure, and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ernst & Young LLP

Chartered Professional Accountants
Licensed Public Accountants

Ottawa, Canada
March 16, 2023

# Financial Statements

## Statement of Financial Position

| *As at 31 December (in thousands of Canadian dollars)* | 2022 | 2021 |
|---|---|---|
| **Assets** | | |
| Investments (note 3) | **2,656,732** | 2,997,451 |
| Accrued interest and dividends receivable | **7,095** | 6,111 |
| Cash | **57** | 699 |
| | **2,663,884** | 3,004,261 |
| **Liabilities** | | |
| Securities sold under repurchase agreements | **382,435** | 375,223 |
| Mortgages payable (note 6) | **8,216** | 8,536 |
| Accounts payable and accrued liabilities | **1,065** | 1,775 |
| | **391,716** | 385,534 |
| Commitments and contingent liabilities (note 13) | | |
| **Net assets available for benefits** | **2,272,168** | 2,618,727 |
| **Pension obligations (note 7)** | **1,753,808** | 1,902,747 |
| **Surplus** | **518,360** | 715,980 |

*The accompanying notes are an integral part of these financial statements.*

On behalf of the Trustees:

**Derek Ballantyne**
Chair, Pension Fund Trustees

**Romy Bowers**
Trustee of the Pension Fund
President and Chief Executive Officer of CMHC

# Statement of Changes in Net Assets Available for Benefits

| *Year ended 31 December (in thousands of Canadian dollars)* | 2022 | 2021 |
|---|---|---|
| **NET ASSETS AVAILABLE FOR BENEFITS** | | |
| Beginning of year | **2,618,727** | 2,403,907 |
| **INCREASE (DECREASE) IN NET ASSETS** | | |
| Investment earnings (losses) (note 4) | | |
| Change in fair value of investments | **(347,732)** | 153,132 |
| Investment income | **62,843** | 79,792 |
| | **(284,889)** | 232,924 |
| Contributions (note 8) | | |
| Employer | **22,139** | 64,580 |
| Employees | **24,607** | 24,023 |
| | **46,746** | 88,603 |
| | **(238,143)** | 321,527 |
| **DECREASE IN NET ASSETS** | | |
| Retirement benefit payments (note 9) | **89,673** | 87,418 |
| Termination benefit payments | **11,326** | 10,899 |
| Operating expenses (note 10) | **7,417** | 8,390 |
| | **108,416** | 106,707 |
| **INCREASE (DECREASE) IN NET ASSETS AVAILABLE FOR BENEFITS** | **(346,559)** | 214,820 |
| **NET ASSETS AVAILABLE FOR BENEFITS** | | |
| End of year | **2,272,168** | 2,618,727 |

*The accompanying notes are an integral part of these financial statements.*

# Statement of Changes in Pension Obligations

| *Year ended 31 December (in thousands of Canadian dollars)* | 2022 | 2021 |
|---|---|---|
| **Pension obligations, beginning of year** | **1,902,747** | 2,063,441 |
| **Increase (decrease) in pension obligations** | | |
| Interest accrued on benefits | **96,318** | 88,798 |
| Changes in actuarial assumptions gain | **(224,505)** | (220,688) |
| Benefits accrued | **48,427** | 54,090 |
| Retirement benefit payments (note 9) | **(89,673)** | (87,418) |
| Termination benefit payments | **(11,326)** | (10,899) |
| Experience loss | **31,820** | 15,423 |
| **Net decrease in pension obligations** | **(148,939)** | (160,694) |
| **Total pension obligations, end of year (note 7)** | **1,753,808** | 1,902,747 |

*The accompanying notes are an integral part of these financial statements.*

# Notes to Financial Statements

**Year ended 31 December 2022**

## 1. Description of plan

### a) General

The CMHC Pension Plan (the Plan or the Fund) is a compulsory contributory pension plan for all employees who satisfy certain eligibility conditions. Under the Plan, contributions are made by Plan members and the Plan Sponsor, CMHC. The Plan's registration number with the Office of the Superintendent of Financial Institutions (OSFI) is 55086 and it is subject to the *Pension Benefits Standards Act*, 1985 (PBSA). The Plan is a registered pension plan as defined in the *Income Tax Act* and as such it is exempt from paying income taxes in Canada. The Plan may be liable for taxes on income earned in other jurisdictions.

### b) Benefits

The following is a summary of the Plan as at 31 December 2022. For more complete information, reference should be made to the CMHC Pension Plan Rules (the Pension Plan Rules).

Under the Pension Plan Rules, pension benefits are determined by a formula based on a percentage of the average salary of the member's best five consecutive years multiplied by the number of years of benefit service. The pension is payable at the normal retirement date of a member or at an earlier date allowing for certain early retirement provisions in accordance with the Pension Plan Rules. The Plan provides survivor benefits for a member's eligible spouse or common-law partner. For service accrued before 1 January 2018, benefits are indexed to the Consumer Price Index (CPI) in accordance with the Pension Plan Rules. For service accrued on or after 1 January 2018, indexation of the benefits to the CPI are conditional in accordance with the Pension Plan Rules and approval from the Board of Directors. Benefits are integrated with the Quebec/Canada Pension Plan.

### c) Funding policy

The PBSA and its regulations require an actuarial valuation to be performed annually, unless the solvency ratio is greater than 120%, to estimate the Plan's surplus or deficit on a going-concern and solvency basis. These valuations are prepared in accordance with the Standards of Practice – Pension Plans as prescribed by the Canadian Institute of Actuaries. The PBSA requires that the Plan be funded in accordance with the actuarial valuation prepared by the designated actuary. The PBSA also requires CMHC to pay into the Plan all amounts required to meet the prescribed tests and standards for solvency.

Plan benefits are funded through a combination of contributions and investment returns. Contributions are required from both CMHC and the employee. The Plan's funding policy is reviewed every three years and aims to ensure the long-term financial health of the Plan and sustain funding at a level that is adequate to provide for member benefits. Contribution rates are established through actuarial funding valuations to determine the funded position of the Plan. Employees, who are members of the Plan, are required to contribute a percentage of their pensionable earnings to the Plan at rates set by the Board of Directors. Employee contribution rates for each of the Plan's options are periodically updated to maintain a 50:50 cost sharing of the Plan's current service cost between employees and CMHC.

Employee contribution rates to the Plan are as follows:

| Contribution rates by members | Pre – July 1, 2022[1] | | Post – July 1, 2022[1] | |
|---|---|---|---|---|
| | Salary up to YMPE[2] | Salary above YMPE[2] | Salary up to YMPE[2] | Salary above YMPE[2] |
| Option A | 9.90% | 13.40% | 8.75% | 11.50% |
| Option B | 6.70% | 10.00% | 6.00% | 8.75% |

[1] For option A and B, prior year rates were 8.75% and 6.00% for salaries up to the yearly maximum pensionable earnings (YMPE) and 11.50% and 8.75% for salaries above the YMPE.

[2] YMPE was $64,900 in 2022 and $61,600 in 2021.

# 2. Significant accounting policies

## a) Basis of presentation

These financial statements have been prepared on a going concern basis in accordance with the Canadian accounting standards for pension plans as set out in Section 4600, *Pension Plans* (Section 4600), in Part IV of the *CPA Canada Handbook – Accounting*, which prescribes accounting policies specific to pension plans including investments and pension obligations. These financial statements present the information of the Plan as a separate reporting entity independent of the Plan Sponsor and Plan members.

For accounting policies that do not relate to investments or pension obligations, International Financial Reporting Standards (IFRS) are applied. To the extent that IFRS is inconsistent with Section 4600, Section 4600 takes precedence.

In accordance with Section 4600, investments, including those in which the Plan has a controlling interest, are presented on a non-consolidated basis.

The objective of these financial statements is to assist Plan members and other users in reviewing the activities of the Plan. The financial statements do not purport to reflect the financial status of the Plan if terminated on the date of the financial statements, the funding requirements of the Plan or the pension expense that should be included in the financial statements of the Plan Sponsor. As the financial statements pertain to the Plan as a whole, they provide no information about the portion of assets attributable to any individual member or group of members.

## b) Accounting estimates

The preparation of financial statements in accordance with Canadian accounting standards for pension plans requires management to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the financial statements, the reported amounts of changes in net assets available for benefits during the year and the reported amount of the actuarial present value of accrued pension benefits and net assets available for benefits at the date of the financial statements. These estimates are based on management's best knowledge of current events and actions that the Plan may undertake in the future.

### Valuation of pension benefit obligation

In 2022, the sustained high inflation has increased uncertainty around our long-term inflation assumption for our pension obligation. Significant judgment, estimates and assumptions used in the valuation of the real assets and in the calculation of the pension obligations are described in further details in Note 3 and Note 7, respectively.

## c) Investments

Investments consist of short-term investments, bonds and debentures, real return securities, emerging market debt, equities, foreign currency forward contracts, real estate, infrastructure and other real assets.

### Valuation of investments

Purchases and sales of investments are recorded on the settlement date. Investments are measured at fair value, which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date under current market conditions.

The following describes how the fair value of investments is determined:

i) Short-term investments consist of bankers' acceptances and Government of Canada Treasury bills and are valued based on quoted market yields.

ii) Bonds, debentures, and real return securities are valued based on a third-party pricing provider, which uses market data from a variety of sources. Actively traded instruments are valued based on market data such as indicative quotes or trade prices for identical securities. Instruments that are not sufficiently actively traded are valued based on techniques using other observable inputs, such as spread differentials of similar actively traded securities.

iii) Emerging market debt are held through investments funds and priced based on Net Asset Values (NAVs) provided by the fund managers.

iv) Canadian equities' fair value is based on last traded price quotes from active markets. United States (U.S.) and other foreign equities are held through the investment funds. The fair value of these funds are priced based on NAVs as reported by the investment fund managers. The net asset value is calculated based on the quoted market prices of the fund's assets less the fund's liabilities, divided by the total number of outstanding units.

v) Foreign currency forward contracts, which the Fund previously entered into to manage its exposure to foreign currencies, are valued based on the difference in the agreed contract rate and the current forward rate.

vi) Real estate comprises direct investments by the Fund in real estate (properties held to earn rental income or for capital appreciation, or both), investments in a wholly owned real estate corporation established under Section 149 of the Income *Tax Act*, and investments in real estate pooled funds. Direct investments in real estate are valued at estimated fair values based on independent appraisals completed at least once every three years plus net working capital. Investments in pooled funds are valued at year-end NAVs, as provided by the investment fund managers.

vii) Infrastructure and other real assets comprise investments in infrastructure and other real asset funds, respectively. The fair value is the NAV reported by the investment fund managers. The NAV is based on independent appraisals of the underlying infrastructure, infrastructure-related assets and other real assets held by these funds.

### Investment earnings

Investment earnings consist of changes in the fair value of investments and investment income.

The change in the fair value of investments comprises unrealized gains and losses from changes in fair value in the period, as well as realized gains and losses on the sale of investments.

Investment income is recorded on an accrual basis. Interest income is recognized using the effective interest method. Infrastructure fund income represents cash distribution entitlements of the Fund, and real estate income represents net rental revenue after expenses. Dividend income is recognized on the ex-dividend date when the right to the dividend is established.

### Investment transaction costs

Transaction costs, which are incremental costs incurred on the purchase and sale of investments, are expensed as incurred in operating expenses.

## d) Assets and liabilities with cost approximating fair value

Due to their short-term nature, cash, accrued interest and dividends receivable, and accounts payable and accrued liabilities are measured at cost, which approximates fair value.

## e) Securities sold under repurchase agreements

Repurchase agreements consist of the sale of securities with the commitment to repurchase the securities from the original buyer at a specified price and future date in the near term. These are measured at fair value. Proceeds received from these agreements are generally invested in investments.

## f) Mortgages payable

Mortgages are measured at amortized cost, which approximates fair value. Mortgages associated with real estate are made at commercial mortgage rates.

## g) Pension obligations

Pension obligations for the Plan are determined based on an actuarial valuation for funding purposes prepared by an independent actuarial firm. The valuation is prepared in accordance with regulatory requirements and uses management's best estimate assumptions.

## h) Contributions

Contributions for current service are recorded in the year in which the related services are performed. Contributions for past service and special payments are recorded in the year they are made. Transfer deficiency payments are recorded in the year to which they relate.

## i) Benefits paid

Benefits are recorded in the period in which they are paid. Benefit payments that are due as at year-end are recorded in accounts payable and accrued liabilities.

## j) Foreign currency translation

Foreign currency transactions are translated into Canadian dollars at the rate of exchange prevailing at the dates of the transactions. The fair values of the investments and cash balances denominated in foreign currencies are translated at the rates in effect at year-end. The realized and unrealized gains and losses arising from these translations are included in the change in fair value of investments.

## k) Current and future changes in accounting policies

There were no new or amended standards issued by the International Accounting Standards Board (IASB) and Accounting Standards Board (AcSB) that we adopted during the year ended 31 December 2022 that had a material impact on our consolidated financial statements.

There are no anticipated impacts on our consolidated financial statements from any future changes in accounting standards issued but not yet effective.

# 3. Investments

## a) General

The following table shows the cost and fair value of the Fund's investments.

| | 2022 | | 2021 | |
|---|---|---|---|---|
| *(in thousands)* | Cost[1] | Fair value | Cost[1] | Fair value |
| **Liability hedging assets** | | | | |
| Fixed income | | | | |
| Short-term investments | **137,487** | **137,450** | 31,685 | 31,683 |
| Bonds and debentures | | | | |
| Government of Canada | **208,646** | **160,020** | 303,310 | 303,767 |
| Provinces/municipalities | **670,794** | **560,679** | 698,955 | 710,476 |
| Corporate/other | **-** | **-** | 37,153 | 35,140 |
| Total bonds and debentures | **879,440** | **720,699** | 1,039,418 | 1,049,383 |
| Real return securities | | | | |
| Government of Canada | **246,819** | **246,792** | 246,109 | 310,047 |
| Provinces/municipalities | **2,560** | **3,514** | 2,530 | 4,127 |
| Total real return securities | **249,379** | **250,306** | 248,639 | 314,174 |
| | **1,266,306** | **1,108,455** | 1,319,742 | 1,395,240 |
| **Growth assets** | | | | |
| Equity | | | | |
| Canadian | **217,907** | **450,086** | 249,369 | 552,143 |
| U.S. | **290,620** | **279,506** | 222,877 | 321,532 |
| Other foreign[2] | **164,911** | **161,535** | 288,143 | 272,028 |
| Total equity | **673,438** | **891,127** | 760,389 | 1,145,703 |
| Emerging market debt | | | | |
| Corporate/other | **86,000** | **95,954** | - | - |
| Total emerging market debt | **86,000** | **95,954** | - | - |
| Real assets | | | | |
| Real estate[3] | **225,045** | **374,677** | 197,147 | 305,849 |
| Infrastructure[2] | **136,699** | **165,063** | 116,843 | 132,304 |
| Other | **18,503** | **21,456** | 16,080 | 18,355 |
| Total real assets | **380,247** | **561,196** | 330,070 | 456,508 |
| | **1,139,685** | **1,548,277** | 1,090,459 | 1,602,211 |
| **Total** | **2,405,991** | **2,656,732** | 2,410,201 | 2,997,451 |

[1] Represents amortized cost for fixed income.

[2] Other foreign equity and infrastructure include foreign currency forward contracts with fair values of nil and nil, respectively (2021 – negative fair values of $0.4 million and $0.5 million, respectively).

[3] Real estate includes $301.3 million held by the Fund's subsidiaries (2021 – $229.9 million), which is reported net of the subsidiaries' mortgage liabilities of $84.6 million (2021 - $87.4 million) and net working capital of $0.1 million (2021 – $0.1 million).

The Fund has investments of $359.4 million (2021 – $389.9 million), included in bonds and debentures in the table above, that are part of securities sold under repurchase agreements. The Fund continues to earn investment income and recognize changes in fair value on these investments in the statement of changes in net assets available for benefits.

## b) Fair value hierarchy

Investments recorded at fair value are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements:

- **Level 1:** Assets and liabilities that are measured based on unadjusted quoted prices in active markets for identical assets or liabilities.
- **Level 2:** Assets and liabilities that are measured based on observable inputs other than Level 1 prices. Level 2 inputs include prices obtained from markets that are not considered sufficiently active, and fair values obtained by discounting expected future cash flows, making maximum use of directly or indirectly observable market data.
- **Level 3:** Assets and liabilities not quoted in active markets that are measured using valuation techniques. Where observable inputs are not available, unobservable inputs are used. For Level 3 assets and liabilities, unobservable inputs are significant to the overall measurement of fair value.

The following table presents the fair value hierarchy for the Fund's investments.

| | 2022 | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|
| *(in thousands)* | Level 1 | Level 2 | Level 3 | Total | Level 1 | Level 2 | Level 3 | Total |
| **Liability hedging assets** | | | | | | | | |
| Fixed income | | | | | | | | |
| Short-term investments | **114,919** | **22,531** | **-** | **137,450** | - | 31,683 | - | 31,683 |
| Bonds and debentures | | | | | | | | |
| Government of Canada | **111,216** | **48,804** | **-** | **160,020** | 273,957 | 29,810 | - | 303,767 |
| Provinces/municipalities | **390,806** | **169,873** | **-** | **560,679** | 636,351 | 74,125 | - | 710,476 |
| Corporate/other | **-** | **-** | **-** | **-** | 1,827 | 33,313 | - | 35,140 |
| Total bonds and debentures | **502,022** | **218,677** | **-** | **720,699** | 912,135 | 137,248 | - | 1,049,383 |
| Real return securities | | | | | | | | |
| Government of Canada | **39,043** | **207,749** | **-** | **246,792** | 28,658 | 281,389 | - | 310,047 |
| Provinces/municipalities | **-** | **3,514** | **-** | **3,514** | - | 4,127 | - | 4,127 |
| Total real return securities | **39,043** | **211,263** | **-** | **250,306** | 28,658 | 285,516 | - | 314,174 |
| | **655,984** | **452,471** | **-** | **1,108,455** | 940,793 | 454,447 | - | 1,395,240 |
| **Growth assets** | | | | | | | | |
| Equity | | | | | | | | |
| Canadian | **450,086** | **-** | **-** | **450,086** | 552,143 | - | - | 552,143 |
| U.S. | **279,506** | **-** | **-** | **279,506** | 321,532 | - | - | 321,532 |
| Other foreign | **161,099** | **-** | **436** | **161,535** | 272,448 | (420) | - | 272,028 |
| Total equity | **890,691** | **-** | **436** | **891,127** | 1,146,123 | (420) | - | 1,145,703 |
| Emerging market debt | | | | | | | | |
| Corporate/other | **48,585** | **47,369** | **-** | **95,954** | - | - | - | - |
| Total emerging market debt | **48,585** | **47,369** | **-** | **95,954** | - | - | - | - |
| Real assets | | | | | | | | |
| Real estate | **-** | **-** | **374,677** | **374,677** | - | - | 305,849 | 305,849 |
| Infrastructure | **-** | **-** | **165,063** | **165,063** | - | (463) | 132,767 | 132,304 |
| Other | **-** | **-** | **21,456** | **21,456** | - | - | 18,355 | 18,355 |
| Total real assets | **-** | **-** | **561,196** | **561,196** | - | (463) | 456,971 | 456,508 |
| | **939,276** | **47,369** | **561,632** | **1,548,277** | 1,146,123 | (883) | 456,971 | 1,602,211 |
| **Total** | **1,595,260** | **499,840** | **561,632** | **2,656,732** | 2,086,916 | 453,564 | 456,971 | 2,997,451 |

## Transfers between fair value hierarchy levels

For assets and liabilities measured at fair value in the financial statements, the Fund determines whether transfers have occurred between levels in the hierarchy by reassessing categorization at the end of each reporting period. Transfers are dependent on internal classification criteria that are based on variables such as observability of prices and market trading volumes considered as at each balance sheet date. Transfers between levels are deemed to occur at the beginning of the year in which the transfer occurs. During the year, the Fund reclassified $1.5 million of securities from Level 2 to Level 1 (2021 – nil) and $63.9 million securities from Level 1 to Level 2 (2021 – $284.7 million).

The following table presents the change in the fair value of level 3 investments:

| *(in thousands)* | Real estate | Infrastructure | Other | Equity | Total |
|---|---|---|---|---|---|
| **2022** | | | | | |
| Fair value as at 1 January 2022 | **305,849** | **132,767** | **18,355** | **-** | **456,971** |
| Additions | **31,650** | **16,036** | **2,376** | **761** | **50,823** |
| Disposals | **(8,848)** | **(241)** | **-** | **(325)** | **(9,414)** |
| Realized and unrealized gains[1,2] | **46,026** | **16,501** | **725** | **-** | **63,252** |
| **Fair value as at 31 December 2022** | **374,677** | **165,063** | **21,456** | **436** | **561,632** |
| **2021** | | | | | |
| Fair value as at 1 January 2021 | 284,840 | 110,623 | 12,431 | - | 407,894 |
| Additions | 28,293 | 16,130 | 5,516 | - | 49,939 |
| Disposals | (34,956) | (254) | - | - | (35,210) |
| Realized and unrealized gains (losses)[1,2] | 27,672 | 6,268 | 408 | - | 34,348 |
| Fair value as at 31 December 2021 | 305,849 | 132,767 | 18,355 | - | 456,971 |

[1] Included in change in fair value of investments on the statement of changes in net assets available for benefits

[2] Unrealized gains related to assets held at December 31, 2022 for real estate, infrastructure, and other respectively are $39.6 million, $26.6 million, and $2.9 million (2021 - $13.4 million, $28.4 million, $2.3 million).

## Level 3 unobservable inputs and sensitivity analysis

Level 3 investments include real estate, infrastructure and other real assets. For these investments, trading activity is infrequent and fair values are based on independent appraisals which consider comparable transactions and/or discounted cash flow. The valuations include significant inputs such as occupancy rates, capitalization rates and discount rates that are unobservable and may significantly affect the measurement of fair value. The valuations were based on the independent appraisers' assessments of the prevailing conditions as at 31 December 2022, which may change materially in subsequent periods.

The fair value of investments in real assets through investment funds is based on the NAVs reported by the investment fund managers. In determining NAVs, fund managers obtain independent appraisals of the individual real assets. All real asset investments other than investments in real properties that are held directly or through a wholly owned real estate corporation, are held through investment funds.

Investments in real properties that are held directly or through a wholly owned real estate corporation, are valued with the use of capitalization rates. At 31 December 2022, these investments had a fair value of $243.4 million (2021 – $230.3 million) and their capitalization rates ranged from 4.4% to 9.1% (2021 – 4.7% to 10.0%). Other reasonable possible alternative assumptions such as discount rates and occupancy rates are not readily available or possible to estimate accurately. As a result, the Plan is not able to determine a change in the fair values derived from a reasonable possible alternative assumption.

Significant increases (decreases) in inputs such as occupancy rates could result in significantly higher (lower) fair values. Significant increases (decreases) in inputs such as discount rates and capitalization rates could result in significantly lower (higher) fair values.

# 4. Investment earnings (losses)

The following is a summary of investment earnings (losses) for the Fund by asset class:

| *(in thousands)* | 2022 | | | 2021 | | |
|---|---|---|---|---|---|---|
| | Change in fair value[1] | Investment income | Total | Change in fair value[1] | Investment income | Total |
| **Liability hedging assets** | | | | | | |
| Fixed income | | | | | | |
| Short-term investments | **(80)** | **1,511** | **1,431** | 9 | 265 | 274 |
| Bonds and debentures | **(250,182)** | **23,516** | **(226,666)** | (57,574) | 24,005 | (33,569) |
| Real return securities | **(62,371)** | **1,827** | **(60,544)** | 91 | 1,909 | 2,000 |
| | **(312,633)** | **26,854** | **(285,779)** | (57,474) | 26,179 | (31,295) |
| Interest expense on repurchase agreements | **-** | **(6,515)** | **(6,515)** | - | (1,130) | (1,130) |
| | **(312,633)** | **20,339** | **(292,294)** | (57,474) | 25,049 | (32,425) |
| **Growth assets** | | | | | | |
| Equity | | | | | | |
| Canadian | **255** | **16,564** | **16,819** | 108,575 | 15,098 | 123,673 |
| U.S. | **(51,425)** | **4,677** | **(46,748)** | 49,573 | 4,045 | 53,618 |
| Other foreign | **(49,206)** | **3,232** | **(45,974)** | 23,237 | 6,955 | 30,192 |
| Total equity | **(100,376)** | **24,473** | **(75,903)** | 181,385 | 26,098 | 207,483 |
| Emerging market debt | **9,955** | **-** | **9,955** | - | - | - |
| Real assets | | | | | | |
| Real estate | **46,027** | **11,299** | **57,326** | 16,771 | 20,999 | 37,770 |
| Infrastructure | **8,570** | **5,690** | **14,260** | 12,041 | 7,427 | 19,468 |
| Other | **725** | **1,042** | **1,767** | 409 | 219 | 628 |
| Total real assets | **55,322** | **18,031** | **73,353** | 29,221 | 28,645 | 57,866 |
| | **(35,099)** | **42,504** | **7,405** | 210,606 | 54,743 | 265,349 |
| **Total** | **(347,732)** | **62,843** | **(284,889)** | 153,132 | 79,792 | 232,924 |

[1] Change in fair value includes a realized net loss of $18.3 million (2021 – gain of $53.4 million) and an unrealized net loss of $329.4million (2021 – gain of $99.7 million).

# 5. Risk exposure and management

The key financial risks related to the Fund's assets are market risk, credit risk and liquidity risk. These are mitigated by policies that define the Fund's overall objective and circumscribe investments in terms of what is permitted, how investments may be made, and minimum standards for diversification, quality, and liquidity. Policies also describe the management structure and monitoring procedures adopted for the ongoing operation of the Fund.

## a) Market risk

Market risk is the risk of adverse financial impact arising from changes in underlying market factors, including interest rates, foreign exchange rates and equity prices. The Fund is able to partially mitigate this risk by incorporating diversification requirements in its investment policies and guidelines. Diversification reduces the risk of market value decreases and helps protect the Fund from potential negative impacts within one asset class or sector.

## Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Pension obligations are also subject to interest rate risk. The Fund's interest rate exposure arises from mismatches in the timing and amount of cash flows of its assets and liabilities.

The Fund's interest rate risk is managed through its asset allocation policy, which takes into account the liability profile of the Fund and diversifies its assets, and other policies that limit the price sensitivity of fixed income assets to interest rate changes relative to established benchmark indices.

The impact of a 100 bps increase or decrease in interest rates on the fair value of fixed income securities including emerging market debt, real return securities and securities sold under repurchase agreements would be:

| | 2022 Interest rate shift | | 2021 Interest rate shift | |
|---|---|---|---|---|
| *(in thousands)* | +100 bps | -100 bps | +100 bps | -100 bps |
| Short-term investments | **(110)** | **110** | (124) | 124 |
| Bonds and debentures[1] | **(117,718)** | **151,916** | (165,889) | 212,113 |
| Real return securities | **(45,038)** | **57,073** | (60,577) | 77,767 |
| Securities sold under repurchase agreements | **249** | **(250)** | 252 | (252) |
| | **(162,617)** | **208,849** | (226,338) | 289,752 |

[1] Includes emerging market debt.

## Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of an investment will fluctuate as a result of changes in foreign exchange rates and is associated with the Fund's foreign investments. At 31 December 2022, the Plan's exposure to foreign currencies expressed in Canadian dollars was $544.1 million to U.S. dollars and $218.7 million to European, Asian and other currencies included in the All Country World Index (ACWI) (31 December 2021 – $434.3 million to U.S. dollars and $366.3 million to Europe, Australasia and Far East currencies).

Fluctuation in foreign exchange rates will have a negative or positive impact on the value of investments in foreign denominations. The following table demonstrates the impact of a 100 bps increase or decrease in foreign exchange rates on the fair value of the investments:

| | 2022 Foreign currency shift | | 2021 Foreign currency shift | |
|---|---|---|---|---|
| *(in thousands)* | +100 bps | -100 bps | +100 bps | -100 bps |
| U.S.[1] | **3,755** | **(3,755)** | 3,215 | (3,215) |
| Other foreign[2] | **1,615** | **(1,615)** | 1,406 | (1,406) |
| **Total** | **5,370** | **(5,370)** | 4,621 | (4,621) |

[1] Includes emerging market debt

[2] 2022 represents non-USD foreign ACWI investments and 2021 represents Europe, Australasia and Far East investments.

### Equity price risk

Equity price risk is the risk that the fair value of an investment will fluctuate because of changes in market prices, whether those changes are caused by factors specific to the individual investment or its issuer, or factors affecting all securities traded in the market. The Fund's exposure to equity price risk arises primarily from investments in equities. Policies set minimum standards for diversification of assets at the total Fund level and within individual portfolios.

A concentration of equity price risk exists when a significant portion of an equity portfolio is invested in entities that operate in the same industry or engage in similar activities and are affected similarly by changes in economic or other conditions. The following table outlines the sectors in which the equity portfolios are invested:

| | 2022 | | 2021 | |
|---|---|---|---|---|
| *(in thousands, unless otherwise indicated)* | $ | % | $ | % |
| Financials | 212,806 | 23.9 | 250,578 | 21.9 |
| Information technology | 119,389 | 13.4 | 154,781 | 13.5 |
| Energy | 103,263 | 11.6 | 88,558 | 7.7 |
| Industrials | 102,635 | 11.5 | 137,190 | 12.0 |
| Consumer discretionary | 73,553 | 8.3 | 102,924 | 9.0 |
| Consumer staples | 67,140 | 7.5 | 86,280 | 7.5 |
| Health care | 56,160 | 6.3 | 74,037 | 6.5 |
| Materials | 54,218 | 6.1 | 109,337 | 9.6 |
| Telecommunication services | 54,179 | 6.1 | 76,011 | 6.6 |
| Utilities | 20,746 | 2.3 | 34,649 | 3.0 |
| Other | 16,039 | 1.8 | 20,794 | 1.8 |
| Real estate | 10,999 | 1.2 | 10,564 | 0.9 |
| **Total** | 891,127 | 100.0 | 1,145,703 | 100.0 |

As at 31 December 2022, 39.6% (2021 – 43.8%) of the Fund's investments, net of securities sold under repurchase agreements and mortgages payable, were in equities. The impact of an increase or decrease of 10% in equity prices, with all other factors held constant, would be an increase or decrease, respectively, in net assets available for benefits of $89.1 million (2021 – $114.6 million).

## b) Credit risk

Credit risk is the risk of loss arising from a counterparty's inability to fulfil its contractual obligations. Credit risk includes the risk of default and encompasses both the probability of loss and the probable size of the loss, net of recoveries and collateral, over time.

The Fund's credit risk associated with investments is managed through policies that include minimum credit rating requirements and limits by sector, counterparty, and credit rating. In the event that a credit change renders an approved investment holding ineligible, the Fund will take the necessary actions to restructure holdings while minimizing losses. The credit quality of issuers of debt securities is assessed by reference to published credit ratings and investment management analysis.

Credit risk exposure on fixed income, emerging market debt and real return securities is divided into short-term (less than one year) and long-term (greater than one year). All short-term exposure must be rated R-1 high or equivalent unless issued or fully guaranteed by the Government of Canada or a Canadian province. The maximum exposure to credit risk for fixed income, emerging market debt and real return securities is the carrying amount of these investments.

A concentration of credit risk exists when a significant portion of a credit portfolio is invested in entities that operate in the same industry or engage in similar activities and are affected similarly by changes in economic or other conditions.

The following table indicates the credit risk exposure and concentration of credit risk of fixed income, emerging market debt and real return securities:

| | 2022 | | 2021 | |
|---|---|---|---|---|
| *(in thousands, unless otherwise indicated)* | $ | % | $ | % |
| Securities issued or guaranteed by: | | | | |
| Government of Canada | **521,731** | **43.4** | 641,340 | 46.0 |
| Provinces/municipalities | **564,193** | **46.8** | 714,602 | 51.2 |
| Corporate/other | **118,485** | **9.8** | 39,298 | 2.8 |
| | **1,204,409** | **100.0** | 1,395,240 | 100.0 |
| Credit rating: | | | | |
| AAA | **524,771** | **43.5** | 644,869 | 46.2 |
| A- to AA+ | **592,703** | **49.2** | 735,636 | 52.7 |
| BBB- to BBB+ | **27,590** | **2.3** | 14,735 | 1.1 |
| B- to BB+ | **46,500** | **3.9** | - | - |
| C to CCC+ | **6,504** | **0.5** | - | - |
| D | **2,045** | **0.2** | - | - |
| Not rated | **4,296** | **0.4** | - | - |
| | **1,204,409** | **100.0** | 1,395,240 | 100.0 |

During the year, the Fund stopped hedging foreign currencies, and at December 31, the Fund held no foreign currency forward contracts. The Fund previously hedged foreign currencies and managed credit risk arising from foreign currency forward contracts by entering into contracts with creditworthy counterparties subject to minimum credit rating requirements and by setting limits on the allowable amount of exposure to each of these counterparties. Specifically, all such counterparties must have had a minimum credit rating of AA, or its equivalent, from at least two rating agencies. Furthermore, no one counterparty could comprise more than 50% of the total value of counterparty hedge volume outstanding with all counterparties.

## c) Liquidity risk

Liquidity risk is the risk that the Plan would not be able to meet its financial obligations as they come due. The Plan is exposed to liquidity risk through its pension obligations (Note 7), investment commitments (Note 13) and financial liabilities.

The Plan's financial liabilities consist of securities sold under repurchase agreements, mortgages payable, and accounts payable and accrued liabilities. The maturity analysis for mortgages payable is provided in Note 6. All securities sold under repurchase agreements have remaining terms that do not exceed 60 days. The term to maturity of accounts payable and accrued liabilities is within one year and the net amount payable is $1.1 million (2021 – $1.8 million).

Liquidity risk is managed through holdings of highly liquid short-term investments, forecasting of cash flow requirements, and daily monitoring. Cash sources include investment income, proceeds from the sale of investments, and employee and employer contributions.

# 6. Mortgages payable

At December 31, mortgages mature in February 2023 and February 2026. Subsequent to year-end, the mortgage maturing in February 2023, was extended to August 2023. Mortgages are secured by land and specific rental properties and bear interest at fixed rates of 3.45% and 3.81% at December 31. Subsequent to year-end, the mortgage with the fixed rate of 3.45%, was changed to 5.95%. The estimated payments of principal and interest are as follows:

| | 2022 | |
|---|---|---|
| *(in thousands)* | **Principal** | **Interest** |
| 2023 | 3,580 | 189 |
| 2024 | 200 | 172 |
| 2025 | 207 | 164 |
| 2026 | 4,229 | 13 |
| **Total**[1] | 8,216 | 538 |

[1] During 2022, interest paid on these mortgages amounted to $0.3 million (2021 – $0.3 million).

# 7. Pension obligation

The actuarial present value of the pension obligation is an estimate of the value of accrued pension benefits of the Plan to date for all active and inactive members. The Plan's pension obligation is calculated using the same actuarial assumptions and methodology as the Plan's going-concern funding valuation as required by OSFI and the PBSA. As at 31 December 2022, an actuarial valuation of the Plan was conducted by Mercer (Canada) Limited and a copy of this valuation will be filed with OSFI and the Canada Revenue Agency (CRA).

The valuation was prepared using the projected unit credit method and reflects management's best estimate of future economic events, involving both demographic and economic assumptions. The demographic assumptions include considerations such as mortality, withdrawals, and retirement rates. The primary economic assumptions include the discount rate, inflation rate and the rate of compensation increase. The discount rate is determined by the long-term expected fund return based on the Plan's target asset mix and market expectations, less a margin for adverse deviations. The inflation rate is based on the use of the 31 December 2022 Consensus Economics survey of future year-end inflation and the rate of compensation increase is based on the inflation rate and the long-term expectation of growth in wages.

The significant economic actuarial assumptions used in the valuation are as follows:

| *(in thousands)* | **2022** | **2021** |
|---|---|---|
| Real discount rate | 4.3% | 3.20% |
| Inflation rate | 6.80%[1] | 2.00% |
| Rate of compensation increase | 3.25% + age based promotional scale | 3.25% + age based promotional scale |
| Mortality table (issued by the Canadian Institute of Actuaries) | CPM2014 (CPM-B scale) | CPM2014 (CPM-B scale) |

[1] The inflation assumption will be revised to a short-term overlay of 6.8% in 2022, 3.7% in 2023, 2.2% in 2024 and then reverting back to the long-term inflation target rate of 2% beginning in 2025.

Variances between estimates and actual experience, which may be material, will emerge as gains and losses in future valuations and will be reflected in future valuations. The changes in the demographic and economic assumptions resulted in a net decrease in the actuarial present value of pension benefits on a going-concern basis of $148.9 million (2021 – net decrease of $160.7 million). Based on the 31 December 2022 valuation, the actuarial present value of accrued pension benefits on a going concern basis is $1.8 billion (2021 – $1.9 billion).

As is standard for actuarial valuations, it is reasonably possible, based on existing knowledge, that changes in future conditions in the near term could require a material change in the recognized amounts. It is not possible to determine the magnitude of any such changes. CMHC bears the risk of experience loss against the long-term assumptions and credit risk associated with the Plan asset portfolio and is responsible for the liability associated with the ongoing operations of the Plan.

The next required actuarial valuation will be completed as at 31 December 2023.

# 8. Contributions

Contributions comprise the following:

| *(in thousands)* | 2022 | 2021 |
|---|---|---|
| **Defined benefit** | | |
| Employer | | |
| Current service | **21,286** | 27,483 |
| Special payments | **853** | 37,097 |
| Total employer | **22,139** | 64,580 |
| Employees | | |
| Current service | **24,555** | 21,630 |
| Past service | **52** | 2,393 |
| Total employees | **24,607** | 24,023 |
| **Total contributions** | **46,746** | 88,603 |

As permitted under section 9.16 of the PBSA and its regulation, CMHC received approval from the relevant ministers to reduce its required solvency special payments. In 2022, these payments amounted to nil (2021 – $36.2 million). Special payments also included $0.9 million (2021 – $0.9 million) to fund transfer deficiencies for members electing to transfer out of the Plan in 2022.

# 9. Benefits paid

| *(in thousands)* | 2022 | 2021 |
|---|---|---|
| Retirement | **80,596** | 79,083 |
| Survivor | **8,312** | 7,786 |
| Disability | **405** | 233 |
| Transfer restriction annuity | **360** | 316 |
| **Total** | **89,673** | 87,418 |

# 10. Operating expenses

Operating expenses include the administrative costs related to the management of the Plan. The following table outlines the operating expenses for the year:

| *(in thousands)* | 2022 | 2021 |
|---|---|---|
| Investment personnel and support services | **2,912** | 2,924 |
| Pension benefits administration | **1,751** | 1,983 |
| Investment management fees | **1,298** | 1,982 |
| Other administration costs | **568** | 614 |
| Software and information technology costs | **576** | 590 |
| Audit and actuarial fees | **312** | 297 |
| **Total** | **7,417** | 8,390 |

# 11. Related party transactions

The Fund's related parties include key management personnel and CMHC and its related parties. CMHC, the Plan Sponsor, is related in terms of common ownership to all Government of Canada departments, agencies and Crown corporations.

The following table summarizes the amount invested in instruments issued by CMHC (namely, Canada Mortgage Bonds) or its related parties:

| *(in thousands)* | 2022 | 2021 |
|---|---|---|
| Short-term investments[1] | **114,918** | 27,570 |
| Bonds and debentures[2] | **160,020** | 303,767 |
| Real return securities[1] | **246,792** | 310,003 |
| **Total** | **521,730** | 641,340 |

[1] This is invested in Government of Canada.

[2] Nil (2021 – $72.0 million) in CMHC and $160.0 million (2021 – $231.7 million) in Government of Canada.

Transactions with the Plan Sponsor were conducted in the normal course of operations and measured at the amount of consideration established and agreed to by both parties. Included in operating expenses is $4.2 million (2021 – $4.2 million) for administrative services provided by the Plan Sponsor. Included in accounts payable and accrued liabilities is $1.1 million (2021 – $1.8 million) due to the Plan Sponsor for administrative services provided to the Plan and nil (2021 – nil) for payments made by the Plan Sponsor on behalf of the Plan.

The Plan defines its key management personnel as the Trustees of CMHC's Pension Fund, CMHC's Board of Directors and those senior executives responsible for planning, directing and controlling the Plan's activities and the Plan is not charged for the compensation of these individuals.

# 12. Capital management

The Plan defines its capital as the Plan's funded status [surplus/deficit]. An independent actuary periodically determines the funding surpluses or deficits of the Plan. The Plan's primary objective with respect to capital management is to ensure that plan assets are adequate to provide for the pension benefits in accordance with the provisions of the CMHC Pension Plan Rules.

The Plan Rules, as well as the Plan's funding and operations, are subject to the PBSA and its regulations and the *Income Tax Act*. Management has adopted a Statement of Investment Policies and Procedures (SIP&P) for the Plan, which sets investment objectives, guidelines and benchmarks used in investing the Plan's assets, permitted categories of investments, asset mix diversification and rate of return expectations. The Plan's SIP&P was last updated and approved in September 2021. The Plan's Trustees provide oversight for ensuring that the Plan assets are managed in accordance with the SIP&P.

The Pension Fund's strategic asset allocation (SAA) policy is based on the principle of diversification of investments among various asset classes relative to the liabilities of the defined benefit Pension Plan. In 2021, the Board of Directors approved a new asset allocation policy, which we expect to fully adhere to by 2026.

The Fund's long-term asset allocation policy is as follows:

| *Asset class* | SAA | As at December 31 2022 | As at December 31 2021 |
|---|---|---|---|
| Liability hedging assets | | | |
| Cash | 3% | 6% | 1% |
| Fixed income | 14% | 15% | 26% |
| Real return securities | 12% | 11% | 12% |
| Public growth assets | | | |
| Equity | 37% | 39% | 44% |
| Emerging market debt | 5% | 4% | - |
| Private growth assets | | | |
| Private equity | 5% | - | - |
| Private debt | 3% | - | - |
| Real assets | 21% | 25% | 17% |

Through the use of leveraged long government bonds, the SIP&P allows for a modest level of leverage of 25% of NAV to purchase fixed income assets to reduce the interest rate risk of the portfolio.

CMHC has managed the Plan's capital in accordance with the legal and regulatory requirements. There have been no changes in what is considered to be capital or the objectives of managing capital during the year.

# 13. Commitments and contingent liabilities

The Plan enters into commitments related to the funding of investments including those in infrastructure, real estate and other real assets. The future commitments can generally become payable on demand in the future based on the capital needs of the investment. The funding is ordinarily expected to occur over several years in accordance with the agreed-upon terms and conditions. As at 31 December 2022, the commitments amounted to $212.4 million (2021 – $160.6 million). The Plan has sufficient liquidity to meet these commitments as they come due.

# 14. Comparative figures

Comparative figures have been reclassified, where necessary, to conform to the 2022 presentation.

# Task Force on Climate-related Financial Disclosures

## About the Task Force on Climate-related Financial Disclosures

In 2015, the Financial Stability Board established the Task Force on Climate-related Financial Disclosures (TCFD) to promote more informed investment, credit, and insurance underwriting decisions and improve understanding of climate change as a systemic risk to the global financial system. In 2017, the TCFD published its final recommendations, providing a framework for consistent, comparable, decision-useful, and forward-looking disclosure by companies and investors on climate-related financial risks and opportunities:

- Physical risks, including catastrophic weather events, changing climate patterns, and rising sea levels
- Transition risks associated with moving to a lower-carbon economy, including policy and legal, technology, market, and reputational impacts
- Opportunities associated with the need to respond to climate change, including resource efficiency, low-emissions energy, new products and services, new markets, and adaptation to improve resilience in the face of climate impacts

The TCFD reporting framework is designed around four pillars, for which recommended disclosures are identified: Governance, Strategy, Risk Management, and Metrics and Targets (Table 1).

**Table 1: Summary of TCFD Recommended Disclosures**

| Category | Recommendation | Recommended Disclosures |
|---|---|---|
| **Governance** | Disclose the organization's governance around climate-related risks and opportunities. | a) Describe the board's oversight of climate-related risks and opportunities.<br>b) Describe management's role in assessing and managing climate-related risks and opportunities. |
| **Strategy** | Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material. | a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.<br>b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.<br>c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. |
| **Risk Management** | Disclose how the organization identifies, assesses, and manages climate-related risks. | a) Describe the organization's processes for identifying and assessing climate-related risks.<br>b) Describe the organization's processes for managing climate-related risks.<br>c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management. |
| **Metrics & Targets** | Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material. | a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.<br>b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.<br>c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets. |

There is strong support for the TCFD recommendations globally among companies, financial institutions, and governments. The Government of Canada has mandated Crown corporations with more than $1 billion in assets to provide TCFD-aligned disclosure starting by calendar year 2022, with other Crown corporations to follow by 2024 at the latest. It is also engaging with regulators to incorporate the TCFD recommendations to disclosure practices across the Canadian economy.

Climate change presents significant risks and opportunities for the value of investments. Therefore, reporting in line with the TCFD recommendations is considered best practice for pension plans.

# About this Report

The Plan is committed to reporting annually on its approach to climate change. Our inaugural TCFD Report describes the Plan's approach to managing climate-related risks and opportunities. The information presented in this Report is organized around the four pillars of the TCFD framework. We voluntarily refer to this framework to help guide the structure and content of our climate-related disclosures. The Plan continually monitors climate-related risks and opportunities and expects to develop further climate-related tools and metrics in the future, particularly as more reliable GHG emissions data becomes available. As such, the Plan will take a phased approach to implementation of the TCFD recommendations.

This Report covers the period from January 1, 2022, to December 31, 2022, unless otherwise noted. The terms "the Pension Plan", "the Plan" and "the Fund", "we" and "our" all denote the CMHC Pension Plan. All data presented is Plan-wide, unless otherwise noted. Financial data is presented in Canadian dollars.

The Report includes information on the GHG emissions associated with the Plan's investments ("portfolio carbon"). Two portfolio carbon metrics are used:

- **Carbon Footprint:** A measure of portfolio emissions expressed as metric tons of carbon dioxide equivalent per million dollars invested ($tCO_2e$/$M invested)
- **Weighted Average Carbon Intensity (WACI):** A measure of portfolio exposure to carbon-intensive companies, expressed in metric tons of carbon dioxide equivalent per million dollars of revenue ($tCO_2e$/$M revenue)

The portfolio carbon metrics are based on the Plan's share of the Scope 1 and Scope 2 GHG emissions created by the operations of the companies and other investments within the portfolio. At present, portfolio carbon metrics are only provided for Canadian Equity, Global Equity and Emerging Market Fixed Income due to lack of sufficiently reliable data for other asset classes. The scope of GHG emissions and asset classes covered by portfolio carbon metrics will be enhanced over time, as the quality and availability of GHG emissions data improves.

More general information about the Plan, such as asset mix, net assets, total return, and funded status can be found in the Financial Highlights of this report and on our website. Information on CMHC's organization-wide approach to managing climate-related risks and opportunities can be found in the CMHC Annual Report 2022.

# Our Approach to Climate Change

## Overview

The Plan's approach to climate change focuses on mitigating risks and seizing opportunities for the portfolio, enhancing value for beneficiaries, and contributing to decarbonization for the long-term stability and sustainability of the global economy in which it is invested. We are committed to:

- Considering climate change in strategic asset allocation
- Integrating climate-related risks and opportunities in investment decision-making
- Stewardship to encourage investees to address climate-related risks and opportunities
- Measuring GHG emissions associated with the investment portfolio, with the expectation that these emissions will decrease over time

## Governance

Good corporate governance is at the heart of CMHC's activities, including management and administration of the CMHC Pension Plan. General information about the governance of the Plan can be found above and on our website. The Pension Fund Trustees, appointed by the Board of Directors, oversee the management and administration of the Fund via the Investment Committee, who assist the Trustees with investment management of the Fund. While the Board of Directors has ultimate responsibility for oversight of climate risk related to the Plan, primary oversight of climate-related risks is provided by the Trustees and Investment Committee.

In December 2022, the Trustees undertook an education session on TCFD, including the impact of the TCFD recommendations and their relevance for pension funds, provided by a specialist responsible investment consultancy.

### Investment Team

The Investment Team is responsible for day-to-day integration of climate-related considerations into investment decision-making. The Investment Team assesses and manages climate-related risks through integration to the investment process and asset allocation.

For assets that are managed by external investment managers, our approach focuses on incorporating climate considerations into the manager selection and monitoring process. Factors we consider include, but are not limited to, an external manager's capabilities and processes relating to climate integration, climate stewardship, and climate reporting. Monitoring is executed through quarterly meetings with external managers, as well as annual due diligence, which includes questions about external managers' approach to incorporation of climate-related risks and opportunities. We may revisit the relationship with any external manager who fails to meet climate-related expectations over time. External managers are expected to follow industry best practices in integrating climate change to their investment decision-making.

### Risk Teams

The risk oversight teams provide additional independent oversight of risks to the Pension Plan, including climate-related risks, and report quarterly to the Board, Trustees, and Investment Committee.

## Strategy

The Plan considers climate risks and opportunities as part of investment decision-making and strategic asset allocation (SAA).

We believe that strategic asset allocation is the key factor in determining the long-term investment returns and risk of the Plan's investment portfolio. Alongside liquidity, diversification, and broader risk management, we also consider climate-related risks and opportunities in strategic asset allocation.

Climate-related risks and opportunities are integrated in portfolio construction and investment decision-making for internally managed assets. Additionally, external investment managers are expected to integrate consideration of climate-related risks and opportunities to investment decision-making.

We believe decarbonization of the economy can be achieved most effectively through climate-related integration and stewardship across the portfolio. As a result, we do not utilize climate-related exclusions targeting specific sectors.

A scenario-based climate risk assessment was last conducted in 2020, before the update of current SAA. Three scenarios were analyzed:

1. Orderly Paris Accord Transition: a smooth and orderly transition toward a low-carbon, climate-resilient economy in line with the goals of the Paris Climate Accord, resulting in global average temperature increase limited to 1.5°C, and avoiding the worst predicted physical impacts of climate change.
2. Disorderly Paris Accord Transition: more severe financial impacts as a result of abrupt and disorderly pricing-in of climate risks to achieve the goals of the Paris Climate Accord.
3. Failed Transition: Failing to achieve the Paris Climate Accord goals, resulting in global average temperature increase well over 2°C, and severe physical climate impacts.

The most recent climate risk assessment did not identify any material risks in the short term. In the medium term, transition risk was identified. In the long term, physical risks became more significant. The key conclusion of the study was that the Pension Fund is more susceptible to risks associated with the transition to a lower-carbon economy than to the physical risks associated with climate change, particularly in the event of a Disorderly Paris Accord Transition. In the disorderly transition pathway, the associated transition risks are expected to have the most impact on asset returns in the medium term. In contrast, in the event of a failed transition pathway, the associated physical risks are expected to have the most impact on asset returns in the longer term. The estimated impact on annual returns is summarized in Table 2 below.

**Table 2: Impact on Annual Returns Relative to Baseline**

| *Scenario* | 2021-2030 | 2021-2060 |
|---|---|---|
| Orderly Paris Accord Transition | (0.2%) | (0.3%) |
| Disorderly Paris Accord Transition | (0.7%) | (0.3%) |
| Failed Transition | (0.3%) | (0.7%) |

The study concluded that the impact of a disorderly transition, and the resulting market repricing of assets, could meaningfully impact the value of the portfolio. While this estimation is based on several key assumptions in terms of the timing and progression of climate policy changes and the market impacts of those changes, the risk is deemed to be significant. As such, the Plan will aim to mitigate this risk through portfolio construction and integration of climate risk considerations into investment decision-making. It is known that certain sectors will be adversely impacted by climate change, and the Plan will closely monitor exposure to those sectors. An update of stress testing exercise will be conducted periodically to reflect changes in the asset mix and assumptions.

## Risk Management

The Investment Team works with the risk oversight teams to ensure identification, assessment, and management of climate-related risks. The investment team will continue to evolve and advance our risk management framework and processes to better identify, monitor and manage climate-related risks by:

- Increasing climate risk literacy and awareness
- Reporting and conducting Stress testing
- Continue to integrate a climate risk lens into Strategic Asset Allocation and Investment decision making
- Developing and enhancing policies & guidelines
- Continuously improving climate data and analytics capabilities

Training has been provided to Investment Committee and Trustees on climate risk and the investment team will continue to increase the awareness of these risks and the processes that will be used to manage them. Stress testing exercise was conducted in 2020 and will be an integral part of our climate risk assessment process. Furthermore, the insights gained from the stress testing process was integrated into Strategic Asset Allocation in 2020.

## Metrics and Targets

The Investment Team and risk oversight teams use a range of climate-related metrics to measure and monitor climate-related risks and opportunities. GHG emissions associated with portfolio investments are measured using two metrics, Carbon Footprint and Weighted Average Carbon Intensity (WACI), which are compared with the same metrics for the relevant investment benchmark. Portfolio exposure to emissions by sector and the top 3 investee contributors to overall GHG emissions are also tracked by the Investment Team. At present, these metrics only account for the operational Scope 1 and Scope 2 emissions of the underlying investments, due to the low availability and reliability of data on Scope 3 emissions relating to the upstream and downstream value chain of investees. The Plan will explore measurement and disclosure of investee Scope 3 emissions as data becomes more accurate and widely available. It is also important to note that the metrics in this report are limited to portfolio GHG emissions, and do not include CMHC's own operational GHG emissions.

Portfolio emissions data is currently sourced from Bloomberg. The Plan's overall WACI was 141.4 tCO2e/$M revenue. At present, the Plan's portfolio carbon metrics are limited to Canadian Equity, Global Equity and Emerging Market Fixed Income. This represents 42.4% of net assets. The remaining 57.6% of net assets is made up of Canadian Government bond, Real Estate and Infrastructure and Cash. As data for these asset classes becomes more widely available and reliable, the Investment Team will look to expand the coverage of portfolio emissions data and metrics.

Portfolio carbon metrics for relevant strategies are set out in Table 3. According to currently available data, the Plan's Canadian Equity investments have a Carbon Footprint and WACI slightly below those of the benchmark portfolio, and the metrics for Global Equity investments are below those of the relevant benchmark.

**Table 3: Portfolio Carbon Metrics as of December 31, 2022**

| *Asset Class* | Portfolio Carbon Footprint ($tCO_2e$/$M invested) | Benchmark Carbon Footprint ($tCO_2e$/$M invested) | Portfolio WACI ($tCO_2e$/$M revenue) | Benchmark WACI ($tCO_2e$/$M revenue) |
|---|---|---|---|---|
| Canadian Equity | 76.0 | 79.7 | 180.6 | 181.8 |
| Global Equity | 85.3 | 91.5 | 122.9 | 131.6 |
| Emerging Market Fixed Income* | 204.1 | Not available | 188.5 | Not available |

*The metric shown includes only corporate bonds and does not include sovereign bonds
Source: Bloomberg

The Plan began to measure portfolio carbon emissions in 2022. It has not adopted climate-related targets at this stage but remains committed to the decarbonization of its investments over time.

# Glossary

**Transition Risk:** Risks associated with the shift to a low-carbon economy including policy and legal, technology, market, and reputational impacts.

**Physical Risk:** Risks associated with the physical impacts of climate change including catastrophic weather events, changing climate patterns, and rising sea levels.

**Total Carbon Emissions:** Absolute GHG emissions associated with a portfolio. Expressed as metric tons of carbon dioxide equivalent ($tCO_2e$ ).

**Carbon Footprint:** Total carbon emissions normalized by market value of the portfolio. Expressed as metric tons of carbon dioxide equivalent per million dollars invested ($tCO_2e$/$M invested).

**Carbon Intensity:** Volume of carbon emissions per million dollars of revenue (i.e. the carbon efficiency of the portfolio). Expressed as metric tons of carbon dioxide equivalent per million dollars of revenue ($tCO_2e$/$M revenue) multiplied by percentage ownership of each investment to calculate the portfolio figure.

**Weighted Average Carbon Intensity:** A measurement of portfolio exposure to carbon-intensive investments. Expressed as metric tons of carbon dioxide equivalent per million dollars of revenue ($tCO_2e$/$M revenue) multiplied by the portfolio weight of each investment to calculate the portfolio figure.

**Scope 1 GHG Emissions:** Direct emissions that occur from sources that are controlled or owned by a company in the portfolio of investments.

**Scope 2 GHG Emissions:** Indirect emissions associated with a company's purchase of electricity, steam, heating, or cooling.

**Scope 3 GHG Emissions:** Indirect emissions that are owned and controlled by another emitter but are associated with the value chain of a company held in the portfolio (e.g., emissions associated with the investee's manufacturing supply chain, or with use of the investee's product).

**Paris Climate Accord:** A legally-binding international treaty on climate change adopted at the 21st Conference of the Parties to the United Nations Climate Convention (COP21), held in Paris in 2015.

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