Reporting in accordance with the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) for Fiscal Year 2022



In 2017, the TCFD released a number of climate change-related financial disclosure recommendations designed to help investors and others in the financial community better understand and assess climate change-related risks and opportunities. These disclosure recommendations are structured around four thematic areas that cover core elements of how organizations operate, including: governance, strategy, risk management, and metrics and targets. These thematic areas are intended to interlink and inform each other.

CPP Investments was a founding member of the TCFD and achieved full adoption of its recommendations in fiscal 2021. We believe our support of the TCFD recommendations will contribute to improved global disclosure of climate change-related risks and opportunities. Below we disclose how we have embedded TCFD recommendations into our investment strategy, how we manage risk and govern the Fund, and the targets/metrics associated with our net-zero strategy.

Governance

Our governance of climate-related risks and opportunities at both the Management and Board levels reflect our belief that climate change is one of the most challenging and complex investment considerations of our time. It carries the potential to materially impact our investments, operations and ability to achieve our mandate. As such, climate-related considerations are directly embedded in how we invest and manage risk across the three lines of defence.

In October 2021, we appointed our inaugural Chief Sustainability Officer (CSO), who is responsible for our approach to ESG matters, particularly climate change at the enterprise level. Our CSO works closely with our CEO and Chief Investment Officer (CIO) to ensure we maintain a global, cross-enterprise approach to sustainability and deliver on our commitment to reach net zero across the Fund and our operations by 2050. The CSO is responsible for the development of our sustainability roadmap.

The Sustainable Investing Committee is our central forum for monitoring issues and providing guidance on ESG-related matters, including climate change. It is comprised of senior representatives from across the Fund, and chaired by the Head of Sustainable Investing, who reports directly to the CSO. For additional details on the mandate of the Sustainable Investing Committee, please refer to our Report on Sustainable Investing posted on our website.

Our Board of Directors and its sub-committees oversee a range of ESG and climate-related matters. For example:

- The Risk Committee of the Board regularly receives reporting on climate-related metrics and scenario analysis results, in support of its risk oversight accountabilities.
- The Investment Strategy Committee of the Board must approve the Sustainable Investing Policy.

In addition to climate change, the Board of Directors also oversees Fund-wide efforts to better understand and manage ESG risks and opportunities more broadly. This includes providing guidance and effective challenge over the Fund's overarching approach to ESG risks and opportunities.

Strategy

Incorporating climate-related considerations into our strategic allocations

We believe that consideration of climate risk at the strategic allocation level is important for institutional investors with diversified global portfolios. To this end, the CIO seeks to factor in a full range of climate change-related risks and opportunities as part of our investment strategy and total portfolio design. A key element of this approach involves estimating the economic impact of climate change, which we incorporate into our views on long-run returns. We currently measure these impacts through a combination of internal modelling scenarios from the Intergovernmental Panel on Climate Change (IPCC).

Our diversified investment strategy affords CPP Investments the flexibility to invest across asset classes into all types of climate change-related opportunities. This includes identifying companies strategically responding to physical changes in our environment, regulatory and technological transitions, and evolving consumer preferences. As part of our net-zero commitment, we also expect to grow our investments in green and transition assets and build on our decarbonization investment approach.

Incorporating climate change into asset allocation is an evolving field and requires a multifaceted approach. As such, we continue to develop our capabilities for evaluating climate change risk and exposure at the total Fund level, refining our existing tools and expanding our toolkit. For example, in our capital allocation process, we conduct scenario analysis on the sensitivity of returns and our capital allocation choices to different climate change pathways. More tailored scenario analysis is also carried out as an integral part of investment due diligence and risk management processes.

Incorporating climate-related considerations in our investment selection processes

For investment decisions where climate change impacts are material to a transaction, our Climate Change Security Selection Framework requires us to consider the financial impacts of both high-physical and high-transition risk scenarios. We call these our "bookend scenarios." We use a variety of tools and resources that align with the bookend scenarios to estimate those financial impacts. These scenarios are meant to provide: (i) a consistent estimation and comparison of impacts across geographies, sectors, and asset classes, (ii) the potential climate-related impacts on future rates of return, on an unmitigated basis, and (iii) the basis for informed discussions of climate-related risks and opportunities most relevant for investment decisions.

The framework must be applied to any material transaction requiring approval at the senior-most management investment committee level. This year, we started applying this framework to existing investments in the Fund. Our investment teams have developed important proficiencies in identifying and assessing material climate risks and opportunities through this structured rollout.

Risk Management

Working closely with our CSO, our Chief Financial and Risk Officer (CFRO) actively measures and monitors the estimated inherent climate-related risks in the Fund. Metrics such as carbon emissions, fossil fuel exposure and climate value-at-risk are reported and reviewed with management committees at least quarterly. To complement these monitoring activities, we also use scenario analysis to assess potential financial impacts of climate-related risk events. This includes stress testing the resilience of our investments under a range of plausible scenarios, including extreme events and trends across a range of temperature outcomes, using both top-down and bottom-up approaches to quantify financial impacts.

Climate change scenario analysis

To augment the standard carbon footprint metrics (see Targets and Metrics section), we use scenario analysis to assess potential future impacts of climate risk-related stress events, expressed as annualized percentage impact to the Fund's market value in a given year. We stress test the resilience of our investments under a range of plausible scenarios, including extreme events. We explore a range of temperature outcomes, using both top-down and bottom-up approaches, to quantify financial impacts. The results of our assessments thus far suggest that:

- In a business-as-usual scenario where carbon prices do not increase markedly from their current levels, there could be a potential annualized negative impact to the Fund's market value by up to 13% in the next 30 years. The impact is largely driven by physical climate risks such as chronic changes in precipitation, ecosystems and sea level as well as the rise in the frequency and severity of extreme weather events.
- Should policy actions be more heavily concentrated in years after 2030 by adopting stricter mitigation efforts in order to limit warming to no more than 2°C, there could be potential annualized negative impact to the Fund's market value by up to 11% in the next 10 years. The impact is largely driven by transition climate risks particularly due to the rapid and disruptive sectoral adjustment associated with the sharp fall in GDP and the knock-on consequences for demand and spending.

Targets and Metrics

In February 2022, we committed our portfolio and operations to net-zero GHG emissions by 2050. As part of our commitment to net zero in our portfolio and operations, we are taking the following actions:

- We continue to invest and exert our influence on the transition as active investors, rather than through blanket divestment.
- We committed to expanding our \$67 billion investments in green and transition assets to reach at least \$130 billion by 2030.0F See below for our definition of green and transition assets.
- We are building on our new <u>decarbonization investment</u> <u>approach</u> that seeks attractive returns from enabling emissions reduction and business transformation in select high-emitting sectors.
- We committed to achieving carbon neutrality for our internal operations by the end of fiscal 2023 across Scope
 1 and 2 GHG emissions and business travel.

We are also committed to our long-standing practice of openness and transparency, including consistent and regular information-sharing with our stakeholders. We will seek to enhance the scope of our disclosure related to ESG, including climate change, as relevant data and metrics become available and our thinking evolves. We will continue to monitor advancements in this area and consider adopting new metrics and/or methodologies as applicable.

Green and Transition Assets

As part of our net-zero commitment, we will expand our investments in green and transition assets from \$67 billion as of December 31, 2021, to at least \$130 billion by 2030. During fiscal 2022, we set out to develop a methodology to estimate our existing green and transition assets. We arrived at our definition of green and transition assets by considering different frameworks and taxonomies, including the EU Taxonomy. We consider an asset to be green when at least 95% of its revenue can be classified as being derived from green activities, as classified by the International Capital Markets Association. We consider an asset to be in transition if it has announced its commitment to net zero with a credible target and plan and is making meaningful contributions to global emissions reductions.

Carbon footprint metrics

CPP Investments' internally developed carbon footprint tool provides insights on greenhouse gas (GHG) emissions associated with all of the Fund's holdings, as well as relevant benchmarks. During the previous years, we disclosed four different portfolio carbon metrics including Total Carbon Emission, Carbon Footprint, Carbon Intensity and Weighted Average Carbon Intensity (WACI). We estimate these by both the Equity Ownership method and Long-term Capital Ownership method. While we will continue to measure all these metrics, going forward we plan to report our Total Carbon Emission and Carbon Footprint using the Long-term Capital Ownership method that can be further referenced in our annual Report on Sustainable Investing. We believe these two metrics are the best available to measure the progress against our net-zero commitment, and the Long-term Capital Ownership method is the best practice to disclose emissions for a multi-asset fund. Total Carbon Emission measures the absolute GHG emissions associated with our investments. This figure will continue to rise in the nearer term as our assets under management grow, before the impacts of emission reductions start to be seen more fully. Carbon Footprint measures the carbon emissions per million dollars of our investments. This figure helps to compare the emissions intensity across portfolios of different sizes.

It is important to note that these carbon metrics are not only impacted by the carbon emissions reported by the companies in our portfolio. They are also sensitive to financial metrics such as market value. To date, about 41% of the Fund's total emissions are directly reported by portfolio companies with the rest estimated by external data providers or by proxies based on available comparators. As corporate climate-related disclosure continues to improve, we expect the percentage of directly reported emissions will increase. We also expect that emissions measurement methodologies will become more standardized. Those improvements may impact the comparability of our portfolio carbon footprint for different periods. Fluctuations in financial metrics like market value can also significantly impact actual changes in carbon footprints in any given year.

This is further complicated if we identify short-term opportunities to invest in a high-emitting industry, with the aim of supporting their transition and generating superior returns for beneficiaries. In that case, the Fund's carbon metrics may fluctuate in the short term but improve over the long term.

Our metrics include Scope 1 and 2 greenhouse gas (GHG) emissions for non-government holdings, and country-wide emissions for government-issued securities. We currently do not include Scope 3 GHG emissions in our calculations as the quality and coverage of data for Scope 3 emissions is not yet sufficient. Scope 3 emissions are all indirect upstream and downstream emissions not included in Scope 2 that occur in the value chain of the reporting company. (More information about Scope 1, 2 and 3 emissions can be found in our Report on Sustainable Investing.) We continue to monitor developments in the availability of complete and robust Scope 3 data to assess the viability of disclosing material Scope 3 emissions, in particular for sectors with higher emissions in their value chains.

During fiscal year 2022, the Fund's Total Carbon Emission and Carbon Footprint for non-government holdings decreased by 0.7 million tonnes CO₂e and 6 tonnes CO₂e per \$1 million invested, respectively. Across a portfolio of our size, there are many factors impacting the changes in Total Carbon Emission and Carbon Footprint, and some of the changes can be reversed in the future. Last year's reduction in Total Carbon Emission can be attributed to changes in the portfolio and the impact of COVID-19 on our portfolio companies' activity levels. The reduction in Carbon Footprint has been further impacted by rising commodity prices, increasing sales relative to activity levels and some early signs of improved energy efficiency. We caution that these measures could increase as parts of the global economy recover from COVID-19 and a reversal in recent commodity price strength.

TABLE - CARBON FOOTPRINT METRICS

Portfolio Carbon Footprint	Current value of holdings (C\$ billion)	Total carbon emission (million tonnes of CO ₂ e)		Carbon footprint (tonnes of CO ₂ e/\$ million)	
		MARCH 2022	MARCH 2021	MARCH 2022	MARCH 2021
Non-Government holdings	455	21.1	21.8	46	52
Government-issued securities	84	41.6	50.9	494	627

Operational Emissions

In February 2022, CPP Investments committed to achieve net zero for the GHG emissions from its internal operations. As part of this commitment, during fiscal 2022, we took the initial step of measuring our operational emissions for the period between fiscal 2019 to the end of fiscal 2022 for Scopes 1, 2 and 3 (business travel only). We selected this time frame to understand the impact of the pandemic on our operational emissions footprint and make informed decisions for our plan to achieve our net-zero emissions target.

We expect CPP Investments' operations to be carbon neutral by the end of fiscal 2023. This will be achieved initially through emissions reduction efforts and the purchase of carbon credits to offset emissions. During fiscal 2023, we will explore emissions reduction efforts as we return to our offices and resume travel to reduce our need to acquire offsets over time and achieve net-zero operational emissions by 2050.

TABLE - OPERATIONAL EMISSIONS

Total operational GHG emissions breakdown by scope

	F2022	F2021	F2020	F2019		
Emissions source	Total GHG emissions (tonnes of CO ₂ e)					
Scope 1	1,282	1,037	1,129	982		
Scope 2 (location-based)	1,033	1,069	1,149	1,153		
Scope 3 (business travel only)	1,893	181	18,565	18,563		
Total GHG emissions	4,208	2,287	20,843	20,698		

For more on CPP Investments' approach to climate change, please see our Report on Sustainable Investing: cppinvestments.com/sustainable-investing