



 2023 Report on
Sustainable Investing

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Our approach to sustainable investing

At CPP Investments, sustainable investing means anticipating and managing sustainability-related material business risks and opportunities, including climate change. We believe that these factors are dynamic and emerging, and we consider them through the investment life cycle when they are material to the investment.

Our approach to sustainable investing is an important component of our investment strategy, designed to fulfil our mandate of maximizing returns without undue risk of loss, taking into account the factors that may affect the funding of the Canada Pension Plan and its ability to meet its financial obligations. Through this approach we aim to make better informed investment decisions and create long-term value in the best interests of the Canada Pension Plan Fund's more than 21 million contributors and beneficiaries.

In this report, we provide an update on the sustainability-related activities we undertook from July 1, 2022, through June 30, 2023. The data used herein are for fiscal year ended March 31, 2023, with the exception of proxy voting statistics, which are for the year ended June 30, 2023.

Messages from Leadership



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President's message: Maximizing returns and effectively managing risk



John Graham, President & Chief Executive Officer

To maximize returns and effectively manage risk, CPP Investments actively monitors and acts on the sustainability issues – from corporate governance to climate-readiness – that affect our investments and operations.

At CPP Investments, we are driven by our purpose: to help create retirement security for generations of Canadians. Let me explain why we believe that purpose requires us to make sustainability an important factor in our decision-making and how we are working to achieve this.

In this year's report, we are pleased to share an overview of how investing sustainably drives value for the Canada Pension Plan (CPP) Fund. It does not matter whether you call it sustainable investing or ESG (environmental, social and governance). To us, considering sustainability contributes to delivering superior long-term returns.

Looking out at the investment landscape

Successful investing is challenging. It requires skillful risk management and a scalable approach to uncovering opportunities. There are more factors to consider when deploying capital than there were just a decade ago. Among those factors is sustainability. After all, a company's ability to navigate the transition to net zero can have an enormous impact on its future value. We carefully consider business-related sustainability factors at every stage of the investment process.

Since our first Report on Sustainable Investing was published 16 years ago, the market has evolved how it prices sustainability risks and opportunities. Investors are pricing the physical impacts of climate change more deliberately as risks intensify, data quality improves and sectors and geographies are impacted in different ways.

“

Successful investing is challenging. It requires skillful risk management and a scalable approach to uncovering opportunities. There are more factors to consider when deploying capital than there were just a decade ago. Among those factors is sustainability.”

John Graham
President & CEO

We recognize that companies face a long and growing list of considerations. That is why director training and appraising board effectiveness are important parts of our approach to asset management. Through first-hand experience I know that a board with robust corporate governance can help take a company from good to great, by providing effective oversight of material business risks and opportunities, including sustainability.

Looking in at our organization

Careful oversight extends to our own organization and portfolio. We are constantly improving how we assess and manage sustainability. Our Chief Sustainability Officer is working closely with our Senior Management Team, including our Chief Investment Officer, Chief Risk Officer and Chief Operating Officer, to pursue our net-zero commitment while maximizing returns and minimizing risk.

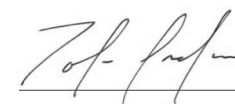
Active ownership is still the lynchpin of our approach to sustainable investing. We partner with portfolio companies as they embark on their own decarbonization pathways – financing climate solutions and supporting hard-to-abate industries as they transition to net zero. We also communicate our expectations with investee companies and use our shareholder voting rights and investment decisions to ensure alignment between our expectations and the company's actions.

For the fiscal year ended March 31, 2023, our investment in green and transition assets rose to \$79 billion, moving toward our goal to invest at least \$130 billion by 2030. Our investments in Redwood Materials (building a circular supply chain for batteries) and Octopus Energy (using technology to make energy fair, clean and simple) are reflections of the investable opportunities that come from the transition to a low-carbon economy. We expect this to be a hugely capital-intensive process, with tremendous opportunities for patient capital like ours.

To keep momentum behind global ambitions to manage sustainability, while preserving value, corporations need to improve their data disclosure. In our view, they should supply financially relevant, comparable and decision-useful information on relevant sustainability issues. To streamline and prioritize reporting, we, [along with our Canadian pension peers](#), encourage the companies we invest in and those seeking our capital to embrace the [inaugural International Sustainability Standards Board \(ISSB\) standards](#). Improving data and disclosure is a work in progress, and we continue to raise the bar for ourselves and investors globally.

When you read this report, you will understand why our approach leads to better informed investment decisions and long-term value for the Canada Pension Plan's more than 21 million contributors and beneficiaries.

Sincerely,



John Graham
President & CEO

Chief Sustainability Officer's message: Navigating the noise



Richard Manley, Chief Sustainability Officer and
Global Leadership Team – Managing Director

The case for sustainability is increasing, pushing investors to lean in.

This letter marks my first year as Chief Sustainability Officer (CSO) at CPP Investments. It is my pleasure to work alongside the talented, dedicated and hard-working team executing the activities described in this report. These actions helped us tap into additional drivers of value creation for the Canada Pension Plan (CPP) Fund in the year ending June 30, 2023. Overall, we believe this past year paved the way for progress, but we know there is more work to do.

At CPP Investments, we believe the value of companies integrating sustainability effectively into their strategy, operations and financial disclosures is increasing. So is our ambition to integrate sustainability into the life cycle of our investment process to drive value creation.

Below are some of my observations on the sustainable investing space over the past year. By sharing how we make sense of a quickly evolving investment landscape, we hope to contextualize how we integrate sustainability factors and, subsequently, our expectations for our portfolio companies.

What we are seeing in sustainable investing

I am pleased to share there has been real progress in advancing the integration of sustainability in investments over the last 12 months. However, war in Ukraine and a shifting geopolitical landscape have undermined the headline impact of these positive events.

Consensus has consolidated around the belief that the financial sector should be empowered to finance the transition to a low-carbon future rather than mobilized to pursue a divestment agenda. The U.S. unveiled its Inflation Reduction Act – a significant approach to de-risking innovation in transition solutions, and Canada closely followed suit with its own measures. The International Sustainability Standards Board (ISSB) launched reporting standards, creating a global baseline for companies to report material sustainability factors, which we welcome and endorse. The U.K.'s Transition Plan Taskforce (which included our participation) published a framework for issuers to develop and report their own transition plans. COP15 in Montreal secured a

global commitment to protect our ecosystems, and we began seeing the first clear signals of climate-related risk translating into asset prices in the real estate sector. These are critical advances in policy, market infrastructure and price discovery in the sustainability space.

Despite many positives, approaches to environmental, social and governance (ESG) integration have elicited fierce scrutiny and polarizing public debate. While that happens, greenhouse gas (GHG) emissions continue to rise. However, the more nuanced debate of how to decarbonize the energy system – acknowledging the need for low-carbon, secure, affordable energy sources – is welcome progress.

An optimal green transition remains possible

Maintaining public and political support for the whole economy transition is key to move beyond ambition and commitments into delivery of the optimal transition to a net-zero economy. The optimal green transition is one that removes the most GHG emissions, from operations, while pursuing opportunities that create value for businesses and stakeholders and avoiding sharp dislocations in specific industries and geographies. Currently, the transition continues to be influenced by the interplay between regulation, technological progress, future customer and corporate behaviour, abatement costs and carbon

prices. We see these variables at play as we pursue our own net-zero commitment at CPP Investments.

Despite the noise and sustained growth in emissions, we remain optimistic about the opportunities ahead for patient capital with advances in policy and market infrastructure.

Trends to watch

The increasing affordability of transition solutions and the signal companies send by favouring low-carbon energy-efficient buildings provide a clear price signal to owners and developers. This momentum in the real estate sector, which is responsible for roughly 30% of annual global CO₂ emissions is sure to have knock-on effects across industries. We expect this trend to continue. Looking ahead, products across asset classes that constitute climate solutions are likely to merit a green premium, relative to carbon-intensive or grey alternatives.

The emergence of a green pricing premium is significant for two reasons. First, it tells companies that there is a volume and price benefit for decarbonizing. Second, a premium for green alternatives today is likely to translate into a grey-discount over time – a signal that should act as a warning bell for investors not yet integrating sustainability factors into their investment life cycle. For companies unable or unwilling to decarbonize relative to their peers, we foresee the emergence of a grey discount to a greening benchmark.

Highlights from this year's report

At CPP Investments, we consider sustainability factors to be dynamic and emerging risks and opportunities. The emergence of ChatGPT is a prime example. The responsible deployment of generative artificial intelligence (AI) offers profound opportunities to drive innovation, solve challenges and improve productivity, but the potential for irresponsible deployment also introduces novel risks for businesses using this technology without appropriate oversight. That is why we added AI oversight to our expectations of company directors to make clear that change remains a constant in this emerging space.

Notable highlights from this year's report include updates to our Policy on Sustainable Investing, which includes an expanded definition of what we consider to be business-relevant sustainability factors. Our updated Proxy Voting Principles and Guidelines (PVPGs) also now include the consideration of nature and its potential impact on a company's long-term performance.

And we are also sharing a progress report on our commitment to net zero. This is where we share details on how we are maintaining carbon neutrality, in our own operations, and our increasing investment in green and transition assets. We also explain how we are using our [Decarbonization Investment Approach](#) to surface embedded value for the CPP Fund.

Please read this year's report knowing that professionals across CPP Investments collaborate daily to make the activities reported here a reality. It is their dedication and relentless pursuit of excellence that helps us deliver value in the best interests of the CPP's more than 21 million contributors and beneficiaries.

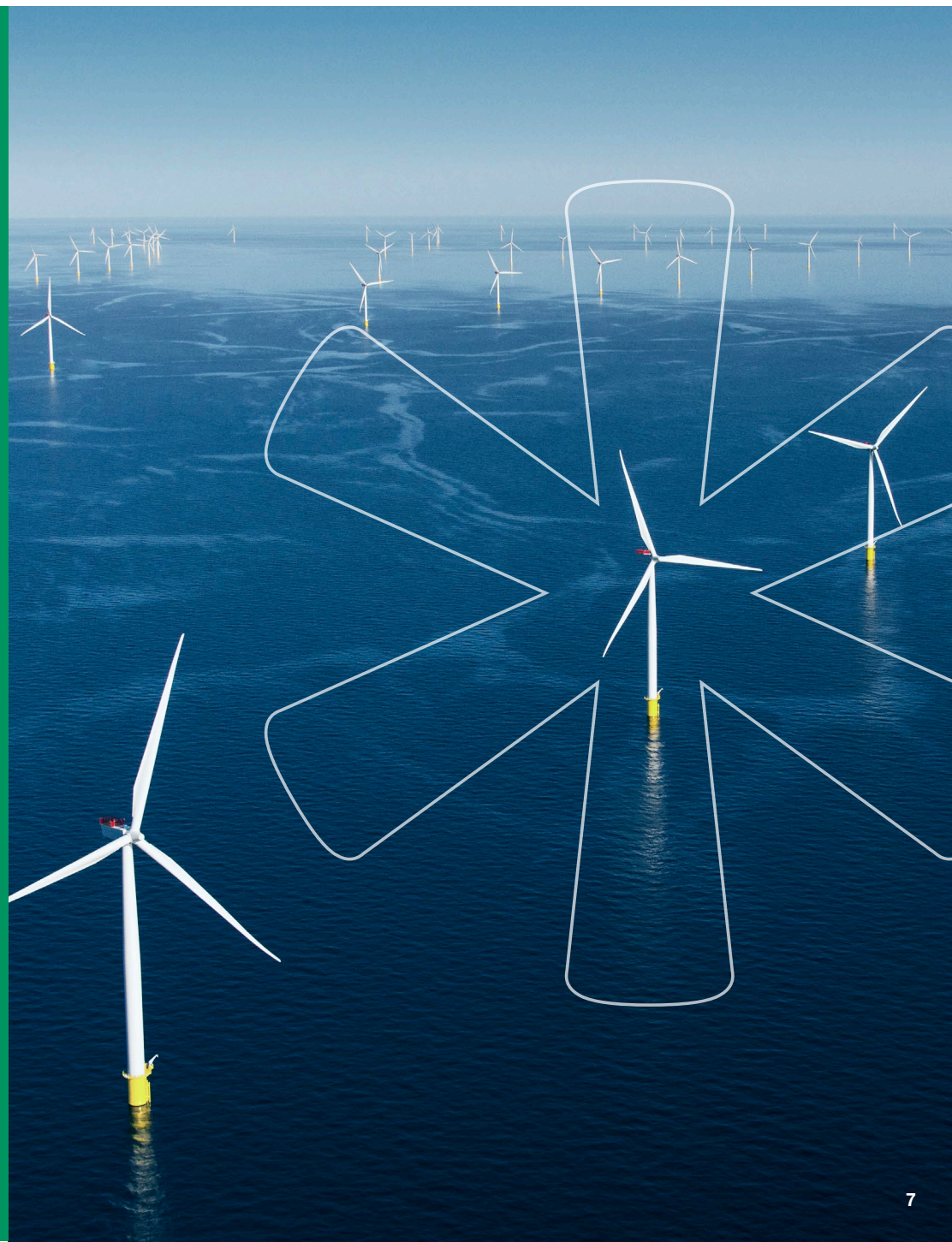
Sincerely,



Richard Manley
Chief Sustainability Officer and
Global Leadership Team – Managing Director

Sustainable Investing for Long-Term Value

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Overview

At CPP Investments, we believe that maximizing the long-term value of a business is no longer about strategic, operational and financial excellence alone. It is also about managing material sustainability-related risks and opportunities effectively. We believe that proactively addressing and investing in these factors can result in added long-term value creation and preservation for a company.

We consider sustainability-related factors in our investment decisions where they are material to the investment. This report outlines our approach and the policies that guide us as we integrate sustainability into our investment decisions and seek to create and preserve long-term value.

In March 2023, we updated our Policy on Sustainable Investing to introduce our definition of sustainability-related factors as those including, but not limited to, effective board governance, climate change, environment, human rights, equity, diversity and inclusion, health and safety, community engagement, responsible sourcing, responsible usage of artificial intelligence, data and cyber security, and other dynamic and emerging factors where they are material to the long-term success of companies. **We review our Policy on Sustainable Investing annually and, when appropriate, we update the sustainability-related factors we monitor.**

Beliefs, Policies and Principles

How we approach sustainability-related factors within the context of our legislative objectives is informed by the following policies and principles:

- [Investment Beliefs](#), which serve as a foundation for our long-term investment goals while ensuring that we make consistent investment decisions and mitigate risk;
- [Policy on Sustainable Investing](#), which includes our climate change principles and sustainable investing principles;
- [Proxy Voting Principles and Guidelines](#); and
- [Risk Policy](#), which outlines our Integrated Risk Framework (see pages 23–26 of our 2023 Annual Report) and risk appetite.



Maximization of long-term business value

Strategic excellence



Operational excellence



Financial excellence



Effective management of material sustainability-related risks and opportunities

In 2023, we strengthened our governance to manage various climate change and sustainability-related matters. This included enhancing Chief Sustainability Officer (CSO) accountabilities and making the Sustainable Investing Committee (SIC) a senior management sub-committee of our Investment Strategy and Risk Committee (ISRC).

► For more details, see [pages 38–39](#).

Sustainability-related considerations are incorporated into employee objectives and compensation structures across the Fund. We expect every department across CPP Investments to play a role in delivering

our sustainability objectives, taking into consideration their capacity to effect outcomes.

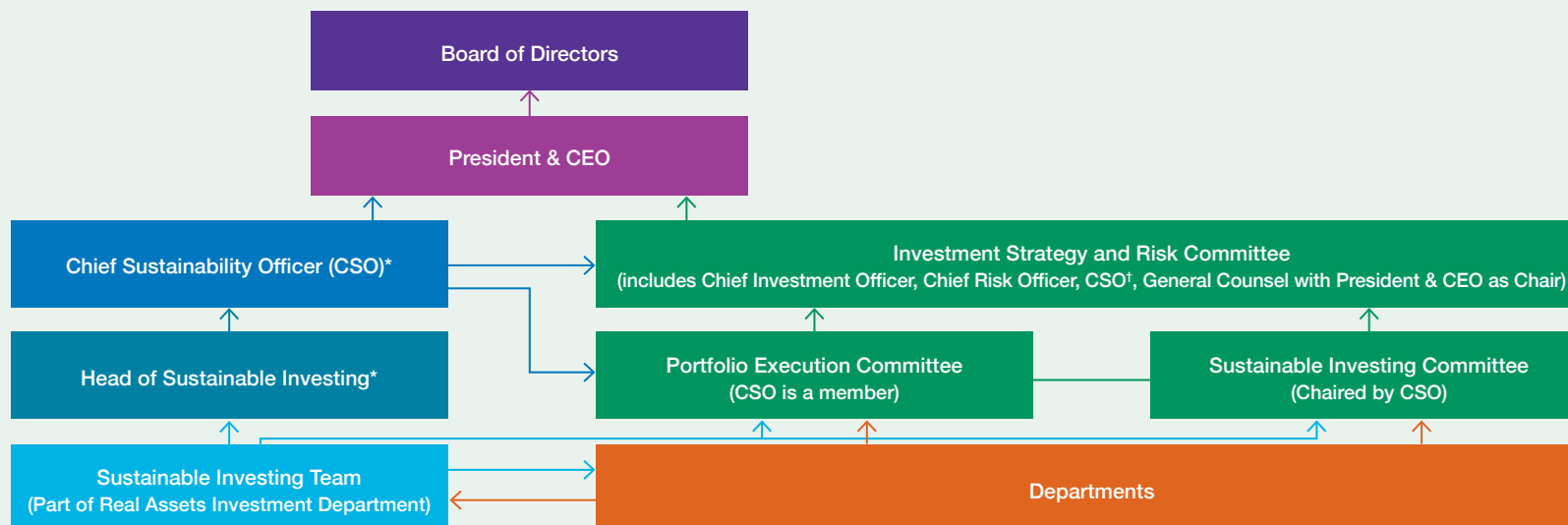
As of June 30, 2023, our dedicated Sustainable Investing (SI) group included over 25 professionals in Toronto and London with diverse experience and sustainability-related expertise. Senior members of the group are members of select investment committees. Additionally, the SI group regularly participates in investment committee discussions when sustainability-related factors are material to the investments being considered. The group is a trusted partner to our investment and asset management teams throughout the investment

process, committed to driving long-term returns through the integration of sustainability-related factors into the life cycle of our investments. The SI group shares insights with colleagues across the Fund on evolving trends, industry competitiveness and best practices on the most significant sustainability-related areas where we can add value. The group helps colleagues gain fluency in better identifying, understanding and managing sustainability-related factors. Members of the group also contribute to enhancing global sustainability-related disclosures through their participation in industry groups and standard-setting initiatives.

The chart below reflects our sustainable investing governance structure as at June 30, 2023. As part of our continued efforts to integrate sustainability into the entire investment life cycle, in early October 2023, we made changes to our organizational structure. Our sustainable investing professionals are now embedded directly into our public and private investing teams.

The Office of the Chief Sustainability Officer is focused on maximizing sustainability as an important pillar of value creation and helping steer the organization along its path to net zero.

Our Sustainable Investing Governance Structure as at June 30, 2023



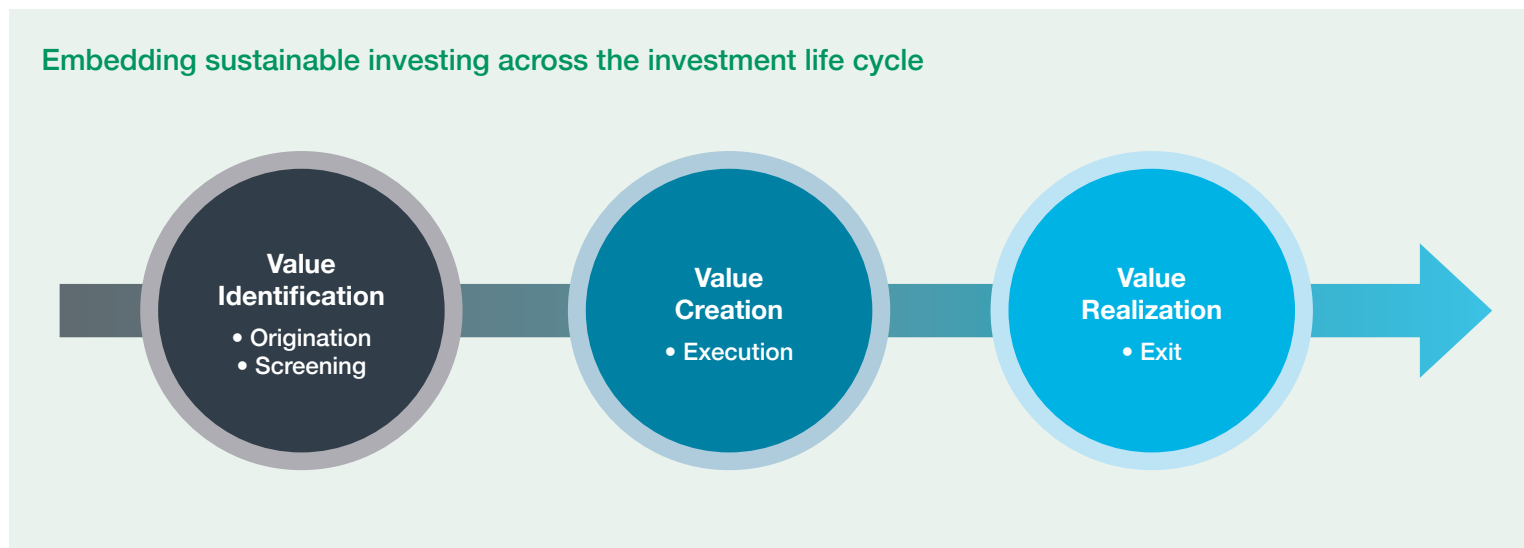
Our sustainability investing activities are guided by our Board-approved:

- Policy on Sustainable Investing:
 - Climate Change Principles
 - Sustainable Investing Principles
- Proxy Voting Principles and Guidelines
- Risk Policy

* CSO and Head of Sustainable Investing report to the Head of Real Assets.
† CSO joins the ISRC for all sustainability-related matters of discussion.

Sustainable investing across the investment life cycle

CPP Investments' approach to sustainable investing contributes to our ability to compete as a world-class global investment management organization, create value and deliver on our mandate.



Sustainability-related risks and opportunities can impact our investments, or assets, differently. We apply a tailored approach to assess and manage these factors in our investments. The approach we use is based on the investment strategy, asset class and/or nature of each individual investment as well as the materiality of sustainability-related factors on the investment and our ability to influence outcomes.

While we may choose not to invest in particular companies, on a case-by-case basis reflecting their fundamental investment case, we will not engage in blanket divestment that excludes investment in entire sectors of the economy. Blanket divestment risks missing out on potential returns as these sectors transition in response to regulation, economic incentives and shareholder engagement.

We continue to enhance our existing sustainability-related tools focused on value identification and value creation through to value realization. These tools include, but are not limited to:

- Proprietary industry-specific materiality framework;
- Funds and secondaries manager due diligence process;
- Research reports;
- Custom engagement heatmap;
- Onboarding and monitoring practices;
- Climate Change Security Selection Framework;
- [Abatement Capacity Assessment Framework](#); and
- [Decarbonization Investment Approach](#).

Proprietary net-zero scenario considerations incorporated in our investment selection processes

Our proprietary net-zero scenario includes views on the whole economy's transition path to net zero. This scenario is our most up-to-date assessment of how technological innovation, policy changes and evolving consumer behaviour will shape the global economy's transition to net zero.

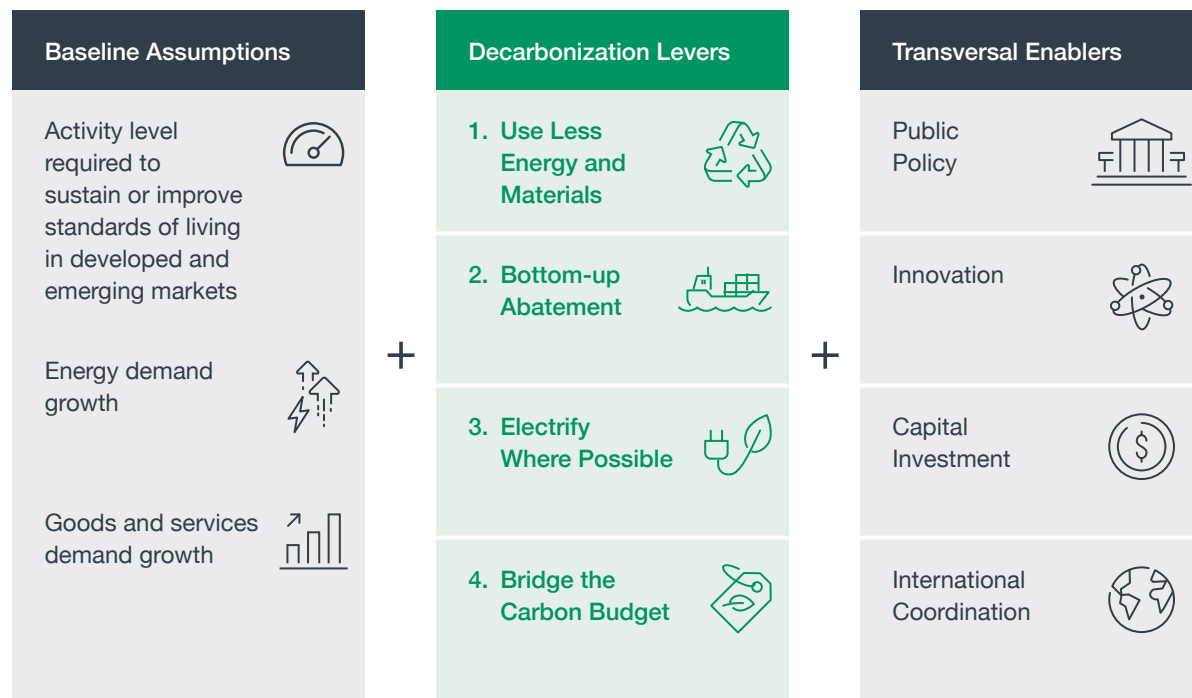
We use our net-zero scenario to assess our investment portfolio's exposure to changes in the global economy should the pace of the transition to net zero change. We also use the scenario as part of our due diligence and asset management reviews of specific investments for which climate-related impacts are deemed material. We periodically revisit this scenario as pathways to net zero evolve and emerge over time.

The net-zero scenario supplements our Climate Change Security Selection Framework.

► For more details on the Framework, which is a key tool we use to assess climate-related factors in our investment decisions, please refer to [page 39](#).

Framework for our proprietary net-zero scenario:

Below is the framework we use to develop our proprietary net-zero scenario which is rooted in our beliefs and informed by firm-wide expertise to support our net-zero commitment.



Created a new framework to assess physical and transition impacts in real estate

We completed a climate-related physical risk screen on 100% of our private real estate holdings and identified the most exposed assets for further engagement. Real estate is a high carbon-emitting sector, with exposure to the impacts of climate change. With \$52 billion invested in real estate as of March 31, 2023, we improved our approach to assessing and addressing climate-related risks and opportunities in this sector. Since real estate assets are generally difficult or impossible to move, the direct and indirect impact of physical risk on such assets is particularly pertinent. We drew on the combined expertise of our real estate and climate experts, and insights gleaned from our portfolio companies and partners, to develop a framework to assess physical and transition risk using observed market changes and emerging trends. We first quantified the baseline risks and opportunities in our portfolio, and now integrate consideration of such impacts into future investment decisions to ensure we are being appropriately compensated for any incurred risk.

By integrating the assessment of physical and transition impacts into our due diligence and asset management, our investment teams and portfolio companies can more effectively monitor and manage the key climate-related exposures to preserve value and capture opportunities.

- **Physical risk:** We use data-driven geo-specific analysis to assess the impact of acute and chronic climate variables on an expected average annual cost of damage basis, identifying assets with the highest unmitigated exposures.
- **Transition risk:** We account for how existing and expected regulation across markets might directly and/or indirectly impact building codes and shifting tenant preferences. When appropriate, we use our [Abatement Capacity Assessment Framework](#) to help determine the cost of decarbonization for individual properties and use this to develop decarbonization plans for the assets.

Responsible sourcing

We invest in a wide range of companies, including ones with vast and complex supply chains that require strong responsible sourcing programs to manage supply chain risks to mitigate human rights abuses and environmental destruction. Failure to prevent and mitigate these issues could lead to financial, operational and reputation damage as well as legal consequences. In recent years, governments around the world have sought to increase supply chain due diligence legislation.

At CPP Investments, we strive to invest in companies that actively seek to improve their responsible sourcing programs. Where material, we seek to identify whether portfolio companies and their direct suppliers have higher risk of potential exposure to human rights or environmental issues in their supply chain. We conduct further diligence and engage with them to address gaps and identify mitigation strategies as required. We consider the following elements to promote responsible sourcing: internal governance/oversight mechanisms and strategies, supplier monitoring and engagement programs, and supply chain mapping and traceability.

100%

private real estate
holdings screened
for climate-related
physical risk



Sustainability benchmarking of external managers

As a limited partner and co-investor, we require our private equity General Partners (GPs) and managers covered by our External Portfolio Management team to complete our sustainability-related due diligence questionnaire at the beginning of a relationship with CPP Investments. This allows us to determine how our partners integrate these considerations into their investment activities.

We surveyed managers covered by our External Portfolio Management team about their equity, diversity and inclusion (EDI) practices and received

a 90%+ response rate. We found that, while the majority of these managers collect EDI data, few evaluate diversity well within their leadership ranks. This past year, we increasingly heard firms state their commitment to remove potential biases in their hiring, promotion and compensation practices, and recognition that diversity fosters creativity and promotes innovation. However, most are still in the early stages of considering formal goals or targets.

We monitor and benchmark the sustainability-related performance of our private equity GPs on an annual basis. As part of the GP assessment process, we leverage relevant insights and data from the ESG Data Convergence Initiative (EDCI),

which is co-chaired by one of our senior sustainability professionals. EDCI works to standardize environmental, social and governance metrics in private markets and helps enhance quality, availability and comparability of that data in those markets. Doing so helps us determine best practices and areas of risks based on the respective priorities of our GPs. These insights also uncover areas of opportunity, where we can engage with GPs and help facilitate improvement in their sustainability practices. Key engagement topic areas include enhanced disclosure and practices related to climate change, EDI and cyber security management.

90%+

response rate when we surveyed our external managers about their equity, diversity and inclusion practices



New strategic partnership to advance our ongoing climate change efforts

In May 2023, CPP Investments commenced a strategic partnership with Lombard Odier Investment Managers (“LOIM”) to help advance our climate change and energy transition efforts. LOIM currently manages over US\$70 billion in assets and is the asset management arm of Lombard Odier Group, an independent Swiss banking firm established in 1796.

Sustainability is central to LOIM’s investment philosophy and organizational design. LOIM’s sustainability experts envisage a future economy that is circular, lean, inclusive and clean (the CLIC® economy). As such, LOIM has applied its CLIC® approach to a dedicated range of funds aimed at capitalizing on the opportunity set created as the world transitions to a CLIC® economy.

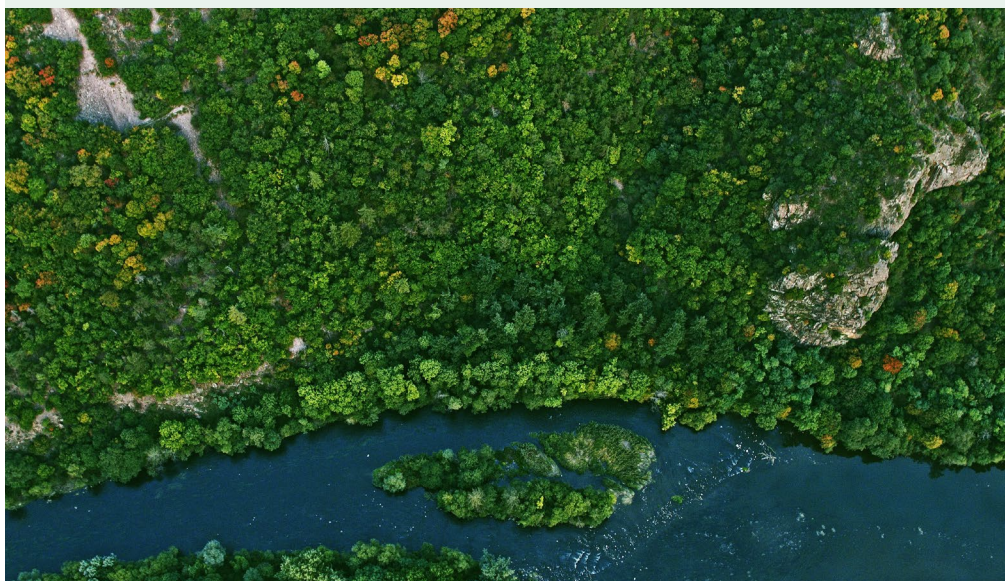
This partnership provides CPP Investments with access to LOIM’s thought leadership, tools, network and product suite to complement and enhance our internal capabilities. It also offers an opportunity for the two organizations to work closely together in service of enhancing our approach to assessing and managing climate change risks and opportunities.

LOMBARD ODIER
INVESTMENT MANAGERS



Proxy Voting Principles and Guidelines updated to include consideration of nature impacts

In 2023, we updated our Proxy Voting Principles and Guidelines to include the consideration of nature-related dependencies and the potential impacts on companies' long-term performance. We believe there is a difference between the expectations placed on boards with regards to climate and nature. Although the two intersect, we see the difference as significant enough to warrant a specific reference to nature in the list of factors we call out as examples for boards to anticipate, manage and integrate into their strategy to create and preserve value over the long term. There is an emerging need to understand the business' dependency on natural systems through specific commodities or operating locations, to seek to determine whether that dependency is material and sustainable for the company or not, and understand any economic implications. Where the dependency is found to be material and unsustainable, boards should consider how to adjust their operations to create a more sustainable dependency or work with their supply chain to do the same. We are a member of the Taskforce on Nature-related Financial Disclosures' Forum to inform our approach on this issue.



Exclusions and exits

As a long-term investor, we prefer to actively engage with and attempt to influence companies when we disagree with a position taken by management or a board of directors of our active holdings. We have the ability to be a patient provider of capital and to work with companies to bring about change. However, we may conclude not to pursue or maintain investments in companies for reasons including the following:

- we conclude that management's strategy or lack of engagement with sustainability-related issues undermine the long-term competitiveness of the business;
- where brand and reputation considerations from sustainability-related factors may generate risk impacts beyond expected risk-adjusted returns; and
- legal considerations.

These criteria are not applied to our exposure to companies through broad-based indices. Such exposures are indirect, resulting from CPP Investments' use of market traded index future contracts. No actual securities are held by the organization in these companies. Further, composition of these indexes is beyond the control of CPP Investments.

We do not invest in companies affected by the following legislation:

- anti-personnel landmines: we will not invest in companies not in compliance with Canada's *Anti-Personnel Mines Convention Implementation Act*, or that would not comply if they operated in Canada.
- cluster munitions: we will not invest in companies not in compliance with Canada's *Prohibiting Cluster Munitions Act*, or that would not comply if they operated in Canada.

Active ownership and engagement

We are active, principled and thoughtful owners managing our investments in the best interests of the Canada Pension Plan's contributors and beneficiaries.

Our active ownership involves engagement with our portfolio companies where we believe it will create better long-term outcomes on sustainability-related matters and, in turn, generate more value for CPP Investments. We engage with our portfolio companies through our board representation and shareholder voting rights.

We recognize and respect the discrete roles, responsibilities and rights accruing to shareholders, boards and management teams. We believe each play a role in helping ensure long-term value creation.

The roles and responsibilities of shareholders, boards and management teams of companies

The shareholders, boards and management teams of companies each play critical roles in creating sustained long-term value. Their relationships hinge on clear communication and understanding of their respective roles, responsibilities and rights. We view their responsibilities as follows:



Shareholders:

- own the company
- elect directors to be stewards of the company

Boards:

- are responsible for overall governance of the company, including approving company's strategy, monitoring its implementation and providing oversight and counsel to management
- are accountable to owners



Management teams:

- are responsible for developing and implementing the company's strategy and for running day-to-day operations
- are accountable to the board



Being aware of, and understanding, the views of relevant stakeholders can help boards and management teams be more effective in discharging their duties.

What we expect from portfolio companies



Effective boards. We believe that, to deliver the best outcomes for the company, a board should be majority independent.¹ While a majority-independent board helps ensure effective board oversight in most circumstances, we recognize that equity-controlled companies may warrant a different independence standard. In our view, it is reasonable for a controlling shareholder to have representation on the board of directors proportionate to its economic equity interest.

Boards should have sufficient diversity to be able to challenge, counsel and support management in developing and executing a strategy that incorporates a thorough review of all material business risks and opportunities. Diversity should be considered in all its forms, including but not limited to gender, ethnicity, race, age, sexual orientation and disability. We strongly encourage boards to disclose the diverse attributes of their directors where appropriate, and where directors have granted permission to do so, to allow shareholders to fully and accurately evaluate board diversity holistically.



Disclosure of material sustainability-related risks and opportunities, including climate-change impacts. We look for companies to report on the potential impact of those factors, including climate change, that are relevant to their industries and investment decision-making. For private companies, this pertains to reporting to their shareholders and boards of directors. We support alignment of reporting to the International Sustainability Standards Board's (ISSB's) IFRS S1, using SASB Standards to implement industry-specific requirements.

Wherever climate change-related factors are material to the company, we expect portfolio companies to have a credible transition plan to navigate through the challenges and opportunities presented by climate change. We expect companies to disclose an appropriate governance structure for monitoring climate risks and opportunities. We support companies aligning their climate change reporting with the ISSB's IFRS S2 climate-related disclosure standards, which are based on the Task Force on Climate-related Financial Disclosures (TCFD).²

► See pages 38–42 for our reporting in accordance with the TCFD.



Integration of sustainability-related factors to inform strategy and enhance returns or reduce risk in the business.

Rather than solely relying on ESG ratings that may not capture the nuance of integration, we expect companies that are proactively integrating these factors into their businesses to be able to articulate how they do so and how it affects outcomes.



A culture that proactively identifies dynamic and emerging material business risks and opportunities, and seeks solutions to reduce or capture their potential. Culture is often the differentiator between good and great companies. We welcome dialogue with companies to understand how their culture helps drive sustainable value creation.



Alignment of incentives. Executives should receive market-competitive total compensation and incentives that are tied to individual and company performance, and that incentivize them to focus on serving the long-term interests of the company, which includes **considering material sustainability-related factors where appropriate and under their control.**

Additionally, we expect our public portfolio companies to:



Adherence to our Proxy Voting Principles and Guidelines. We are willing to support companies if they provide compelling explanations for why specific proposals diverge from these principles and guidelines. Companies that fail to create a high-performing culture for governance and leadership will typically struggle to realize their full potential.

► See pages 18–23 for an overview of our proxy voting activities for the year ended June 30, 2023.

1. A director is typically considered independent if they have no direct or indirect material relationship with the company, or the company's senior management or controlling shareholder(s). We defer to a company's classification of individual director independence, which we expect reflects local listing rules and other applicable laws and regulations.

2. On July 6, 2023, the Financial Stability Board (FSB) announced that it will wind down the TCFD following the delivery of the TCFD's annual status report in September 2023. The launch of the ISSB sustainability disclosure standards which are based on the recommendations of the FSB's TCFD can be considered the culmination of the work of the TCFD.

Best practices among toll road companies in our portfolio

With investments in over 60 roads in seven countries making up 19% of our Real Assets portfolio, CPP Investments is one of the largest financial investors in toll roads in the world. In November 2022, as part of our second Global Toll Road Offsite, our Infrastructure investment team gathered senior executives from across our global toll road portfolio companies to address joint challenges and opportunities, and to share insights and best practices. The event included site visits to motorway control centers, an operating tunnel asset and to a greenfield tunnel nearing completion of construction, as well as roundtables and discussions on themes such as:

- **Sustainability:** sustainability principles as part of toll road operator culture and strategy. Participants expressed the need to re-benchmark the frequency/likelihood of material weather events caused by climate change (e.g., increased frequency of flooding) and implications for safety, road maintenance and incident response. They also shared experiences of using low carbon construction materials and recycled road base, addressing emissions of road assets by using tunnel ventilation and filtration, and benefits of electronic toll systems to reduce fuel consumption and emissions (e.g., the time spent in electronic toll plazas was 30 seconds versus three minutes in non-electronic ones).
- **Safety:** the importance of prioritizing safety of road users, employees and contractors, using appropriate lead and lag indicators, and effective communication. Best practices were shared in relation to toolbox briefings conducted in advance of starting work, the use of truck-mounted attenuators as cover vehicles to protect teams working near live traffic, and the impact of simply displaying “Reduce Speed” on variable message signs to materially reduce speeding.
- **Technology and data:** benefits of using data collection and analysis to improve the safety of our assets as well as the user experience. One example discussed was the ability to use car data to identify sections of roads where drivers repeatedly brake heavily, and to diagnose and respond to causes of that behaviour.



Sustainability-related engagement in preparation for future public listing

CPP Investments invested in the Flipkart Group (Flipkart) in 2021. Flipkart, which is the largest online commerce platform in India with more than 150 million active users, has committed to be net zero across its own operations by 2030 and across its value chain by 2040.

Over the past year, we have provided insights to the company as Flipkart seeks to enhance management, disclosure and reporting of their sustainability-related activities ahead of a future public listing. Management is preparing Flipkart’s first sustainability report, which will outline Flipkart’s strategy and goals as well as its commitment to embed sustainability into core business operations.

Flipkart plans to decarbonize emissions across its value chain by utilizing 100% renewable energy across its warehouses, zero-emission mobility across all logistics, and 100% sustainable packaging. Additionally, Flipkart prioritizes consumer education to help shift consumer preferences towards more environmentally conscious purchases, including certified products from low-emissions-based brands. Finally, Flipkart is working with stakeholders across its value chain to ensure responsible sourcing practices and facilitate seller education on sustainability-related responsibilities.



Proxy voting

2023 Proxy Voting Facts

For the year ended June 30, 2023

We conveyed our views at

4,277 meetings

We voted on

43,225 agenda items

We voted in

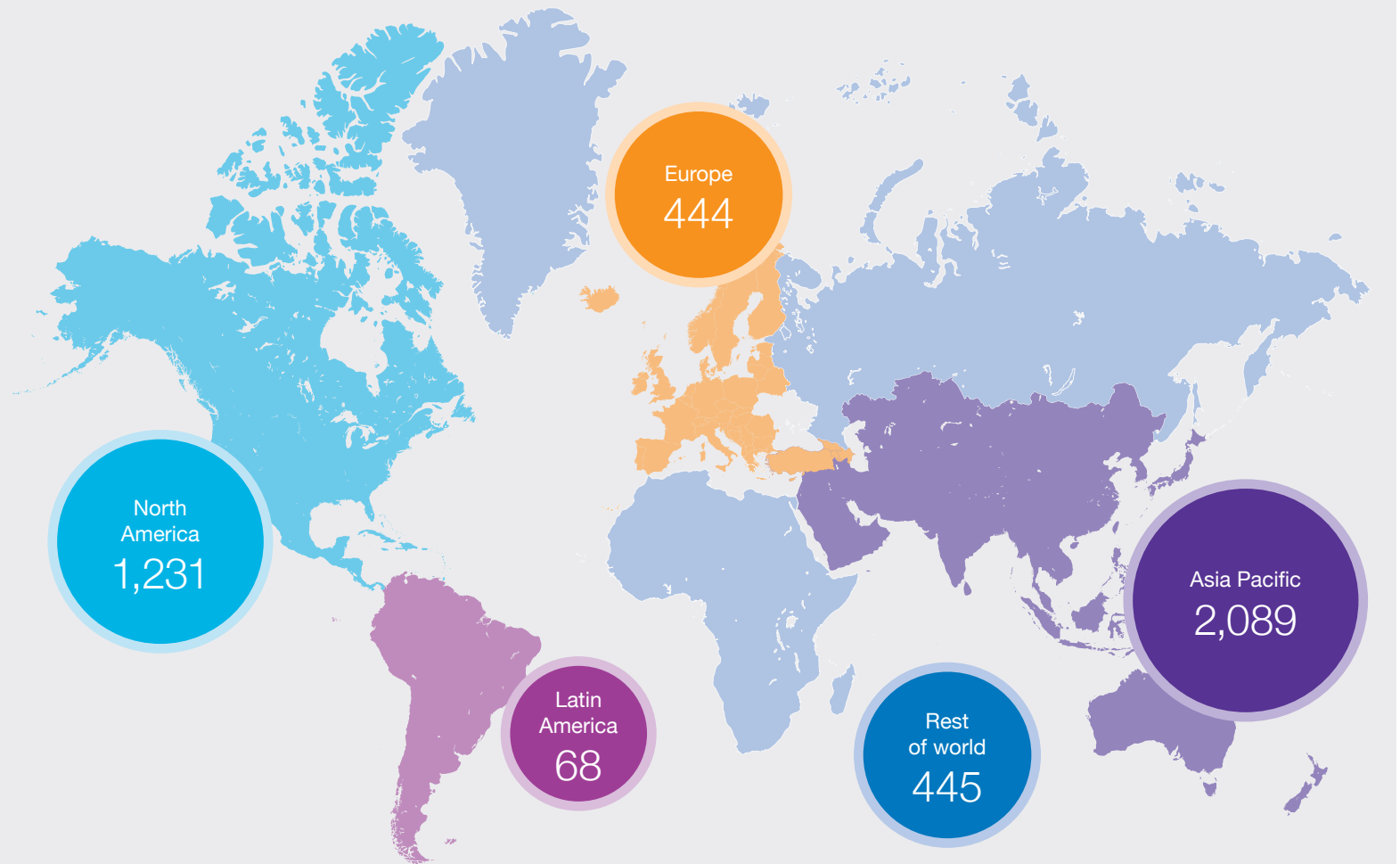
45 countries

We voted against management in

11.73% of cases

As an engaged asset owner, we are transparent in our voting activities and employ the leading practice of sharing our [individual proxy vote decisions](#) in advance of meetings.

Meetings voted in



Below are some of the key themes from the 2023 proxy season and our approach to addressing them.

Shareholder proposals

During the 2023 proxy season, the number of shareholder proposals received in Canada and the U.S. remained relatively high compared to historical trends. We support proposals that are likely to enhance long-term company performance, reduce risk to long-term company performance or improve disclosure reasonably necessary to enable shareholders to assess their investment risk and opportunity. All of our proxy voting decisions are guided by our [Proxy Voting Principles and Guidelines](#).

In the first six months of 2023, over 340 shareholder proposals that focus on environment and social themes, such as climate change, nature, human rights, human capital and water, have appeared at annual shareholder meetings for U.S. companies. This is a significant increase from the approximately 300 proposals that were received in all of 2022. Meanwhile, support from shareholders for such shareholder proposals has decreased over time: in 2021, there was nearly 35% support compared to 26% in 2022, and 19% for the first six months of 2023.



Climate Change

Climate remains a key focus for shareholders with more than 90 climate-related shareholder proposals received at U.S. companies in the first six months of 2023. In the U.S., such proposals have seen a decrease in average support in 2023, down from 35% in 2022 to approximately 23% in the first six months of 2023. In Canada, climate-related shareholder proposals have seen moderate support levels, ranging between 4% and 29% support, and we have observed that the adoption of “say on climate” votes appears to be losing momentum. “Say on climate” proposals are ones that seek to direct corporate strategy, including proposals calling for annual shareholder approval of company climate change strategy. We generally view “say on climate” proposals as inconsistent with the roles and responsibilities of owners, directors and managers. In our role as a shareholder, we respect that companies we invest in determine their own specific climate-related transition strategies.

► For details on our expectations of companies, see [page 16](#).

In the year ended June 30, 2023, CPP Investments supported 26 climate-related shareholder proposals including eight proposals seeking greater disclosure of a company’s climate transition plan when commitments have been made. In the year ended June 30, 2022, we supported 20 climate-related shareholder proposals.



Equity, Diversity and Inclusion

Shareholder proposals related to the effectiveness of equity, diversity and inclusion (EDI) efforts have also been a key area of focus this year. U. S. companies have increasingly received proposals for racial equity or civil rights audit tools to help advance racial justice and civil rights across a company’s policies, practices and products or services.

In the first six months of 2023, requests for racial equity and civil rights audits received lower average support than in previous years, with none receiving majority support during this period. In 2022, eight such proposals received majority support. For the year ended June 30, 2023,

CPP Investments supported 12 shareholder proposals requesting independent third-party reviews of racial equity or civil rights, as well as nine shareholder proposals related to EDI efforts more broadly.



Challenges to Sustainability-related Practices and Initiatives

In recent years, there has been a rise in shareholder proposals which challenge a company’s sustainability practices and initiatives. Such proposals have garnered less than 5% of votes in the first six months of 2023, however, U.S. companies received 40 such proposals during that period, almost double that for all of 2022. While most of these proposals were filed at U.S. companies, Canadian companies were subjected to these requests for the first time, with Canadian banks receiving proposals that called for the removal of net-zero targets or a clear commitment to continue investing in and financing the Canadian oil and gas sector. As with any other shareholder proposals, we review their adherence to our Proxy Voting Principles and Guidelines.



Board Diversity

In recent years, there has been an increase in investor and regulatory expectations regarding board diversity on public company boards. Several proxy advisors have implemented policies to ensure that U.S. company boards are held accountable if they do not have at least one racially or ethnically diverse director, with plans to extend these policies to Canada in the future. Regulatory changes have also been introduced in different geographies that require public companies to meet ambitious targets. For example, in the U.K., currently FTSE 100 companies are expected to have a minimum of 40% female representation on their boards and at least one ethnically-diverse director, or if they do not to comply by explaining why not. This requirement will expand to include FTSE 250 companies in 2024. At CPP Investments, we firmly believe that diverse and inclusive boards and management teams generate superior value, and we remain committed to actively collaborating with companies to enhance the diversity of their boards.

Key voting statistics for 2023 proxy voting season



Climate Change Voting Statistics

In our role as a shareholder, we respect that companies we invest in determine their own specific climate-related transition strategies. However, we expect boards and executives to have integrated climate risks and opportunities — where material — into their strategy, operations and disclosure consistent with long-term value creation for the company. Where a company has clear, intrinsic climate-related risk, we expect the board to have a strategy in place and publicly disclose it. While we do not seek to prescribe what this strategy should look like, we expect the board to ensure it is in place.

In respect of the listed companies within our portfolio, our Proxy Voting Principles and Guidelines set out that a board can only be deemed to be effectively considering the company’s best interests if climate risks and opportunities have been identified, quantified and integrated into strategy, operations and reporting. We introduced our climate change voting policy in March 2021 where, if engagement was unsuccessful, we voted against the reappointment of the chair of the committee responsible for oversight of climate change (or an appropriate equivalent committee). Where these expectations are not met, we will consider escalating this voting practice to the entire committee, the board chair and the entire board where we see inaction in addressing this area in future years.

As active investors, we will continue to evolve our climate change voting policy in accordance with our [Climate Change Principles](#) and the factors underpinning our net-zero commitment ([see page 24](#)).

Climate Change Voting Statistics

For the year ended June 30, 2023

24

companies where we voted against the reappointment of the chair of the risk committee (or an appropriate equivalent committee).

This resulted in **70** votes against directors.

22

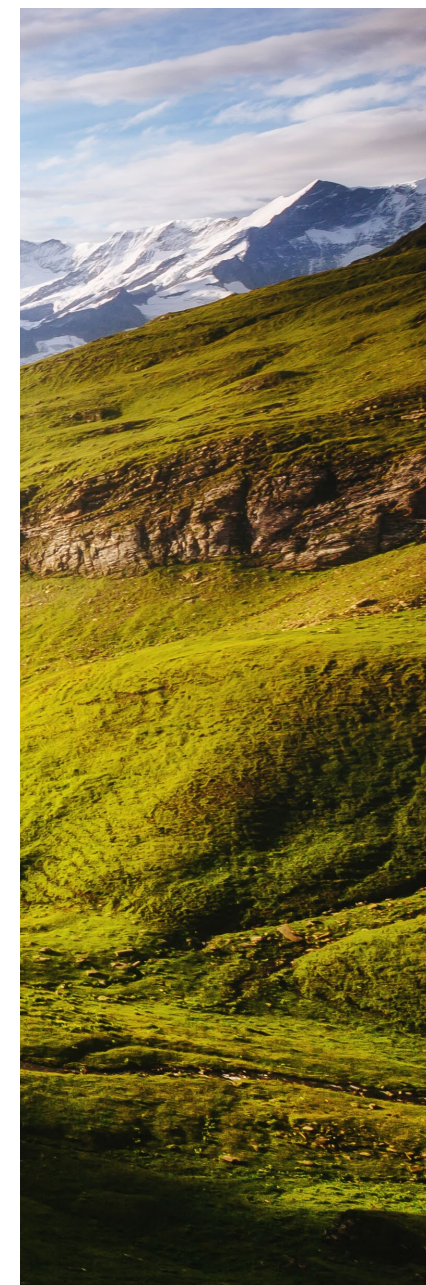
companies where our engagement contributed to material commitments and improvements on climate-related disclosures and practices. These include dedicating a board committee or director responsible for climate oversight, enhancing details of a company’s decarbonization plan, or quantifying the financial impacts from climate-related risks and opportunities.

26

climate-related shareholder proposals supported that sought deeper disclosures on topics such as climate accountability, operational emissions management, asset portfolio resilience and public policy.

8 of the 26

climate-related shareholder proposals sought greater disclosure of a company’s climate transition plan if commitments have been made.



Key voting statistics for 2023 proxy voting season (continued)



Executive Compensation Voting Statistics

Long-term shareholder value is more likely to be created when management and shareholder interests are aligned. Clear and appropriate links between executive pay and company performance help align those interests. As such, we expect a clear link between executive pay and company performance that appropriately aligns management and shareholders. Executive compensation programs should be appropriately structured to emphasize long-term and sustainable growth of shareholder value. Similarly, companies should provide full disclosure in corporate reporting of compensation information and clear rationales for compensation decisions. In addition, we expect an annual “say on pay,” which refers to a yearly advisory vote by shareholders on executive compensation.

Executive Compensation Voting Statistics

For the year ended June 30, 2023

Approve Executive Compensation

14.3% AGAINST
(193/1,349)

Approve Share Plan Grants

38.8% AGAINST
(33/85)

Annual “Say on Pay” Frequency

100% FOR
(554/554)

Compensation-related Shareholder Proposals

21.4% FOR
(9/42)



Classified Board Voting Statistics

In 2022, we added a new voting policy to escalate our concern regarding classified boards at our public portfolio companies. With a classified board structure, only a subset of directors is put forward for election by shareholders at each annual general meeting. While this structure can provide enhanced continuity and stability – e.g., in the immediate years following an initial public offering – classified boards actively inhibit the rights of shareholders to hold specific directors to account annually. For this reason, for public companies with classified boards, we will consider voting against all directors up for election where votes against one or more directors are warranted under our Proxy Voting Principles and Guidelines. We expect companies with classified boards to clearly set out appropriate sunset provisions that will define when annual director elections will commence, aligned with their transition to having a distributed shareholder base as a seasoned listing, and that governance will converge to best practice on a reasonable timeframe.

Classified Board Voting Statistics

For the year ended June 30, 2023

Shareholder meetings where our classified boards voting policy applied

216

Voted against directors under the classified boards voting policy

604




We supported

100%

of management proposals to declassify the board
(15/15)

Evolution of our gender diversity voting practices

Policies

2017	2018	2019	2020	2021	2022	2023
<p>Introduced our gender diversity voting practice in Canada</p> <p>For our Canadian public holdings, we started voting against the election of the chair of the nominating committee if a board had no (0) female directors*</p> 	<p>Escalated our gender diversity voting practice in Canada</p> <p>For our Canadian public holdings, we started voting against all nominating committee members at companies where we voted against the nominating committee chair in 2017 if the company had since made no progress improving its lack of board gender diversity*</p>	<p>For our Canadian public holdings, we escalated our approach to vote against nominating committee chairs of S&P/TSX composite boards with only one (1) female director*</p> 	<p>During the 2020 season, we considered voting against the entire committee responsible for director nominations if sufficient progress on gender diversity was not made at companies that we voted against in 2019</p>	<p>Escalated our global gender diversity voting practice for companies in the United States, Canada, developed Europe and Australia to start voting against the nominating committee chair if the board has less than rounded 30% female directors</p> <p>In all other markets, we continued to vote against the nominating committee chair if the board did not have at least one female director*</p>	<p>Enhanced our gender diversity voting practice by expanding the countries where we will vote against the nominating committee chair if the board has less than rounded 30% female directors* to include South Africa and New Zealand</p> <p>In all other markets, we continued to vote against the nominating committee chair if the board does not have at least one female director*</p>	<p>In the United States, Canada, developed Europe and Australia, South Africa and New Zealand, we continued to vote against the nominating committee chair if the board has less than rounded 30% female directors*</p> <p>Enhanced our practices in all other markets to vote against the nominating committee chair if the board does not have at least two female directors*</p>
<p>Introduced our global gender diversity voting practice.</p> <p>For our global public holdings, we started voting against the election of nominating committee chair if the board had no (0) female directors*</p>		<p>Escalated our global gender diversity voting practice to vote against the entire committee responsible for director nominations if sufficient progress on gender diversity was not made at companies that we voted against in 2019</p>	<p>Escalated our global gender diversity voting practice to vote against the entire committee responsible for director nominations if sufficient progress on gender diversity was not made at companies that we voted against in 2019</p>	<p>We continued to escalate our opposition to the entire nominating committee if sufficient progress was not made in subsequent years*</p> 	<p>We continued to consider voting against the entire nominating committee, or, where appropriate, all incumbent directors, if sufficient progress on gender diversity was not made in subsequent years</p> <p>We expected to apply a rounded 30% threshold to more countries and markets</p>	<p>We will consider voting against the entire nominating committee, or, where appropriate, all incumbent directors, if sufficient progress on gender diversity has not been made in subsequent years</p>

Legend

- Canada
- Global

* Provided there are no extenuating circumstances warranting an exception.

Evolution of our gender diversity voting practices

Statistics

As of year ended June 30,

2017

Voted at shareholder meetings for **45** Canadian public companies with no (0) female directors

2018

21 of the 45 companies we voted against in 2017 added a female director to their boards over the subsequent year

Voted at shareholder meetings for **22** Canadian public companies with no (0) female directors

Voted against the nominating committee chair at **6** companies

Voted against entire nominating committee at **7** companies

2019

Voted against directors at **13** Canadian public companies for having no (0) female directors

Voted against directors at **26** Canadian public companies on the S&P/TSX composite for having only one (1) woman on the board

2020

Voted against directors at **10** Canadian public companies due to gender diversity concerns; **9** of these were S&P/TSX composite companies with only one (1) woman on the board, while one (1) was a non-S&P/TSX composite company with no (0) women on the board

2021

Voted against **481** companies globally

Canada: 18
USA: 257
Europe: 33
Asia Pacific: 168
Latin America: 4
Rest of World: 1

Of the 481 total companies we voted against, we voted against **290** of those companies under our newly adopted 30% threshold for North America, developed Europe and Australia

Canada: 13
US: 251
Developed Europe: 26
Australia: 0

2022

Voted against **357** companies globally

Canada: 15
USA: 234
Europe: 23
Asia Pacific: 82
Latin America: 2
Rest of World: 1

2023

Voted against
433
companies globally

Canada: 4
USA: 144
Europe: 13
Asia Pacific: 244
Latin America: 5
Rest of World: 23

Legend

Canada
Global

Voted against the election of **626** directors globally at companies with no (0) female directors

Voted against **323** of our public portfolio companies globally (excluding Canada) for failing to have any women on their boards



Progress on our net-zero commitment

As part of our commitment to have our portfolio and operations be net zero of greenhouse gas (GHG) emissions across all scopes by 2050, we are taking the following actions:³



I.

Continuing to invest in and exert our influence on the whole economy transition as active investors, rather than through blanket divestment.



II.

Maintaining carbon neutrality for our internal operations (Scope 1, 2 and 3 business travel) from fiscal 2023 onward.



III.

Continuing to increase our green and transition asset portfolio from \$66 billion at end of fiscal 2022 to at least \$130 billion by 2030.



IV.

Scaling our Decarbonization Investment Approach, which seeks attractive returns from enabling emissions reduction and business transformation in high-emitting sectors.

Fulfilling our net-zero commitment will be done in accordance with our [Climate Change Principles](#). These help guide our decision-making so we can deliver on our mandate against the backdrop of escalating climate risks and opportunities by supporting the transition of the whole economy towards sustainability. Our commitment is made on the basis and with the expectation that the global community will continue to advance towards the goal of achieving net-zero greenhouse gas emissions by 2050. These advancements include the acceleration and fulfilment of commitments made by governments, technological progress, fulfilment of corporate targets, changes in consumer and corporate behaviours, and development of global reporting standards and carbon markets, all of which will be necessary for us to meet our commitment.

3. Scope 1 refers to direct GHG emissions from an organization's owned and controlled sources. Scope 2 refers to indirect emissions from the generation of purchased energy. Scope 3 refers to all indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.



Enabling a whole economy transition and financing emissions reduction

We believe that the only way to comprehensively decarbonize the real economy is to empower capital market participants to finance emissions reductions. While we may choose not to invest in particular companies, on a case-by-case basis, we will not engage in blanket divestment that excludes investment in entire sectors of the economy.

We focus on reducing emissions in the operations of companies in which we invest rather than simply divesting high-emitting companies and leaving their emissions for someone else to abate or reduce. This also includes investing in companies that are enabling the whole-economy transition through the advancement of technological innovations in reducing GHG emissions.

Credit investments in renewables

Dogger Bank Wind Farm

CPP Investments is investing in the Holdco bonds issued by Vårgrønn (a joint venture by the global energy company Plenitude (Eni) and the Norwegian energy entrepreneur and investor HitecVision), which owns a 20% stake in Dogger Bank Wind Farm. Located more than 130km off the north-eastern coast of England, with total installed capacity of 3.6 GW, Dogger Bank Wind Farm will form the world's largest offshore wind farm once operational, capable of powering up to six million homes annually or around 5% of the U.K.'s electricity demand. Dogger Bank Wind Farm will use 277 GE Haliade-X turbines – each blade is 107 metres long and one rotation of the turbine can power a U.K. household for two days.

Rio Energy

In fiscal 2023, CPP Investments co-invested with Lumina Capital Management in the Holdco bonds issued by Rio Energy, a developer, constructor, and operator of renewable energy projects, focusing on onshore wind and solar photovoltaics technology in Brazil. Rio Energy has ~1.1 GW of projects under implementation or commercial operation in the states of Bahia and Ceará. Rio Energy was one of the first Brazilian companies to issue green bonds and sign the United Nations Global Compact.

DOGGER BANK
WIND FARM



Technology to reduce energy waste and lower carbon emissions

CPP Investments invested in Redaptive in 2022. Redaptive provides enterprise customers with data-driven energy generation and efficiency programs, including heating ventilation and air conditioning (HVAC), LED lighting, solar, electric vehicle and other utility upgrades, that can be deployed at large sites or across distributed real estate portfolios.

Redaptive's core Energy-as-a-Service model allows customers to implement energy efficiency projects with no upfront capital requirements through an off-balance-sheet arrangement repaid through regular energy payments more than offset by energy cost savings. In addition, Redaptive utilizes its proprietary metering and data platform, Redaptive ONE, to provide enterprise customers with expertise, resources and management so they can reduce energy waste, save money, lower their carbon emissions and meet their sustainability goals across their entire real estate portfolios.



REDAPTIVE[®]

India's first-ever project to achieve IFC EDGE Zero Carbon Certification

In 2022, CPP Investments and Tata Realty and Infrastructure Limited (TRIL) – a 100% subsidiary of Tata Sons Private Limited and one of the leading real estate development companies in India with a portfolio spread across over 50 projects and 15 cities – embarked on a joint venture (JV) to develop and own commercial office space across India.

One of the assets in this JV is the Ramanujan Intellion Park in Chennai ('Ramanujan'). It consists of six buildings developed for multi-tenanted IT usage, as well as the Taj Wellington Mews serviced apartments. Ramanujan is Indian Green Building Council LEED Platinum certified (Core and Shell) and was the first project in India and ninth globally to achieve the International Finance Corporation's EDGE Zero Carbon Certification. The certification recognizes the company's efforts to construct green commercial buildings that are at least 40% more energy efficient than typical buildings and are primarily powered by renewable energy. Ramanujan includes large external green spaces with outdoor sports facilities for recreation. The irrigation of these green spaces predominantly relies on recycled water from the sewage treatment plant, while renewable energy powers them, emphasizing the project's dedication to sustainability. In addition, the management at Ramanujan is focused on implementing sustainable practices in various domains, including water and waste management, flood risk mitigation and air quality management measures. Additionally, Ramanujan prides itself on being an accessible and mobility-friendly establishment.



RAMANUJAN
Intellion
PARK

Energy storage technologies

Energy storage and battery recycling technology are areas of emerging opportunity and the latter is part of the global circular economy megatrend. In 2022, we invested in Form Energy and 2023, we provided additional funding for Redwood Materials.

Form Energy is a U.S.-based technology and manufacturing company that is developing and commercializing a cost-effective, multi-day iron-air energy storage system. The multi-day battery could help electric grids worldwide run on reliable and fully renewable energy year-round.

Form
energy



According to BloombergNEF and Benchmark Minerals, global battery demand is expected to grow at a compounded annual rate of 30% through 2030. Nevada-based Redwood Materials seeks to make electric vehicle batteries sustainable and affordable by increasing the supply of battery materials and reducing the cost and the environmental impact of batteries. It does so by creating a closed-loop, domestic supply chain for lithium-ion batteries across collection, recycling, refining, and remanufacturing of sustainable battery materials. Redwood's technology involves taking raw materials (used batteries and battery production scrap) and converting them into raw metals, cathode active material, and copper foil. On average, Redwood recovers 95% of key battery elements, and supplies raw materials back to U.S. battery manufacturers.

REDWOOD
MATERIALS



Circular economy

According to the Circularity Gap Report 2023, the global economy is estimated to be only 7% circular, partly driven by material overuse, limited product re-use, unnecessary waste generation and limited recycling. However, there are multiple driving forces helping to move towards a more circular economy, including policy and regulatory considerations, value chain and cost pressures, and technology advancements leading to new circular business models. The emergence of circular economy as a mega-trend is focused on extending the lifetime of materials through more efficient uses, re-useable markets, and high-quality sorting and recycling.





II.

Operational emissions

As part of CPP Investments' commitment to achieve net-zero operations by 2050, we disclose our Scope 1, 2 and 3 (business travel) emissions.

Total Operational GHG Emissions Breakdown by Scope

Emissions source	Total GHG emissions (tonnes of CO ₂ e)			
	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020
Scope 1	1,100	1,282	1,037	1,129
Scope 2 (location-based)	1,258	1,033	1,069	1,149
Scope 3 (business travel only)	11,168	1,798	197	16,045
Total GHG emissions	13,526	4,113	2,303	18,323

Our operational GHG emissions are based on the GHG Protocol Corporate Accounting and Reporting Standard. Scope 1 and 2 emissions are for our office locations for which we have operational control. Scope 3 emissions only include employee business travel. We prioritize disclosing operational emissions based on materiality and availability of high-quality data.

We have adopted an enhanced methodology to measure air travel emissions by including flight-specific variables such as aircraft type, freight ratio and load factor. We have recast the Scope 3 (business travel) reported figures to align with this new methodology. The use of different methodologies may result in incomparability of emissions information with other organizations.

We expect that emissions measurement methodologies will further standardize and data availability will continue to increase. These improvements may result in future recasting of historical emissions levels to improve comparability and accuracy.

We have achieved carbon neutrality across these emissions sources for fiscal 2023. We applied our [Abatement Capacity Assessment Framework](#) to inform our plans to decarbonize

our operations. Our approach is to pursue opportunities to decarbonize while continuing to deliver on our mandate, with carbon credits only used to offset the remaining emissions. Consistent with this approach, we will monitor and manage emissions associated with our air travel and office footprint, capturing learnings from the hybrid working models used during the COVID-19 pandemic.

We acquired 13,526 carbon credits from the Canadian Darkwoods Forest Carbon Project at a fair market price. These credits compensate for the unabated emissions from our Scope 1, 2 and 3 (business travel) activities in fiscal 2023. The project is an initiative of the Nature Conservancy of Canada (NCC) and has been validated and verified in accordance with the Verified Carbon Standard (VCS), the Climate, Community and Biodiversity Standard (CCB) and under the Sustainable Development Verified Impact Standard (SD VISta). Darkwoods is an Improved Forest Management carbon project. It achieves net GHG emission reductions through the avoidance of conventional logging, along with carbon sequestration through the retention of additional forest biomass and older forests. Carbon finance enables the continued protection of the area.





Green and transition assets

This year, as of March 31, 2023, our investment in green and transition assets rose to \$79 billion, moving toward our goal to invest at least \$130 billion by 2030. We anticipate our year-over-year progress to be non-linear, but we are confident in our ability to reach our target. The increase in the value of these holdings since the last fiscal year is due to a combination of new investments in green and transition assets, existing assets becoming green and transition eligible by taking actions such as Science Based Targets initiative (SBTi) certification, and increased market valuations of eligible assets.

► For more details on what we mean by green and transition assets, please refer to [page 42](#).

We utilize recognized third-party data and classification methodologies, such as green revenues and decarbonization targets, derived from publicly available disclosures to assess whether assets in our public portfolio are green or transition assets. For private market assets and public market ones, for which there is not enough publicly disclosed information, we seek to obtain information sufficient to determine the appropriate classification consistent with our definitions of green and transition assets as highlighted on [page 42](#).

Examples of green and transition assets

RBC WaterPark Place and Octopus Energy are green assets in our portfolio, while E.ON is a transition asset.



RBC WaterPark Place, the national headquarters of RBC's Canadian Banking business, was the first Leadership in Energy and Environmental Design (LEED) Platinum Core & Shell office tower located at the waterfront in Toronto, Canada. CPP Investments owns the building through a joint venture with Oxford Properties, the real estate arm of the Ontario Municipal Employees Retirement System (OMERS). RBC WaterPark Place has achieved LEED Platinum Existing Buildings: Operations and Maintenance status, Well Health & Safety Rating for Facility Operations, and Fitwell Multi-Tenant Whole Building v.2.0 certification. In addition, the building is certified by the Rick Hansen Foundation, which works to help improve accessibility of the built environment in Canada.



Octopus Energy is a global energy and technology company headquartered in the U.K. Octopus Energy operates several businesses in 15 countries across four continents. Through its energy technology platform, Kraken, Octopus supports 32 million customers and is the largest renewables investor in Europe.



E.ON is one of Europe's largest owners of energy networks and energy infrastructure, headquartered in Essen, Germany. E.ON operates regulated electricity and gas distribution networks in Germany, Sweden, and Central and Eastern Europe, as well as energy retail and infrastructure-like energy solutions businesses across Europe. It employs around 72,000 employees developing and selling products and solutions for private, commercial and industrial customers.

Green Bonds

CPP Investments was the first pension fund in the world to issue a green bond and our activities in this space continue to grow. We use green bonds to provide additional funding for attractive long-term investments in green assets. For details on project eligibility for a green bond, refer to our 2022 Green Bond Framework. This framework specifies treatment of temporarily unallocated net proceeds and expands on CPP Investments' processes for transparency, reporting and verification.

The Framework received a dark green rating (the highest possible rating) from the Center for International Climate Research (CICERO), a leader in providing second opinions on the qualification of debt for green bond status. See our [2022 Green Bond Framework](#) for details on eligibility criteria and the [Green Bond section of our website](#) for details on allocation of proceeds and associated impact.



IV.

Decarbonization investment approach

In 2023, we applied our [Decarbonization Investment Approach](#) on more than 10 existing and new assets spanning the real estate, infrastructure, agriculture, energy and tourism sectors. These initiatives helped develop transition plans that increase value, along with key learnings to scale the approach across the portfolio. We are able to use these learnings to identify potential programs and investible themes across similar assets. For example, our experience and knowledge of the applicable decarbonization levers for the built environment makes us a more effective investment partner for one of our most recent investments, Redaptive (see [page 26](#) for more details on Redaptive), that is uniquely positioned to capture the transition opportunities.

407 ETR

407 ETR is a toll road business in Ontario, Canada. We partnered with 407 ETR as part of our [Decarbonization Investment Approach](#) to reduce its greenhouse gas (GHG) emissions over time. The next step was to lay out an ambitious, yet achievable roadmap.

407 ETR was selected as one of the first trials for our [Decarbonization Investment Approach](#) because of the potential applicability of learnings from it to CPP Investments' broader toll road portfolio. One of the key outputs of the trial is the development of a toll road decarbonization playbook to serve as a resource for the other toll road assets in our portfolio.

The assessment showed that material near-term reductions in Scope 1 and 2 emissions by 2030 (consistent with the 407 ETR's own GHG reduction target) were possible through three levers: 1) continuing the electrification of certain categories of the 407 ETR vehicle fleet; 2) completing an energy-efficiency program of lighting upgrades; and 3) supplementing the 407 ETR electricity supply with renewable electricity options. The assessment categorized both upstream and downstream Scope 3 emissions, identified material contributors and evaluated opportunities to help create a roadmap for 407 ETR's future actions. The overall bottom-up assessment confirmed 407 ETR's existing approach, helped determine where cost-effective actions can be taken immediately to meet near-term targets, and enabled us to monitor other decarbonization options that will help inform later decisions.



This multi-functional collaborative project has resulted in a GHG emission reduction roadmap for our fleet, buildings and the highway, and highlighted several opportunities in fleet electrification, fuel consumption, alternative energy solutions and other options such as renewable energy certificates (RECs). This GHG emission reduction roadmap is our first major milestone in our decarbonization journey that is leading us to our established emission reduction goal by 2030.”

George Lovell, MSc, EP, CRSP
Director, Health, Safety, Environment and Wellness, 407 ETR

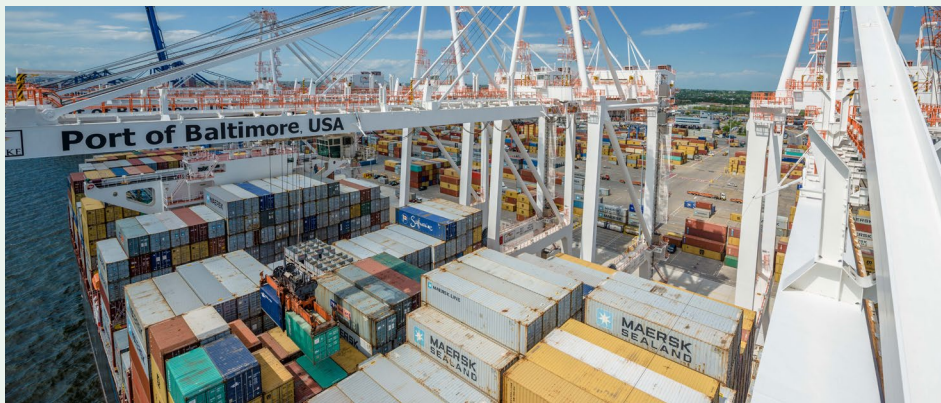


Ports America Group

Ports America Group (PAG) is the largest marine terminal operator in North America, with operations in 70 locations and 33 ports across the United States. The company covers a wide range of supply chain services including container, auto, rolling stock, breakbulk, military and cruise ship operations.

We partnered with PAG to trial our [Decarbonization Investment Approach](#). This included determining the emissions baseline for two of PAG's critical ports: Port Newark Container Terminal in New Jersey, and Baltimore, Maryland. Using our [Abatement Capacity Assessment Framework](#) and evaluating decarbonization pathways, the data from these two sites will be used as a baseline for all PAG's operations. The assessment conducted a detailed bottom-up analysis evaluating various abatement options for cargo handling equipment, quay and other yard operational activities. This exercise identified several economic solutions to reduce Scope 1 and 2 emissions and highlighted key strategic decisions for PAG on its scope 3 emissions.

The [Decarbonization Investment Approach](#) is being used to support PAG's senior leadership to define its climate ambition and the best decarbonization pathways to achieve it.



Merlin Entertainments

Merlin Entertainments (Merlin) is Europe's largest and the world's second-largest visitor attraction operator with a global footprint of 140 attractions, 24 hotels and six holiday villages in 24 countries across four continents. The company has a unique portfolio of strong brands and iconic assets, such as LEGOLAND, SEALIFE and Madame Tussauds, among others.

We partnered with Merlin to trial our [Decarbonization Investment Approach](#). The strong collaboration between CPP Investments and Merlin's management team was supported by a shared belief that decarbonization can drive value creation by offering an important competitive advantage in attracting customers and by investing in cost-effective solutions that better position the company on absolute basis and relative to peers.

The exercise included gaining a deep understanding of Merlin's main sources of Scope 1 and 2 greenhouse gas (GHG) emissions and equipment replacement life cycles and evaluating decarbonization options using our [Abatement Capacity Assessment Framework](#). The framework helped management gain confidence in potential cost-effective abatement solutions. Such solutions include onsite and offsite options for securing renewable energy, installation of more efficient lighting, and other efficiency measures such as variable speed drives and pump replacements. This bottom-up assessment is being used to support Merlin's leadership in defining the company's climate ambition and a starting point to chart its decarbonization pathway.



Contributing to standardized sustainability-related disclosure and data

Consistent, standardized global data and disclosures are important for investors to evaluate and assess the potential impacts of sustainability-related issues on a company's performance, and to support the whole economy transition to net zero. With this in mind, we actively contribute to the development of global standards for disclosures and the development of high-quality data that helps support price discovery and capital formation and facilitates efficient capital markets.

Companies and investors face a proliferation of frameworks for reporting data related to corporate sustainability. Competing scopes and objectives created an inefficient outlook for issuers, and incomplete and incomparable data for their boards and their investors to derive decision useful insights.

CPP Investments welcomes the International Sustainability Standards Board's (ISSB's) IFRS S1 and IFRS S2 disclosure standards. Launched in June 2023, these new standards are assurable, enforceable and designed to elicit decision-useful information connected to financial statements. By consolidating and building upon the resources of other investor focused initiatives – SASB, International Integrated Reporting Council (IIRC), Climate Disclosure Standards Board (CDSB) and TCFD – the ISSB is able to address

fragmentation and secure international support for a global baseline of sustainability disclosures. While we recognize that the standards still need to be adopted at a jurisdictional level and, once this is done, issuers will need to report and their auditors assure the data, we are encouraged by the important step towards a global baseline of sustainability reporting. Our Chief Sustainability Officer is the Chair of the [ISSB Investor Advisory Group](#).

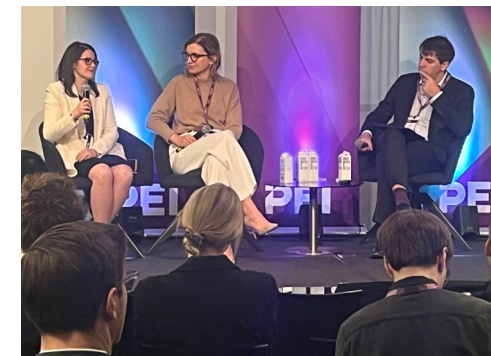
We continue to advocate for improved disclosures related to sustainability, with a focus on driving the codification, at an industry level of the material drivers of value creation and risk mitigation for issuers to report on. Our Chief Sustainability Officer is a member of the Delivery Group for the United Kingdom Transition Plan Taskforce. One of our senior sustainability professionals is the Co-Chair of the [ESG Data Convergence Initiative \(EDCI\)](#). On June 28, 2023, along with the CEOs of 11 of Canada's leading pension plan investment managers, we called on companies focused on long-term value to embrace the ISSB disclosure framework. We believe that widespread adoption of this new global baseline will spur companies to more closely examine and manage activities that are having an increasingly material impact on [long-term value creation](#). We have also contributed to the global efforts to improve sustainability disclosures by providing input to the latest consultations from the European Financial Reporting Advisory Group (EFRAG) about the European Sustainability Reporting Disclosures, and the GHG Protocol.

Our [Abatement Capacity Assessment \(ACA\) Framework](#) is an important effort towards improved disclosures. As we get closer to 2050, boards and investors need to have a greater degree of confidence in a company's commitment and ability to transition to a low-carbon future. CPP Investments developed and refined the ACA Framework for this purpose. In fiscal year 2023, we not only used the ACA Framework to inform our plans to decarbonize our own operations, we also used it to identify and quantify the emissions-reduction opportunities for select companies in our portfolio.

► See [pages 30–31](#) for details on our [Decarbonization Investment Approach](#).









Richard Manley, Chief Sustainability Officer and Chair, ISSB Investor Advisory Group, participating at the launch of the ISSB's IFRS S1 and IFRS S2 disclosure standards in New York.



Samantha Hill, Global Leadership Team – Managing Director and Co-Chair, EDCI speaking on an EDCI panel at the Responsible Investment Forum 2023 in New York.

Partnerships and collaborations

We believe partnerships and collaborations make us, and the entire investing ecosystem, more effective and efficient. Our collaborative sustainability-related efforts include but are not limited to: seeking to improve transparency and standards, conducting research, participating in regulatory consultations, promoting governance practices and advocating for long-term thinking in the investment and corporate worlds.

 <p>Founding Member</p>	 <p>Member</p>	 <p>Signatory</p>	 <p>Member</p>	 <p>Global Supporter</p>
 <p>Capital Markets Signatory</p>	 <p>Founding Member, Co-Chair and Steering Committee Member</p>	 <p>Co-Founder</p>	 <p>Member</p>	 <p>Member</p>
 <p>Chair of ISSB Investor Advisory Group⁴</p>	 <p>Member and Member of Research Advisory Council</p>	 <p>Member</p>	 <p>Founding Signatory</p>	 <p>Member</p>
 <p>Forum Member</p>	 <p>Member of Delivery Group</p>			

4. Following the publication of the inaugural International Sustainability Standards Board's (ISSB's) Standards – IFRS S1 and IFRS S2 – in June 2023, the Financial Stability Board announced that the work of its Task Force on Climate-related Financial Disclosures (TCFD) was completed, and it was transferring responsibility for the monitoring of progress on companies' climate-related disclosures to the IFRS Foundation. IFRS S1 and IFRS S2 incorporate the recommendations of the TCFD.

Our Organization

Investing in our people and purpose-driven culture

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Investing in our people and purpose-driven culture

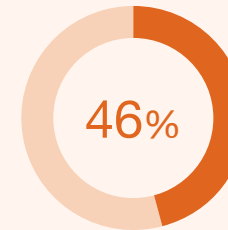
Our global team of more than 2,000 are motivated to meet our mandate and help support the stability and financial sustainability of the CPP. This public purpose drives high performance, attracts top talent, and connects employees across all global offices.

Our work style is evolving, blending the advantages of office and virtual work. In addition to other systemic changes such as, collective enterprise-wide (Unplugged) days, we have adopted a hybrid-flexible framework that offers colleagues flexibility to work in ways that accommodate individual needs while favouring more time each week with colleagues in the office than work from home. We have also

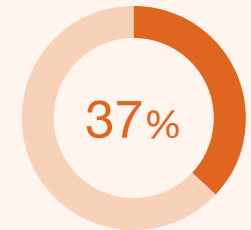
sustained and will continue to grow resources, tools and programming that support the mental health of our colleagues, including enhanced benefits, information sessions with medical professionals and wellness experts, and employee programming that emphasizes health, well-being and connection.



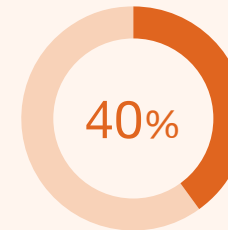
Representation of women (as at March 31, 2023)



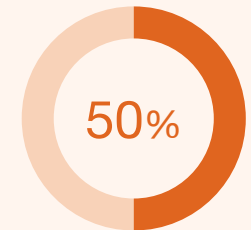
Global Workforce



Investment Professionals



Senior Management Team



Board of Directors

Inclusivity

As at March 31, 2023, almost 90% of our global colleagues reported they feel respected, valued and supported by their colleagues for who they are as individuals. Nearly 70% of colleagues feel encouraged to call out bias when they see it and 75% believe their teams are actively working to mitigate bias in their groups and decisions.

Campus recruiting

In November 2022, we hosted our ninth annual Women's Leadership Conference, a multi-year program that aims to attract, develop, and retain women. Fifty-two students from programs and schools across North America joined in interactive sessions with colleagues from across the organization, with the goal of developing a deeper understanding of the investment portfolios managed by CPP Investments, as well as the different career paths on offer. Additionally, our Campus Team also increased engagement with universities and student associations with more diverse populations in support of our recruitment efforts.

Learning and development

In fiscal 2023, we delivered over 250 internal development courses with more than 4,400 total participants.

Strategic Talent Objectives	Fiscal 2022	Fiscal 2023	Fiscal 2025 Target
Female new hires	38%	52%	50%
Female senior investment professionals	22%	23%	30%
LGBTQ+ colleagues	3.4%	4.1%	5%
Minorities in senior roles	27%	27%	28%

We are building an inclusive workplace where all colleagues feel supported, respected and valued for who they are as individuals and for their unique contributions. In doing so, we ensure everyone has an opportunity to reach their full potential. Our Inclusion and Diversity Leadership Council is comprised of senior leaders from across each department and contributes to the execution of our equity, diversity and inclusion (EDI) strategy. In addition, we have regional EDI-related councils and an Inclusion and Diversity Action and Advisory Council comprised of leaders from our Employee Resource Groups (ERGs). Our ERGs are motivated to effect change in our culture through a range of programs and activities. The resource groups are sponsored by members of the Senior Management Team, mentored by select members of the Global Leadership Team

and help build understanding and inform programs on topics ranging from cultural differences to sustainability, gender equity and LGBTQ+ inclusion. Global participation in these grassroots teams is robust and growing. Membership for established groups, including allies, totals more than 900 colleagues globally. Further information about our commitment to equity, diversity and inclusion can be found on our [website](#).

Our Employee Resource Groups

AsiaConnect	Promotes the development and interconnectivity of colleagues that identify with, or are allied with, the Asian diaspora across the organization.
GoGreen	Raises employee awareness to improve collective environmental efficiency and reduce CPP Investments' internal environmental footprint.
MindMatters	Promotes mental health and a psychologically healthy workplace for employees.
Mosaic	Builds awareness of the rich cultural diversity at CPP Investments.
Out	Contributes to a diverse and inclusive culture through building awareness of and engagement with the LGBTQ+ community.
Rise	Supports the recruitment, development and retention of Black students and professionals by building awareness, allyship and community.
WIN	Aims to improve organizational culture by attracting, developing and retaining female professionals.

In fiscal 2023, we hosted several activities focused on equity, diversity and inclusion, including: sponsoring a Women in Capital Markets Job Shadow Day for Grade 12 students to preview what it is like to work in the financial services industry; hosting a Black History Month event in collaboration with other Canadian pension funds; and piloting a mixed-gender workshop designed to provide the fundamentals of allyship, based on research and organizational best practices.

Climate-related Financial Disclosures

Reporting in accordance with the recommendations from the Task Force
on Climate-related Financial Disclosures (TCFD) for fiscal 2023

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Reporting in accordance with the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) for fiscal 2023

These details were previously shared in our 2023 Annual Report.

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: 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.

On July 6, 2023, the Financial Stability Board (FSB) announced that it will wind down the TCFD following the delivery of the TCFD's annual status report in September 2023. The launch of the International Sustainability Standards Boards' sustainability disclosure standards which are based on the recommendations of the FSB's TCFD can be considered the culmination of the work of the TCFD.

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 and management of climate-related risks and opportunities at the management and board levels reflects 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.

Investment Strategy and Risk Committee

The Investment Strategy and Risk Committee (ISRC) comprises the Chief Investment Officer, Chief Risk Officer and General Counsel, with the President & CEO as Chair. The ISRC membership expands to include the full Senior Management Team for select matters that require broader perspectives. Membership also expands to the Chief Sustainability Officer (CSO) whenever sustainability-related matters or decisions are discussed. The ISRC and its sub-committees are accountable for a select set of approvals. They provide guidance and recommendations to accountable executives and committees to ensure diverse perspectives are incorporated into decision-making processes.

The ISRC is accountable for overseeing portfolio and risk-related matters including the strategy, design, management and governance of the Investment Portfolios. Among other things, it oversees our Climate Change Risk Standard. The ISRC also provides guidance on the design of our reputation management program and our approach to managing other broad factors, such as sustainability-related issues.

The ISRC receives the following targeted support from its sub-committees, including the following:

- **Portfolio Execution Committee (PEC)** supports the ISRC's oversight of investment-related accountabilities. Chaired by the CIO, the PEC oversees key aspects of portfolio execution. It considers an array of strategic investment and risk-related matters as it reviews new investments, dispositions and follow-on transactions for approval. PEC also evaluates whether specific investments are aligned to its corresponding active strategy mandate and provides guidance on select investment department-related matters, including their strategies, mandates, sustainability-related considerations and department reviews.
- **Portfolio Strategy Committee (PSC)** supports the ISRC's oversight of design, delivery and management of the Investment Portfolios. Chaired by the CIO, the PSC provides guidance on matters including the Climate Risk Limit and the Sustainability-Related Risk Standard.

- **Investment Risk Committee** (IRC) supports the ISRC in its oversight of market, credit, liquidity and leverage risks. Chaired by the CRO, the IRC provides guidance on matters including the Climate Risk Limit and the design of Board and Management-level market, credit, liquidity and leverage risk limits. It also plays an active role in monitoring risk exposures.
- **Operational and Legal Risk Committee** (OLRC) supports the ISRC in its oversight of operational, legal and regulatory risks. Chaired by the General Counsel, the OLRC provides guidance on matters including the Non-Investment Risk Appetite Standard and Operating Emissions.
- **Sustainable Investing Committee** (SIC) supports the ISRC in its oversight of all non-financial sustainability-related factors for the Fund. Chaired by the CSO, the SIC provides guidance on matters including the delivery of the Fund's firm-wide sustainability strategy. It also provides guidance on integration of sustainability considerations into the Fund's portfolio construction, investment decision-making and internal operations.

Each of these sub-committees is composed of cross-functional representatives from our leadership teams. They help provide a diverse set of perspectives and guidance to support the chairs of their respective committees.

The Board oversees strategy execution and risk governance, including approving our [Policy on Sustainable Investing](#). This policy sets out how CPP Investments approaches sustainable investing within the context of our clear legislative mandate. It also lays out how CPP Investments considers sustainability-related risks and opportunities in our investment analysis. The policy is applied throughout the investment life cycle and across asset classes where such considerations are material to the investment.

In addition, the Board receives quarterly reports on the Fund to monitor, among other things, Investment Portfolios' market and other risk measures, including liquidity and stress tests, climate-related metrics and climate change scenario analysis results.

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, we seek to factor in a broad 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 potential economic impacts of climate change to evaluate the impact on long-run returns. We currently measure these impacts using an internally estimated physical risk damage function, as well as transition scenarios established by the UN's Intergovernmental Panel on Climate Change.

Our diversified investment strategy affords CPP Investments the flexibility to invest across asset classes and 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](#). This approach seeks attractive returns from enabling emissions reduction and business transformation in high-emitting sectors for selected companies.

Incorporating climate-related considerations in our investment selection processes

Where climate change impacts are deemed to be material to the investment decision and asset management strategy, we implement our Climate Change Security Selection Framework. The framework considers the potential financial impacts of both high-physical and high-transition risk scenarios. High-physical-risk scenarios are those resulting in more than 4°C of global temperature warming over pre-industrial levels. High-transition-risk scenarios result in less than 2°C warming. We use a variety of tools and resources that align with these scenarios to estimate such financial impacts. These scenarios are meant to provide:

- a consistent estimation and comparison of impacts across geographies, sectors and asset classes;
- the potential climate-related impacts on future rates of return;
- the basis for informed discussions of climate-related risks and opportunities most relevant for investment decisions; and
- input into the engagement or asset management strategy for the investment.

Risk Management

We monitor and manage all risks that could have a material impact on our ability to fulfil our mandate and achieve our strategic objectives. We recognize risk events can have financial and reputation impacts, and we seek to manage both impacts within our stated risk appetite. We operate in a dynamic and rapidly changing environment. These changes may affect our risk profile, risk management practices and ability to achieve our objectives. Top and emerging risks encompass those that could materially impact our financial results, financial and operational resilience, reputation or strategy. Sustainability-related factors represent one of our top and emerging risks, along with inflation, geopolitical uncertainty, talent management, cyber security and relative performance.

Sustainability-related factors continued to be significant drivers of risks and opportunities as capital markets continued to evolve how they integrate these factors into evaluating long-term performance. Climate change in particular presents a complex array of physical and transition impacts as the economy transitions to a low carbon future. We consider sustainability-related factors and integrate them into our investment decision-making where these factors are material to the investment. We use a range of tools and analytics to measure and monitor sustainability-related factors, both quantitatively and qualitatively.

Climate change scenario analysis

To augment the standard carbon footprint metrics, we use scenario analysis⁵ to assess potential future impacts of climate risk-related stress events, expressed as the potential annualized percentage impact to the Fund's market value in a given year. This includes stress testing the resilience of our investments under a range of plausible scenarios, including extreme events, the results of which are highlighted below:

- In a business-as-usual scenario where carbon prices do not increase markedly from their current levels and global decarbonization efforts are less successful, there could be a potential negative impact to the Fund's market value by up to 13% in a given year during the next 30 years.⁶ The impact is largely driven by physical climate risks, including chronic changes in precipitation, ecosystems and sea levels, as well as the rise in frequency of extreme weather events.
- In a scenario where policy actions are more heavily concentrated in years after 2030 through abrupt adoption of stricter mitigation efforts to limit warming to no more than 2°C, the Fund's market value could be negatively impacted by up to 11% in a given year during the next 10 years.⁶ The impact is largely driven by transition risks associated with the sharp fall in GDP and knock-on consequences for consumer demand.

Scenario analysis efforts are taken into consideration during our strategic allocation process in portfolio construction, our climate risk monitoring, and our due diligence process during security selection. We continue to seek opportunities to further integrate top-down and bottom-up climate risk management in the portfolio.

Targets and Metrics

We believe that the performance of our portfolio will be influenced by how well the assets we hold adapt alongside the global economy on the path to net zero. As such, we have committed to achieving net-zero greenhouse gas (GHG) emissions across the Fund and our operations by 2050. This commitment was made based on our expectation that public and private sector

actors in the global community will also continue to make advancements towards this goal. These include the acceleration and fulfilment of commitments made by governments, technological progress, corporate delivery of their targets, changes in consumer and corporate behaviour, and development of global carbon markets and reporting standards. All of these advancements will be necessary to help us meet our commitment. We are committed to staying ahead of and strategically investing in developments that will have an impact on our path to net zero.

► See pages 24–31 for details.

Reporting on our portfolio emissions

CPP Investments' internally developed carbon footprint tool provides insights on GHG emissions associated with all of the Fund's holdings, as well as relevant benchmarks. To disclose the GHG emissions associated with our Fund's holdings, we use Total Carbon Emissions and Carbon Footprint metrics, using the Long-term Capital Ownership method. These metrics are industry best practice for measuring a multi-asset fund.

Methodologies for estimating and calculating GHG emissions and other climate-related metrics have not been subject to the same globally recognized or accepted reporting or accounting principles and rules as traditional financial reporting. With the launch of the inaugural global sustainability reporting standards by the International Sustainability Standards Board (ISSB) in June 2023, we expect that emissions measurement methodologies, as well as the maturity of underlying data, systems and controls, to evolve and become more standardized over time. Such improvements may impact the comparability of our portfolio carbon footprint with those reported by other organizations and between different reporting periods.

Portfolio Carbon Footprint	Current Value of Investments (\$ billion)	Total Carbon Emissions (million tonnes of CO ₂ e)		Carbon Footprint (tonnes of CO ₂ e/\$ million)	
		March 31, 2023	March 31, 2022	March 31, 2023	March 31, 2022
Non-government holdings	457	21.1	21.1	46	46
Government-issued securities	113	33.6	41.6	298	494

Total Carbon Emissions measures the absolute GHG emissions associated with our investments. As assets under management grow, we expect this figure to fluctuate in the nearer term, before the impacts of emission reductions can be seen more fully. Carbon Footprint measures carbon

5. A set of generally accepted climate scenarios are used for this analysis, including The Bank of England 2021 Climate Biennial Exploratory Scenario (CBES) and Shared Socioeconomic Pathways by the Intergovernmental Panel on Climate Change (IPCC SSP).

6. Scenarios are not forecasts (they do not mean to predict future outcomes); rather they are projections designed to build an understanding of the nature and size of changes that may occur in the future. Predicting climate change and quantifying its impacts on the Fund is inherently complex and the practice of climate change scenario analysis has limitations that are sensitive to key assumptions and parameters, which are themselves subject to uncertainty.

emissions per million dollars invested, which can be used to compare emissions intensity across portfolios of different sizes. In a portfolio of our size, there are many factors that impact these figures. Key drivers in fiscal 2023 were investments in renewables and fluctuations from normal portfolio turnover and portfolio company reported emissions.

Approximately 51% 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 disclosures improve, we expect methodologies to standardize and the proportion of directly reported emissions to increase. This may impact the comparability of our carbon emissions and portfolio carbon footprint over different periods. Fluctuations in financial metrics, like market value of investments, can also impact calculated changes in our portfolio carbon footprint in any given year.

Scope 3 GHG emissions include those arising from activities not under the direct ownership or control of an entity. Therefore, the reporting entity is likely to face challenges related to data availability and quality, as well as the associated cost of data collection. We currently do not include Scope 3 GHG emissions in our calculations due to these challenges. Also, currently only 6%-7% of the Fund's Scope 3 emissions are directly reported by portfolio companies. We continue to monitor developments in the availability of complete Scope 3 data for our portfolio companies, so that they can be incorporated when appropriate into our metrics. We expect that the adoption of the IFRS S2 Climate-related Disclosure Standards will lead to further refinement of methodologies related to Scope 3, and lead to more robust reporting of these emissions by issuers.

Source of the Fund's Scope 1 and Scope 2 emissions data ⁷	Fiscal 2023	Fiscal 2022	Fiscal 2021
Company-reported data	51%	41%	28%
Vendor-estimated data	7%	7%	16%
Proxy data	42%	53%	56%

7. Methodologies vary in their use of Scope 1 and Scope 2 GHG emissions. Some use only Scope 1 data while others Scope 1 and 2. Some methodologies use company-specific historical emissions data while others use estimation of emissions based on sectoral or geographical data or averages. Certain methodologies take cumulative historical GHG emissions into account while others incorporate point-in-time assessments of emissions intensity. Variations in methodologies may lead to under- or overestimates of emissions metrics.

Carbon Metric Methodologies

Portfolio Carbon Footprint

The Fund's investments are split into two categories when measuring GHG emissions:

- 1. Government-issued securities:** includes marketable government bonds, non-marketable government bonds, government treasury bill and government inflation-linked bonds.
- 2. Non-government holdings:** the rest of the portfolio excluding the government issued securities.

Asset classes within scope for government-issued securities.

- 1. Total Carbon Emissions:** measures the absolute amount of carbon emissions of a given country financed by CPP Investments. The measurement is estimated by apportioning a country's emissions based on the share of the country's debt. Financed carbon emissions for all countries are aggregated to arrive at total emissions for the portfolio.

$$\sum \left(\frac{\text{Current Value of Sovereign Bond Investment (\$) } i}{\text{Gross Debt Outstanding (\$) } i} \times \text{Country Emissions (tCO}_2\text{e) } i \right)$$

- 2. Carbon Footprint:** estimates the total apportioned emissions per million dollars invested.

$$\frac{\sum \left(\frac{\text{Current Value of Sovereign Bond Investment (\$) } i}{\text{Gross Debt Outstanding (\$) } i} \times \text{Country Emissions (tCO}_2\text{e) } i \right)}{\text{Current Sovereign Bond Portfolio Value}}$$

Formula Definitions:

i represents each investment and portfolio company in the calculation.

Current Value of Sovereign Bond Investment or portfolio is the market value as of March 31, 2023.

Gross Debt Outstanding consists of all liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at a date or dates in the future. This includes debt liabilities in the form of SDRs, currency and deposits, debt securities, loans, insurance, pensions and standardized guarantee schemes, and other accounts payable.

Country Emissions reflect the territorial emissions from all domestic production of goods and services within a national boundary, regardless of whether those goods and services are consumed domestically or exported. It includes land use, land-use change, and forestry emissions. The country emissions are defined under the production basis. The production-based emissions reflect the territorial emissions from all domestic production of goods and services within a national boundary, regardless of whether those goods and services are consumed domestically or exported.

Asset classes within scope for non-government holdings

1. Total Carbon Emissions: The absolute greenhouse gas emissions associated with a portfolio, expressed in tonnes CO₂e; measures the absolute tonnes of CO₂e which CPP Investments has in its underlying portfolio. The measurement is estimated by taking the pro rata share of a company's GHG emissions. The portfolio's share has been calculated by dividing the market value of the portfolio's investment in a company by the long-term capital* of the company.

$$\sum \left(\frac{\text{Current Value of Investment } i}{\text{Issuer's Long-term Capital } i} \times \text{Issuer's Carbon Emissions } i \right)$$

2. Carbon Footprint: Total carbon emissions for a portfolio normalized by the market value of the portfolio, expressed in tonnes CO₂e / \$ million invested; estimates the total carbon emissions for every \$1 million invested.

$$\frac{\sum \left(\frac{\text{Current Value of Investment } i}{\text{Issuer's Long-term Capital } i} \times \text{Issuer's Carbon Emissions } i \right)}{\text{Current Portfolio Value}}$$

Formula Definitions:

*The long-term capital is the sum of the fair market value of equity and long-term debt.

i represents each investment and portfolio company in the calculation.

Current Value of Investment or portfolio is the market value as of March 31, 2023.

Issuer's carbon emissions include the Scope 1 and Scope 2 emissions.

Green and Transition Assets Definitions

Green Assets

An asset is considered to be "green" when a substantial majority of its revenue can be classified as being derived from green sources or activities. Green Assets represent the total AUM of companies where:

- at least 95% of a firm's revenue is derived from International Capital Market Association (ICMA) Eligible Green Project sectors and/or subsectors identified as green; or
- the asset type is conditionally green according to the Climate Bonds initiatives Taxonomy Paris Agreement Compliant criteria, and the relevant Screening Indicator is met; or
- if the above criteria are not clearly applicable, but the firm has a reasonable case to qualify, the Risk department will work with the applicable investment department to apply a bespoke assessment.

Transition Assets

Transition Assets represent the total AUM of companies that are actively contributing to the transition to a low carbon economy and can be categorized into two groups:

High emission companies with decarbonization plans

Companies are considered Transition Assets if they meet all of the following criteria:

- Have adopted decarbonization targets and are committed to transitioning towards a net-zero emissions economy by 2050.
- Have interim targets and track their progress with a specific business plan on how they will be achieved.
- Both targets and continued progress are validated by a credible third-party (such as SBTi).
- The allocation of capital can lead to substantial decarbonization opportunities, defined by operation in a high emissions sector.

Companies approaching Green Asset status

Companies which have substantial green revenues that currently fall short of the Green Asset threshold (95% minimum) may also be considered for inclusion, provided there is a credible plan to grow their green revenue share over time. This categorization may be applied when evaluating a company's Green Asset eligibility, based on assessment by investment departments and the Risk department.

Head Office

Toronto

One Queen Street East, Suite 2500
Toronto, Ontario M5C 2W5 Canada

T: +1 416 868 4075

F: +1 416 868 8689

Toll Free:

+1 866 557 9510

International Offices

Hong Kong

18/F York House, The Landmark,
15 Queen's Road Central

Central Hong Kong

T: +852 3973 8788

F: +852 3973 8710

London

40 Portman Square, 2nd Floor

London W1H 6LT

United Kingdom

T: +44 20 3205 3500

F: +44 20 3205 3420

Luxembourg

10-12 Boulevard F.D. Roosevelt

Luxembourg

L-2450

T: +352 2747 1400

F: +352 2747 1480

Mumbai

3 North Avenue, Maker Maxity,
5th Floor, Bandra Kurla Complex,

Bandra (East) Mumbai 400051

India

T: +91 22 615 14400

New York

510 Madison Avenue, 15th Floor

New York, NY 10022

U.S.A.

T: +1 646 564 4900

F: +1 646 564 4980

San Francisco

100 First Street, Suite 2600

San Francisco, CA 94105

U.S.A.

T: +1 415 276 2835

São Paulo

Av. Brigadeiro Faria Lima,
4300 – 14° andar

São Paulo – SP, 04538-132, Brasil

T: +55 11 3216 5700

F: +55 11 3216 5780

Sydney

Suite 5, Level 30,

Governor Macquarie Tower

1 Farrer Place

Sydney, NSW 2000, Australia

T: +61 2 8257 7777

F: +61 2 8257 7717