



## **Responsible Investment Report**

September 2023

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## Introduction

Vestcor's investment clients primarily consist of pension and endowment funds which require a source of stable sustainable long-term investment returns. It is therefore imperative that we continue to be proactive in investing in sustainable businesses in a responsible manner on behalf of our clients.

We advocate that the companies in which we invest provide detailed reporting and disclosure on their Environmental, Social, and Governance (ESG) risk exposures and the strategic initiatives and risk management governance process being utilized to mitigate related risks and meet global best practices and regulatory targets.

To ensure we also continue to maximize the long-term value for our funds under management, Vestcor conducts its investment management activities under the direction of a set of Responsible Investment Guidelines (RIG) ([vestcor.org/investments](https://vestcor.org/investments)). These guidelines provide a framework in which we consider ESG related issues in our investment process, and they are reviewed and approved by the Vestcor Inc. Board of Directors.

We are pleased to present our second Responsible Investment Report. It has been prepared to fulfill the core principle of "Transparency" that is outlined in the RIG and is formatted in-line with our other RIC core principals of "Active Ownership and Engagement", and "Incorporation of ESG Information" in our Investment Process. It also allows us to compare our annual progress against any goals, objectives, or targets that may be set by our clients, regulators or other stakeholders.

This report is primarily focused on our activities during 2022. Our intention is to continue to update and publish this report on an annual basis.

## Responsible Investing Committee Activity

The Vestcor Responsible Investing Committee operates under the direction of the Chief Investment Officer and has a mandate to review all activities related to responsible investment related issues. Committee members also include the President and CEO, the Vice President of each Investment Team, and the Risk Manager, but membership may be extended to certain other investment team members as well. A Senior Research Analyst acts as the Committee Recording Secretary.

Committee activities include (but are not limited to) the development and management of Vestcor's responsible investment program and proxy voting oversight. The Committee is also responsible for ensuring that Vestcor remains current with evolving industry trends, guidelines and regulations and regularly reviews reports from each investment team summarizing how ESG considerations were considered within the management of respective team portfolio. The committee also reviews various ESG analytical tools and data sources for applicability in Vestcor's investment process.

The Committee formally met two times during the year to review Vestcor's proxy voting activity and continue development on the next steps of Vestcor's integration of ESG information into the Responsible Investment platform. The Chief Investment Officer regularly reports on Committee activities to the Vestcor Board of Directors.

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## Active Ownership Plan

Vestcor takes an active investment management approach at both the portfolio development and individual investment level. Our internal investment and risk management teams consider responsible investment issues when conducting initial investment due diligence and through their ongoing investment monitoring activities. Similar diligence is required in situations where external managers are utilized or partnered with in investment opportunities.

Our responsible investing guidelines are utilized as part of our active investment approach and are expected to provide better risk-adjusted investment returns than through a more passive management approach. It also ensures that the companies we invest in have the proper robust governance policies, diverse management teams and risk management procedures in place to identify and manage the risks inherent in their businesses.

We strongly believe that active analysis and engagement will lead to better long-term investment outcomes for our clients. As mentioned in our RIG, our active ownership approach provides a more effective alternative than blanket divestments or exclusionary screen processes. That being said, management may conclude that investments in certain companies or specific sectors are not in the best interest of our client's long-term investment goals and are therefore to be avoided.

This active approach is also an important component in assisting us identify attractive long-term investment opportunities such as carbon reduction transition opportunities.

## Engagement and Collaboration

Vestcor is an active member in the following national pension and investment industry associations:



These relationships allow us to collaborate with other institutional peer pension plan managers on responsible investment issues and together leverage our respective influence and ownership interests to make long-term sustainability improvements in the companies in which we invest.

An example of the benefits from this type of collaboration can be seen in the recent Canadian Coalition for Good Governance (CCGG) Annual Engagement Report publication ([ccgg.ca/engagement-program](https://ccgg.ca/engagement-program)). Their 2022 engagement impact assessment determined that approximately 90% of the corporate boards that the CCGG have engaged with on behalf of their members have adopted at least one material positive change with respect to governance policies, practices or disclosure made during their engagement discussions, which significantly targeted effective compensation practices for

management as well as Board, management compensation and diversity initiatives, and climate related risks and strategies.

## Proxy Voting Activities

One of the most effective tools that an investor can use to express our views with respect to a company’s approach to their corporate governance and long-term sustainability risks is through active proxy voting. Vestcor has set out a series of “Proxy Voting Guidelines” in our RIG and has retained the services of the advisory firm Glass Lewis to assist with our analysis in Vestcor’s ultimate independent proxy vote decisions.

Vestcor also shares our guidelines with our external management relationships and partnerships. We actively review and discuss our proxy voting process with these relationships during the initial due diligence process and where appropriate, Vestcor also requires external managers to submit their proxy voting history to us on an annual basis which is subsequently reviewed by Vestcor management to ensure general conformity to the general principles included in our Guidelines.

## 2022 Proxy Voting Overview Statistics

The following table provides a breakdown of Vestcor’s proxy voting activities for the public company securities held in 2022. Proxies were voted to be consistent with the “Principles” expressed in our RIG:

1. Equal treatment (e.g., voting rights, attributes, and information disclosures) for all shareholders.
2. Effective independent best practice governance and disclosure practices.
3. A long-term value creation and sustainability focus.

Category	No. of Meetings	No. of Proposals	Against Management
Environment	99	218	24%
Social	594	857	23%
Governance - General	2,123	15,408	6%
Governance - Board Independence	2,935	36,337	6%
Governance - Compensation (Director)	472	726	4%
Governance - Compensation (Executive)	2,037	4,587	14%
Governance - Corp Capital Structure	1,379	3,932	12%
Other Business	71	86	81%
<b>Totals</b>	<b>9,710</b>	<b>62,151</b>	<b>8%</b>

Key industry themes that we voted on during the year included the following:

- Proposals around director nominations and say-on-pay received modestly less support in 2022 than in the prior year, with just about 86% of SOP proposals in the U.S. large cap universe achieving support.

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- We noted a continued increase in the overall number of shareholder proposals, although the percentage of shareholder proposals that were supported dropped back to normal levels from the generally higher support observed in 2021.
  - In general, the increased retail ownership of the stock market in recent years has come with somewhat reduced voting participation, as market research suggests that retail investors appear to be much less likely than institutional owners to participate in the proxy voting process.

## Investment Process Integration

Vestcor incorporates ESG information as part of our portfolio development and investment selection due diligence and monitoring processes. ESG information is typically gained through our investment management teams directly engaging with the management team of investment companies and / or through resources which include general industry publications, regulatory guidelines, proprietary industry specific research and analysis, and specialized databases.

Vestcor management is also an active participant in many industry associations and has developed working relationships with many national peer organizations. These connections provide an effective reference to share operating procedures, evaluations, and best practices with respect to responsible investment issues.

## Integration of ESG Information

Vestcor's internal investment staff are responsible for conducting the necessary due diligence, including the consideration of ESG related issues with respect to their specific investment decision making process. This due diligence typically involves reviewing and analyzing public disclosure documentation, third party research reports, and direct interaction with corporate management teams.

In addition to the information received from collaborative partners mentioned earlier, we also have access to a variety of specific ESG data sources from multiple providers to supplement their own due diligence in the management and monitoring of portfolios and during the investment decision making process.

During the previous year, the Responsible Investing Committee decided that each internal investment team will provide a report to the Committee on at least an annual basis as to the use of such ESG information in the management of all the team's internally managed strategies during the year and worked with each team to determine the optimal approach to incorporation of ESG information into internal investment processes in 2022. Vestcor has three public markets-focused internal investment teams that focus respectively on Fixed Income, Fundamental Equity, and Quantitative Investment portfolios. Each team was successful in making inroads in their Responsible Investing strategy during 2022 through varying approaches that either targeted investments in specific securities (e.g., green bonds) or directly incorporated ESG and climate risk data into an investment process to allow the team to better understand and manage risks.

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### **Case Study: Managing Climate Risks in Factor Strategies**

*Vestcor's initial TCFD report in 2022 provided us with detailed information on the company level carbon exposure for holdings within our public markets portfolios. After a significant research effort, Vestcor's Quantitative Investing Team was able to incorporate this information into Vestcor's Canadian, Global, and Emerging Market Low Volatility Factor Portfolios and reduce those portfolio's carbon exposure by 9, 13, and 9%, respectively, during 2022 while maintaining targeted exposures to other investment factors and ensuring other risk parameters of the funds were largely unchanged.*

In Private Markets, Vestcor's teams invest client assets using a combination of 3<sup>rd</sup> party managers, co-investments alongside like-minded partners, and direct investments. Each of these investment methods produces unique opportunities for us to consider and deploy best practices from an ESG perspective.

### **Case Study: Hillsdale Investment Management Inc.**

*Celebrating over a quarter of a century of investment excellence, Hillsdale Investment Management Inc. ("Hillsdale") is an independent, employee-controlled, and client-aligned investment boutique serving a select group of institutional and private wealth investors. Hillsdale engages in disciplined active investment management, specializing in equities, alternatives, ESG, and customized mandates. Vestcor's Private Equity portfolio completed its first investment in Hillsdale during 2021.*



*Hillsdale is "Great Place to Work Certified" for 2023-2024 for the second consecutive year and has also adopted the CFA Institute's Diversity, Equity, and Inclusion Code for Investment Professionals ("DEI Code").*

*For more information, please refer to [www.hillsdaleinv.com](http://www.hillsdaleinv.com).*

When investing in a third-party fund structure, we delegate specific investment decisions to a fund manager. As such, Vestcor does not have direct input into the investment decision making, but rather, selects the underlying manager. As part of our manager selection process, we gather specific information from managers to ensure they are employing a thoughtful and systematic approach to integrating environmental, social and governance (ESG) considerations into their investment decision-making and asset management processes. An increasing number of fund managers are now adopting respective ESG policies that reflect growing global concerns about climate change and the value of diversity, equity, and inclusion (DEI) initiatives. These are some of the elements that we will consider, amongst others, during our diligence of fund managers prior to making a commitment to a limited partnership.

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### **Case Study: Sea Electric Inc.**

*Global e-Mobility technology company SEA Electric was founded in Australia in 2012 and is now headquartered in the USA, with its proprietary all-electric SEA-Drive® power-system technology adaptable to the world's urban delivery and commercial transport fleets.*



*Widely recognized as a market leader in the electrification of commercial vehicles on a global basis, SEA Electric has a worldwide presence, deploying products in eight countries to date, namely the USA, Canada, Australia, New Zealand, Thailand, Indonesia, India and South Africa, collectively achieving more than two million miles of service via independent OEM-testing and real-world operation.*

*SEA Electric has deployed over 200 battery-electric vehicles to date, with telematics data proving the SEA-Drive® power-system's world-class total cost of ownership. In the next five years, SEA Electric predicts that its zero-emissions commercial vehicles will have eliminated over 3 billion pounds of CO2 emissions from the transport task.*

*"As a Founder in the zero-emissions technology segment, the challenge was to find an investment partner that not only understands this unique segment, but truly believes in the positive impact of the business while accepting the nuances of forging a new market," said Tony Fairweather, CEO and Founder, SEA Electric. "In Vestcor, we have found a partner who lives all of these, plus some."*

*For more information, please refer to [www.sea-electric.com](http://www.sea-electric.com)*

In contrast, for direct and co-investments, we maintain investment decision making authority and use this ability to target assets that not just provide superior risk adjusted returns but also are aligned with our long-term views on climate and other ESG risks. Renewables, as a category, represented 19% of our total infrastructure portfolio at the end of 2022.

### **Case Study: Puget Sound Energy**

In 2022, Vestcor participated in Puget, a co-investment offered through OMERS Infrastructure's Strategic Partnership Program to select global like-minded institutions. Puget Sound Energy is a Washington State, USA based regulated utility providing electric and natural gas services to Western Washington, including the Seattle metropolitan area. PSE is one of the largest integrated utilities in the US Pacific Northwest with ~1.2 million electric customers<sup>1</sup> and ~900,000<sup>2</sup> natural gas customers.

The power utility sector has traditionally been a highly carbon intensive industry. In 2019, Washington state introduced the Clean Energy Transformation Act (CETA) which commits the state to an electricity supply free of GHG emissions by 2045. PSE has worked alongside stakeholders to introduce a Clean Energy Implementation Plan which commits the company to be coal-free and have 63% of the electric supply coming from renewable sources by 2025<sup>3</sup>.

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<sup>1</sup> <https://www.pse.com/en/about-us>

<sup>2</sup> <https://www.pse.com/en/about-us>

<sup>3</sup> [PSE | CEIP Process](#)



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In addition, PSE has taken their commitment a step further. The company has introduced a “Beyond Net Zero Carbon” plan setting out several goals that look past net zero targets. PSE is looking to partner with customers that identify cost-effective means to reduce their own emissions.

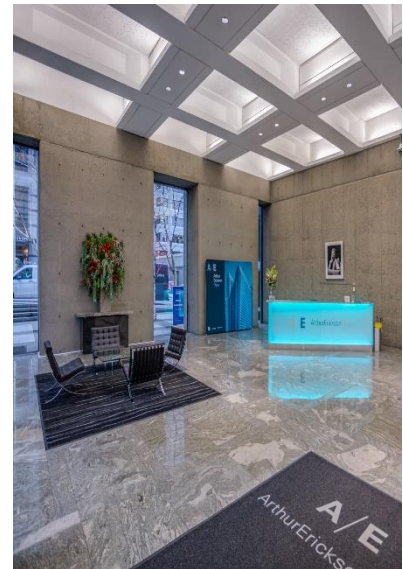
More information: [www.pse.com/en/about-us/Sustainability](http://www.pse.com/en/about-us/Sustainability)



### **Case Study: Reducing Our Carbon Footprint**

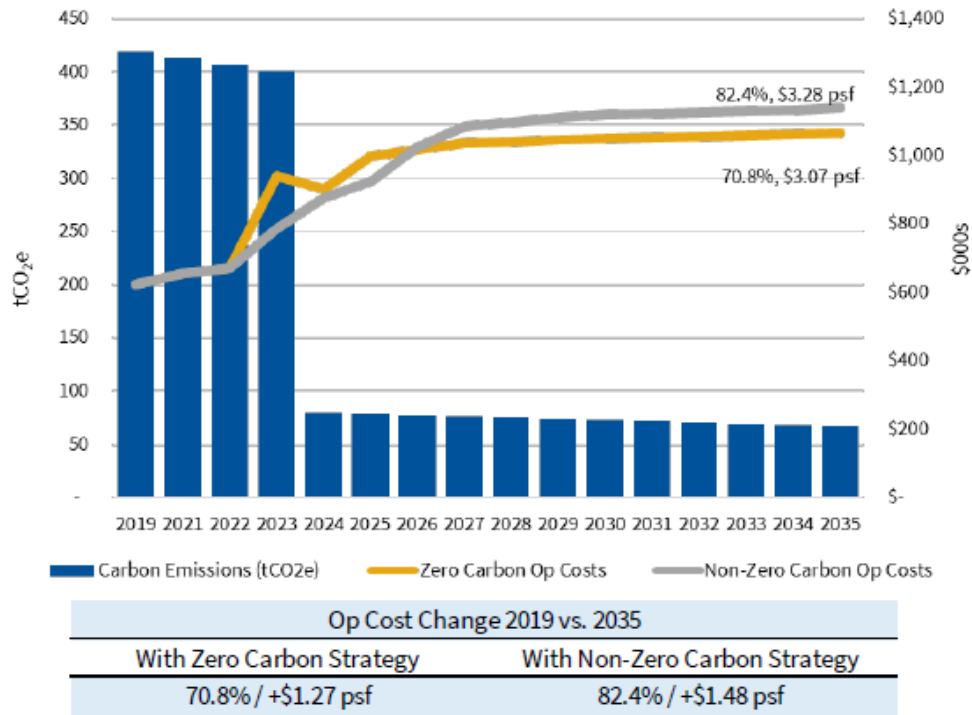
*Vestcor acquired a 25% interest in Arthur Erickson Place in 2019, a landmark asset in downtown Vancouver.*

*This unique and iconic office building was designed and built in the 1960's and still operates with several original mechanical systems. The core structure of the asset is sound and through proper planning and effort, the replacement of equipment nearing the end its useful life with modern and efficient cooling and heating systems offers the*



*opportunity to reduce carbon gas emissions while investing in the future. Once the planned capital improvements are complete in 2023, the building will be eligible for Zero Carbon Certification by the Canada Green Building Council.*

*Through proper asset management initiatives, it is forecast that 2024 carbon emissions will be reduced by 81% when compared to 2019 baseline emissions while also significantly reducing long-term operating costs compared to non-zero carbon alternatives.*



*Arthur Erickson Place also benefits from existing additional density and the ownership group is focused on converting this density to multi-residential rental to bring much needed housing to the downtown Vancouver market.*

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## Climate-Related Financial Disclosures – In Accordance with TCFD Recommendations

The Financial Stability Board’s Task Force on Climate-Related Financial Disclosures (TCFD) released its landmark report in 2017, which provides a framework for companies to effectively report on climate related financial disclosures. Since its release, the TCFD framework has seen significant adoption by companies globally and has brought better understanding of the impacts of climate-related risks and opportunities to the global financial system.

Vestcor published its inaugural 2021 TCFD-aligned report in September 2022 to assist management and our clients in monitoring and managing the related environmental carbon exposure and climate risk within their investment portfolios. Our investment management process and guidelines require access to consistent timely disclosure on these risks and exposures to ensure our investment portfolio managers are investing in opportunities that will provide our clients with sustainable value well into the future. Vestcor has therefore developed the following TCFD-aligned report for our portfolio as of year-end 2022.

This year’s report continues to provide TCFD aligned disclosures with respect to our investment activities. **In addition, we were able to expand the scope of our disclosures by including more asset class types in this year’s calculation.** Our carbon footprint calculation methodology is informed by guidance from Partnership for Carbon Accounting Financials (PCAF) in calculating the financed emissions metrics.

It is important to point out that the landscape of carbon footprint reporting continue to evolve at a rapid pace, and more standardized methodologies and higher quality data become available over time through this process. Our climate metrics are calculated with the best of our ability using the best quality of data available to us at the time of this publication. Our disclosures will continue to adapt along with developments in carbon footprint reporting.

The goal of this report is to assist our clients in better understanding their own climate related risk and exposures, and in turn assist them in developing and monitoring strategies to reduce risk and exploit potential investment opportunities. We continue to seek inputs from our clients in terms of their specific needs for climate-related disclosure and risk management strategies, and through further discussions and consultations with our clients, the determination of specific emission reduction targets.

## Core Elements of Recommended Climate-Related Financial Disclosures



### **Governance**

The organization's governance around climate-related risks and opportunities

### **Strategy**

The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

### **Risk Management**

The processes used by the organization to identify, assess, and manage climate-related risks

### **Metrics and Targets**

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Source: *Recommendations of the Task Force on Climate-related Financial Disclosures*, June 2017

## Governance

The Vestcor Inc. Board, management and our internal Responsible Investing Committee all have active governance roles in our climate-related approach.

- The Vestcor Inc. Board of Directors is responsible for setting the overall corporate risk appetite and understanding both the principal risks facing our business and the systems that have been put in place to mitigate and manage those risks including climate change. The Board is briefed on Vestcor's responsible investing activities. In 2022, the Board approved Vestcor's inaugural Responsible Investment Report. The Audit Committee of the Board is specifically assigned the task of assisting the Board in its risk management oversight, including the oversight of climate risk.
- Management in conjunction with our Risk Manager assists the Board in coordinating its risk management activities through the guidelines of a Board-approved **Enterprise Risk Management Framework** (available at [vestcor.org/corporate-overview](https://vestcor.org/corporate-overview)). Climate related risk is monitored regularly primarily under the Governance, Reputation, and Investment risk categories of this Framework.
- Vestcor's investment clients set out their statement of investment policies and goals, and Vestcor is responsible for the management of their funds. The Vestcor Inc. Board of Directors approves the Responsible Investment Guidelines which are used by management in executing its fiduciary responsibilities on behalf of our clients' investment portfolios. They have been prepared based on best practices in the institutional investment management industry and are the responsibility of Management's Responsible Investing Committee. These guidelines include information concerning: Vestcor's Principles for Responsible Investing, Vestcor's Approach to Responsible Investing in practice, the related roles and responsibilities of Vestcor management and staff, and reporting and communication with stakeholders.

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- Vestcor’s Responsible Investing Committee, an internal cross functional working group, is responsible for regularly reviewing the firm’s activities related to the umbrella of Responsible Investing.

## Strategy

### Climate-related Risks and Opportunities:

Climate change continues to present opportunities and risks over the short, medium and long term for our clients’ investment portfolios.

#### **Climate-related Risks:**

Climate-related risks include both physical risks and transition risks across our investment portfolio.

- Physical risks are risks resulted from climate related events including acute physical risks and chronic physical risks. Acute physical risks arise from extreme weather events such as wildfires and floods, while chronic physical risks arise from longer-term weather pattern changes such as rising temperatures and rising sea level. Recent more extreme weather events around the world amplified the need for managing physical risks within any business.
- Transition risks are inherent in our investment portfolio that arise from the economy transitioning towards a lower-carbon economy. Some examples of transition risks include potential impacts from changes in government policy related to transitioning to a lower-carbon economy, potential risks from new technology displacing old systems and disrupting existing economic system, potential changes in the supply and demand of certain assets in the transition process, etc.

#### **Climate-related Opportunities:**

Unique opportunities also arise in the process of developing climate risk reduction strategies.

- Attractive investment opportunities arise when certain companies outperform in the climate transition process, through resource efficiency and cost savings, adopting low emission energy sources, developing new products and services, accessing to new markets, and building resilience along the supply chain. Vestcor has a long history of identifying these types of opportunities and investing in assets that contribute to sustainable development. Case studies of these investments can be found in the “*Investment Process Integration*” section of this report.
- We also proactively seek opportunities that are present for active engagement and advocacy with companies in the process of implementing our climate strategies in accordance with our Responsible Investing Guidelines. In the proxy voting process, we follow our proxy voting guidelines to vote the directly held shares, thereby exercising shareholder voice in promoting longer-term value creation and sustainability. In the limited cases where a mandate is managed by an external manager, the manager’s proxy voting processes are actively reviewed and discussed during the initial due diligence process, and their proxy voting history is submitted to and reviewed by Vestcor annually if their service is retained. Vestcor also takes

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an active role in collaborating with other institutional peer pension plan managers on climate risks and responsible investment issues as an active member of Canada's pension and investment industry associations (for information on our collaborative efforts please see the "*Engagement and Collaboration*" section of the report).

### Scenario Analysis:

To assess an organization's future resiliency to a range of potential future climate-related scenarios, the TCFD recommends using scenario analysis when developing the organization's climate strategy.

We reviewed our in-scope investment portfolio through the lens of climate risk scenarios for the investment holdings as of December 31, 2022. The review assesses how our portfolio could be impacted by physical risks and transition risks, and benefitted from investing in the opportunities brought by a low-carbon technology transition. This review attempts to aggregate costs and benefits from these risks and opportunities over the next 15 years and evaluate the potential financial performance into the foreseeable future. This analysis also estimated how well the portfolio is aligned with the temperature rise target under the Paris Agreement which is to limit global warming to below the 2°C level.

Both the methodologies for conducting scenario analysis and data available for the analysis are rapidly evolving. As a result, this analysis is subject to limitations inherent in currently available methodologies and data. This analysis serves to inform us of our climate exposures and provides another perspective in designing an effective long-term climate strategy, and ultimately a portfolio that is resilient to various transition and physical scenarios.

### Risk Management

Vestcor adopts the "three lines of defence" risk governance model which is typically considered best practice for risk management practices at financial institutions. At the first line of defense, Vestcor's investment teams and business management are the primary risk owners where each team identifies, assesses, and manages their respective risks including climate risks while conducting their day-to-day investment functions in accordance with established risk policies. At the second line of defense, an independent Vestcor Risk Team provides independent oversight of established risk policies and practices, including climate risk related practices via monitoring of the activities within the Enterprise Risk Management Framework, in addition to the Risk Manager directly participating in the Responsible Investing Committee. Climate risk is inherently embedded into the Enterprise Risk Management Framework within governance, reputational and investment risks. Oversight and reviews of activities within these risk areas are conducted regularly to ensure these risks are understood and identified while appropriate risk mitigation strategies are put into place where needed. At the third line of defence, Vestcor Internal Audit team objectively assesses the adequacy and effectiveness of Vestcor's internal control environment, including providing independent assurance on the above-mentioned risk management policies and practices.



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The Responsible Investing Committee meets at least semi-annually under the direction of the Chief Investment Officer and has a mandate to review all activities related to responsible investment, including (but not limited to) receiving a report from each investment team summarizing how ESG issues were considered within the management of portfolios during the period under review. The Committee will also review ESG data sources for applicability to Vestcor’s investment process and make recommendations to management when new systems or data are required for the implementation and management of the Responsible Investing Guidelines.

Vestcor’s management team ensures that the various risk management guidelines approved by our Board of Directors are implemented and managed, and that all required systems and procedures necessary to implement the guidelines are available to staff. Vestcor Investment Teams actively use ESG information to more effectively manage risk within investment decisions and the portfolio management process. Internal investment teams (Equity, Fixed Income, Private Markets and Quantitative Investment and Applied Research) will report to the Responsible Investing Committee on at least an annual basis the use of ESG related information within the management of the team’s portfolios during the year. More details on investment process integration can be found in the *“Integration of ESG Information”* section of this report.

With external relationships and partnerships, our external manager selection due diligence process includes considerations based on the manager’s approach to ESG/climate risk. Proxy voting process discussion is an important part of the due diligence process as well as in the ongoing partnership with these managers. More details on our external manager proxy voting engagement can be found in the *“Proxy Voting Activities”* section of this report.

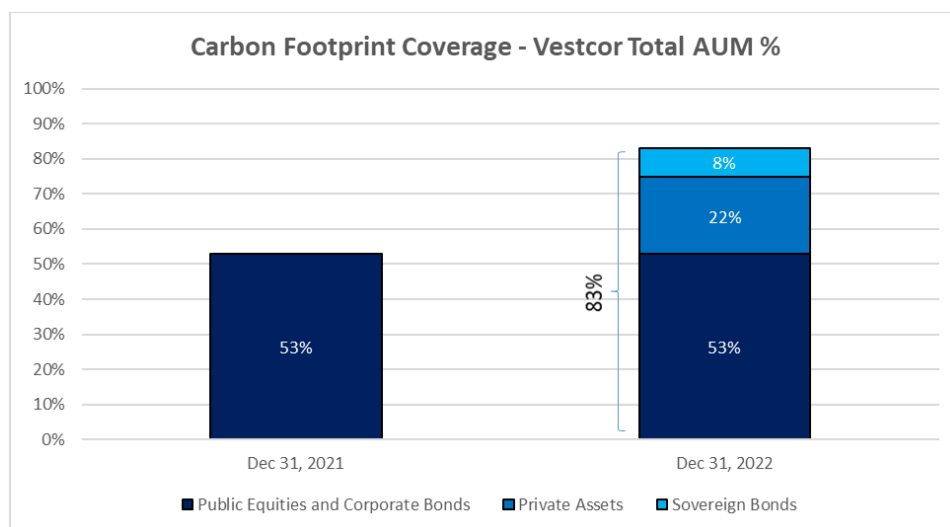
This is our second year to assess our carbon footprint at the consolidated total fund level. We used a bottom-up approach in this project with the aim of establishing a baseline of our carbon footprint aggregated over our total portfolio (for portfolio coverage methodology please see *“Notes on Carbon Footprint Metrics”*). The project analyzes climate risks across several dimensions, including carbon intensity, carbon footprint attribution, specific exposure to carbon intensive sectors and issuers, and climate scenario analysis. This analysis further informs our decision-making processes in effectively managing our climate risk exposure going forward.

## 2022 Carbon Footprint Metrics and Targets

### Carbon Footprint Methodology

Our Carbon Footprint methodology continues to be aligned with TCFD recommendations. In addition, our 2022 methodology is also informed by the guidance from Partnership for Carbon Accounting Financials (PCAF) in calculating financed emissions metrics. Industry guidance and best practices in carbon footprint calculation methodology have been a developing process, and we expect our methodology to continue to evolve over time alongside these developments. Further details of our carbon footprint calculation methodology are discussed in the Appendix *“Notes on Carbon Footprint Metrics”*.

Chart 1. Carbon Footprint Coverage - Vestcor Total AUM %



### Key Facts about December 31, 2021 Carbon Footprint Methodology

Last year we completed the assessment of our total portfolio carbon footprint for the first time based on assets held as of December 31, 2021. The scope of the metrics in last year’s report were based on publicly listed equities and corporate bonds holdings (including all holdings from equity and equity-like long-only portfolios and bonds in all corporate fixed income portfolios). Consistent with the TCFD’s recommendations, the metrics reported last year were Total Financed Emissions (tCO<sub>2</sub>e), Financed Carbon Emissions (tCO<sub>2</sub>e/\$M invested) and Weighted Average Carbon Intensity (WACI, tCO<sub>2</sub>e/\$M revenue).

### Key Facts about December 31, 2022 Carbon Footprint Methodology

This year we improved the scope of coverage for our disclosures by including more asset class types in the calculation. In addition to public equities and corporate bonds, this year our carbon footprint calculation expanded to also cover private assets including real estate, infrastructure and private equity. We also calculated carbon metrics for our sovereign bonds investments separately based on PCAF guidance. **This brings our overall carbon footprint coverage to 83% of total investments, compared to 53% last year.**

- **Publicly Listed Equities and Corporate Bonds:**

This year we continue to publish Total Financed Emissions (tCO<sub>2</sub>e), Financed Carbon Emissions (tCO<sub>2</sub>e/\$M invested) and WACI (tCO<sub>2</sub>e/\$M revenue) for publicly listed equities and corporate bonds (Table 2). These metrics are based on analytics provided by a third-party climate data vendor (see “Notes on Carbon Footprint Metrics”), where emissions data is collected by the vendor from companies’ publicly available reports and filings. When emissions data is not publicly disclosed, estimates are provided by the vendor using their proprietary estimation models. When data is not available from the vendor, this year Vestcor applied an estimation approach based primarily on GICS sub-industry average emissions. This estimation approach is recommended in PCAF guidance and is a new approach in our carbon footprint calculation this year.



- **Sovereign Bonds:**

In 2022, PCAF released its guidance on methodology to attribute financed emissions from sovereign debt investments. Guided by PCAF’s standard, we are disclosing carbon emissions attributable to our sovereign bond investments (Table 3).

- **Private Assets:**

This year we calculated Vestcor Total Financed Emissions (tCO<sub>2</sub>e) and Financed Carbon Emissions (tCO<sub>2</sub>e/\$M invested) metrics that cover both public and private asset classes. The results are shown in Table 1.

For private real estate and private infrastructure investments, emissions are primarily sourced directly from company self-disclosures. For private equity, emissions are estimated using public proxies which are established based primarily on GICS sub-industry average emissions.

Among all the investments included in this year’s carbon footprint calculation, 71% of the emission data is sourced from direct company/government reports, with 29% estimated by either the third-party vendor or Vestcor.

#### 2022 Carbon Footprint Metrics:

Our total financed emission intensity is 52.9 tCO<sub>2</sub>e/\$M invested as at December 31, 2022. This calculation covers 75% of our total investments and includes public equities, corporate bonds, and private assets.

Table 1. 2022 Carbon Footprint Metrics

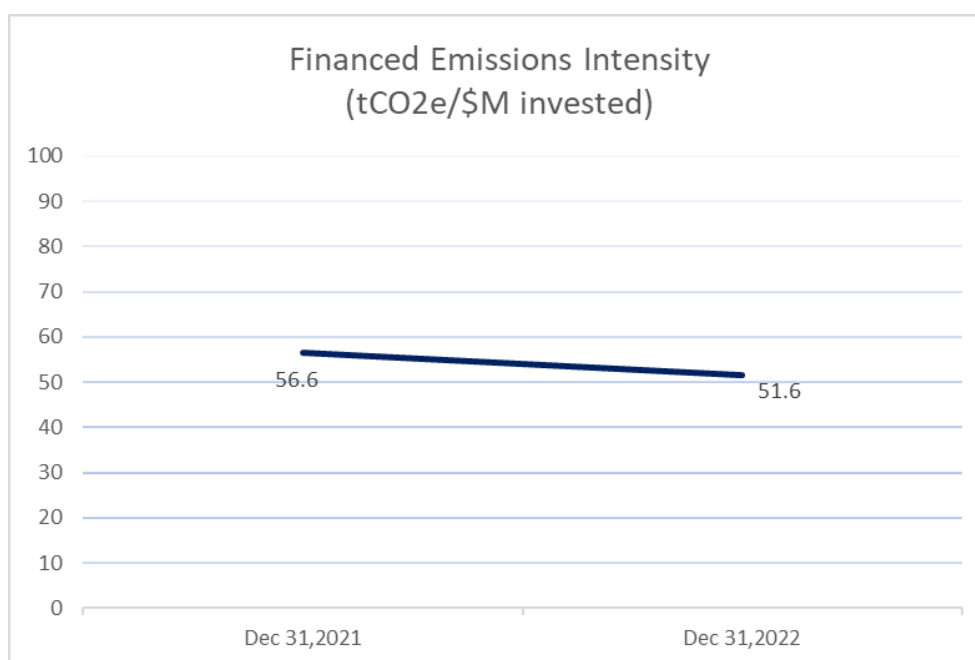
	December 31, 2022
<b>Financed Emissions (tCO<sub>2</sub>e/\$M invested)</b>	52.9
<b>Total Financed Emissions (tCO<sub>2</sub>e)</b>	789,242
<b>% AUM Covered</b>	75%
<b>Asset Classes Covered</b>	Public Equities, Corporate Bonds, Private Assets

For the purpose of a consistent year-over-year comparison, this year we continue to provide comparable metrics for the same in-scope asset classes as were covered in 2021, with 2021 methodologies (Table 2). Financed emissions intensity decreased from 56.6 as reported for December 31, 2021 to 51.6 as at December 31, 2022. The main drivers for this decrease include our efforts in reducing the portfolio’s carbon footprint via investment process integration as well as updated investee companies’ carbon data provided by the vendor, which is partially offset by a lower base of aggregated market value in the denominator.

Table 2. Comparative Metrics 2022 vs. 2021 (Public Equities and Corporate Bonds)

	December 31, 2021	December 31, 2022	% Change
<b>Financed Emissions (tCO<sub>2</sub>e/\$M invested)</b>	56.6	51.6	-8.8%
<b>Total Financed Emissions (tCO<sub>2</sub>e)</b>	628,374	539,693	-14.1%
<b>Weighted Average Carbon Intensity (tCO<sub>2</sub>e /\$M revenue)</b>	204.5	177.4	-13.2%
<b>% AUM Covered</b>	53%	53%	--
<b>Asset Classes Covered</b>	Public Equities, Corporate Bonds	Public Equities, Corporate Bonds	--

Chart 2. Financed Emissions Intensity (Public Equities and Corporate Bonds)



Guided by PCAF's standard, we are disclosing carbon emissions attributable to the sovereign bond investments separately from our total investment carbon metrics. Carbon emissions attributable to Vestcor's sovereign bond investments were 410,226 tCO<sub>2</sub>e in total financed emissions, and 266 tCO<sub>2</sub>e/\$M invested in financed emissions intensity.

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Table 3. Carbon Footprint Metrics for Sovereign Bonds

	December 31, 2022
<b>Financed Emissions Intensity (tCO<sub>2</sub>e /\$M invested)</b>	266
<b>Total Financed Emissions (tCO<sub>2</sub>e)</b>	410,226
<b>% AUM Covered</b>	8%

Targets:

This is our second year of disclosing our climate-related metrics based on TCFD recommendations. The analysis in this report provides us with measurable metrics for monitoring the climate transition reduction progress of the portfolio over time as investee companies work towards meeting public carbon reduction targets. We will continue to enhance our TCFD disclosures over time as we further integrate responsible investing considerations into our investment and risk management processes.

Vestcor is committed to being transparent about our climate journey and using our influence to support the global goal of transitioning to net-zero greenhouse gas emissions by 2050. Our investment and risk management processes and guidelines ensure that we continue to invest in opportunities that will provide our clients with sustainable value well into the future.

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## Notes on Carbon Footprint Metrics

### 1. Carbon footprint data

The majority of our carbon footprint data is based on MSCI climate data, with the exceptions of private real estate and private infrastructure where emission data is collected by Vestcor from company self-disclosures. Emissions data used in the calculation is based on the most recently available data at the time of the analysis. Please note that changes in carbon metrics are not only attributable to the changes in investee company emissions, but are also sensitive to changes in other parameters such as changes in market value of the portfolio and changes in FX rate used in converting foreign currency based investments to Canadian dollar based metrics.

2. All values reported are in Canadian dollars unless specified otherwise. Exchange rate applied is as of December 31, 2022.

3. Our climate metrics reported include Scope 1 and 2 greenhouse gas emissions (GHG). Scope 1 emissions are direct emissions that occur from sources owned or controlled by a company and Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, consumed by the company.

### 4. AUM in Scope for December 31, 2022

<b>AUM for Carbon Footprint Metrics, CAD \$ Millions</b>	<b>December 31, 2022</b>
Public Equities and Corporate Bonds	10,605
Private Assets	4,315
<u>Sovereign Bonds</u>	<u>1,543</u>
Total AUM in scope for Carbon Footprint Metrics	16,463
Vestcor Total AUM	19,883

The AUM in scope does not include provincial/municipal/government agency bonds and equity long/short portfolios. For any portfolio covered in scope, the calculation also includes emissions from composite assets such as ETFs, and derivatives such as equity futures. Not included are cash, short-term notes, FX contracts, warrants, among other items.

In total, investments included in the analysis of this report represented 83% of Vestcor's AUM as at December 31, 2022.

5. Weighted Average Carbon Intensity (WACI) metric was not calculated for sovereign bonds as the metric's revenue-based attribution is not applicable to sovereign bonds. WACI was not calculated for private assets due to limited access to company data.

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## 6. Climate Metrics Calculations

### **Total Financed Carbon Emissions (tCO<sub>2</sub>e):**

Measures the portfolio's climate impact in terms of carbon emissions, for which the portfolio is responsible with its total financing for investee companies (by holding company shares and bonds). Each individual issuer's total emission includes the issuer's Scope 1 and Scope 2 GHG emissions. Total portfolio level financed emissions is calculated as the sum of emissions from each issuer, weighted by the portfolio's holdings of the issuer's shares and bonds as a percentage of the issuer's Enterprise Value (including cash).

$$\sum_n^i \left( \frac{\text{current value of investment}_i}{\text{issuer's Enterprise Value including cash}_i} \times \text{issuer's Scope 1 and Scope 2 GHG emissions}_i \right)$$

### **Financed Carbon Emissions (tCO<sub>2</sub>e / \$M invested):**

Measures the portfolio's normalized climate impact in terms of carbon emissions for which an investor is responsible with its total financing, per million dollars invested.

$$\frac{\sum_n^i \left( \frac{\text{current value of investment}_i}{\text{issuer's Enterprise Value including cash}_i} \times \text{issuer's Scope 1 and Scope 2 GHG emissions}_i \right)}{\text{current portfolio value } (\$M)}$$

### **Weighted Average Carbon Intensity (tCO<sub>2</sub>e / \$M revenue):**

Measures the portfolio's weighted average exposure to the carbon intensity of companies it invests in. Each individual company's carbon intensity is calculated as the company's Scope 1 and Scope 2 GHG emissions, per million dollars of its total revenue.

$$\sum_n^i \left( \frac{\text{current value of investment}_i}{\text{current portfolio value}} \times \frac{\text{issuer's Scope 1 and Scope 2 GHG emissions}_i}{\text{issuer's } \$M \text{ revenue}_i} \right)$$

### **Sovereign Bonds Financed Carbon Emissions Intensity**

The share of a country's total sovereign emissions attributable to an investor is proportionate to the investor's sovereign bond exposure as a percentage of the country's GDP.

$$\sum_n^i \left( \text{current value of investment}_i \times \frac{\text{sovereign issuer's GHG emissions}_i}{\text{sovereign issuer's } \$M \text{ GDP}_i} \right)$$

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*Required disclosure:*

*This disclosure was developed using information from MSCI ESG Research LLC or its affiliates or information providers. Although Vestcor Inc.'s information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the "ESG Parties"), obtain information (the "Information") from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used as a basis for, or a component of, any financial instruments or products or indices. Further, none of the Information can in and of itself be used to determine which securities to buy or sell or when to buy or sell them. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.*