THINKING**ahead**

Investing in the path to net zero

FEBRUARY 2022

CPP Investments

I. Climate Change: Our commitment to net zero

As the world moves toward net zero, we at CPP Investments aim to manage the investment risks and invest to capture and support value-creating opportunities that will arise as society works to remove greenhouse gas (GHG) emissions from the whole economy.

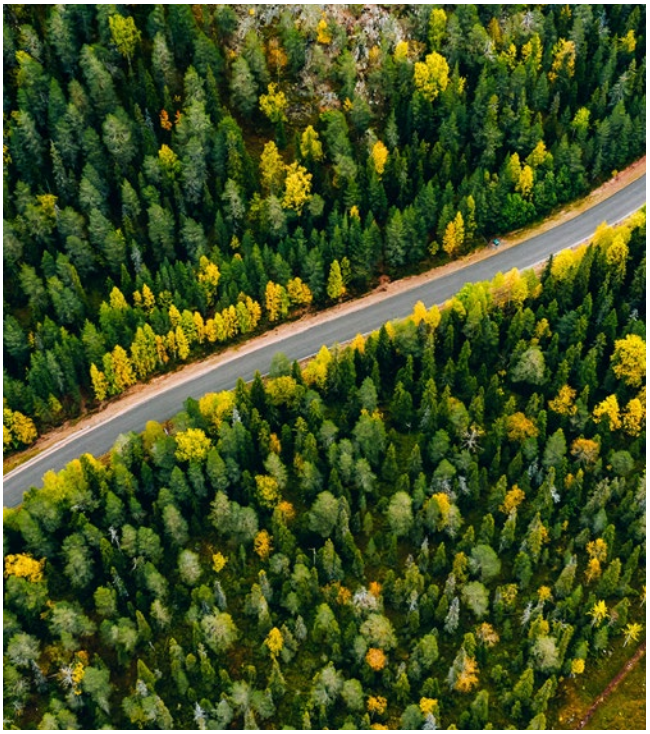
We believe that the performance of our portfolio will be influenced by how well it adapts alongside the global economy on the path to net zero. As such, we believe stewarding the portfolio to net zero is in the best interests of the contributors and beneficiaries of the Canada Pension Plan and meeting our mandate. **We commit our portfolio and operations to being net zero of GHG emissions across all scopes by 2050.**

This proactive choice is a continuation of CPP Investments' long and successful track record of integrating environmental, social and governance considerations, including climate change, into our investment activities to drive enduring financial performance.

Our investment strategy is designed to fulfill 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. We anticipate that the whole economy transition will create both investment opportunities and risks. We believe that incorporating factors like climate change and the transition to net zero into our decision-making will help us create sustainable value.

We have made the decision to commit our portfolio and operations to net zero by 2050 after rigorous analysis of the best data and information available today and with a deeply pragmatic mindset. Fulfilling our net-zero commitment will be done in accordance with our Climate Change Principles (see *II. How we invest in the path to net zero*). These principles highlight that supporting the whole economy transition requires a sophisticated, long-term approach.

Our Chief Sustainability Officer will work closely with our President & CEO and Chief Investment Officer to ensure we maintain a global, cross-enterprise approach to sustainability and deliver on our commitment to net zero.



WHAT IS NET ZERO?

Net zero refers to reducing human-caused greenhouse gas emissions from the global economy to as close to zero as possible. Any remaining greenhouse gas emissions should then be balanced by removing an equivalent amount of emissions, using technology- or nature-based solutions.

The actions we are taking to reach net zero by 2050

We are holding ourselves accountable to our net-zero commitment by taking the following actions. We will evolve and expand our plans over time.

- We will continue to invest and exert our influence in the whole economy transition as **active investors**, rather than through blanket divestment.
- We will achieve **carbon neutrality** for our internal operations by the end of FY23.[1]
- We expect our $67 billion investment in **green and transition assets** will increase to at least $130 billion by 2030.[2]
- We will build on our new **decarbonization investment approach** that seeks attractive returns from enabling emissions reduction and business transformation in high-emitting sectors. See *Investing to enable an economy-wide evolution to a low-carbon future*.

As we embark on this journey, we will adhere to our longstanding practice of openness and transparency, including in the consistency and regularity of information-sharing with our stakeholders. We will seek to enhance the scope of our disclosure as relevant data and metrics become available and our thinking evolves. We will also continue to produce analysis and research where we believe we can contribute to the global conversation on advancing the measurement and management of climate risk as well as investing in attractive opportunities that emerge along the path to net zero.

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 GHG 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 to help enable us to meet our commitment. We are committed to staying ahead of developments that will impact our portfolio's path to net zero.

HOW WILL CPP INVESTMENTS REPORT OUR PROGRESS TOWARD NET ZERO?

Stakeholders are able to clearly gauge the progress of the Fund's holdings towards net zero in our annual Report on Sustainable Investing, where we report several emissions metrics including our carbon footprint. In terms of the Fund's carbon footprint, we do not expect a linear decline in emissions, especially as we invest to help certain companies and industries transition. However, our objective for 2050 is clear.

1. Across Scope 1 and 2 GHG emissions and business travel emissions, which are Scope 3.
2. Figures as at December 31, 2021. We arrived at our definition of green and transition assets by considering different frameworks and taxonomies, including the E.U. Taxonomy. We consider an asset to be green when at least 95% of its revenue can be classified as being derived from green activities, as classified by the International Capital Markets Association. We consider an asset to be transition if it has announced its commitment to net zero with a credible target and plan and is making meaningful contributions to global emissions reduction.

The path ahead

Navigating the risks and opportunities presented by the whole economy transition required by climate change will be a defining challenge of the 21st century. It will require courage and extraordinary skill on the part of policy makers, regulators, executives, boards, investors and individual citizens. As an investor, we join this effort not just as a capital provider but as a capital partner, one that brings experience and expertise as well as financial resources to the table.

We are committed to doing our part in the best interests of helping to keep the Canada Pension Plan secure and solvent for generations to come, and are delivering our statutory mandate.

II. How we invest in the path to net zero

Our statutory mandate supports the long-term financial sustainability of the Canada Pension Plan (CPP) for the benefit of multiple generations of Canadians.

That mandate requires CPP Investments to assist the CPP to meet its obligations to contributors and beneficiaries, maximize returns without undue risk of loss and manage the Fund in the best interests of contributors and beneficiaries. This focus on returns earned and prudent risk management supports the CPP's endurance. Incorporating factors like climate change and the transition to net zero into our decision-making will help us create sustainable value.

We believe the optimal transition to a net-zero economy – one that removes the most GHG emissions from operations, while pursuing opportunities that create value for the business and its stakeholders – is influenced by the interplay between regulation, technological progress, future customer and corporate behaviour, abatement costs, and carbon prices.

We see powerful, converging forces accelerating the path to net zero, including: more stringent regulatory policies, especially in the world's largest economies; growing environmental literacy, transforming household behaviour; changes in corporate practices, brought on by regulation and stakeholder pressure; and technology innovation driven by human ingenuity.

To attract the support of stakeholders (including employees, investors, customers and communities) and manage climate risk, companies will increasingly seek to outperform their peers in executing transition plans. Businesses will attract capital by developing and deploying new technologies that help mitigate climate change.

Forces accelerating the global path to net zero

Leading companies will need to beat their industries' transition pathways. These pathways will be industry-specific across all sectors of the economy and evolve based on regulation, innovation and carbon prices.

Capital will flow toward industry leaders to fund innovation. We seek out companies across all industries that are driving and demonstrating carbon reduction innovations and practices that we believe will lead to maximized returns, from increased efficiency and renewable energy to carbon capture and storage technologies, sustainable food, real estate and transportation.

Investors will play the role of capital partner, not just capital provider. With expertise, resources and experience across a highly diversified global portfolio, we can help inform companies' transition strategies and identify innovation opportunities.

Capital markets are a powerful lever. Market mechanisms will develop to provide a clearing price for carbon that creates a reference to reward abatement and penalize emissions.

Boards are accountable. Boards are responsible for ensuring their management teams develop long-term strategies that manage climate risks and opportunities. We expect companies to report on Environmental, Social and Governance (ESG) factors relevant to their industries and investment decision-making. We support and publicly advocate for organizations to align their reporting with the Task Force on Climate-related Financial Disclosures (TCFD).

Active owners will exert influence. We will not support the reappointment of directors where our expectations on climate-related oversight are not being met. As an active manager, we are prepared to make prudent sell decisions, when we conclude companies are at risk of permanently impairing shareholder value.

How CPP Investments is navigating the whole economy transition as an active owner

Our Climate Change Principles help guide our decision-making so we can deliver our mandate against the backdrop of escalating climate risk and opportunities created by supporting the transition of the whole economy towards sustainability.

Principle 1: Invest for a whole economy transition required by climate change.

CPP Investments is structured to capture unprecedented climate change opportunities across the whole economy. In April 2021, we formed our Sustainable Energies Group (SEG) to combine our expertise in renewables, conventional energy, and new technology and service solutions. SEG provides capital for the growing number of market opportunities emerging as the energy sector evolves and global power demand grows, especially for low-carbon energy alternatives. Our Sustainable Energies Group has invested more than $20 billion across the global energy sector and in the last two years alone, we have more than doubled our investments in renewables from $3 billion to $8 billion.

Within SEG, our Innovation, Technology and Services (ITS) team pursues early-stage investments aligned with the energy evolution. A recent addition to the ITS portfolio is our investment in Carbon America, the first vertically integrated carbon capture and sequestration (CCS) developer in the United States to deploy and invest in commercial projects and scale up its proprietary technology.

Similarly, in 2019, our Thematic Investing (TI) team launched its Climate Change Opportunities (CCO) strategy to identify companies responding to physical changes in our environment; regulatory and technological changes; and evolving consumer preferences. Perfect Day, a company pioneering new ways of producing milk proteins without the GHG emissions of dairy herds, is one of many investments in the TI Climate Change Opportunities thematic portfolio.

Additionally, as at June 30, 2021, our real estate portfolio includes 403 green building certified or pre-certified assets across 27 countries.

We seize climate change opportunities across asset classes

Our diversified investment strategy, scale and patient capital affords the flexibility to invest across asset classes into all types of climate change opportunities. Our climate-related investments span investment strategies across the entire Fund. For example:

Our Fundamental Equities Asia portfolio includes ReNew Power, a leading Indian renewable energy developer and operator with clean energy capacity diversified across wind, solar, hydro and rooftop solar assets. As of November 2021, ReNew Power has a portfolio with total capacity of 10.3 GW, of which ~7 GW has been commissioned.

Our Active Fundamental Equities portfolio includes Ørsted, a Danish company that is the world's largest offshore wind operator with an installed base of 7.6 GW. Additionally, Ørsted also develops, constructs, and operates onshore wind farms, solar farms, energy storage facilities, and bioenergy plants. In 2021, Ørsted announced that it had joined forces with Yara, the world's leading fertilizer company, to develop a pioneering project aimed at replacing hydrogen generated from fossil fuels with renewable hydrogen in the production of green ammonia, with the potential to abate more than 100,000 tonnes of CO_2 per year.

WORLD'S FIRST PENSION FUND TO ISSUE GREEN BOND

Our debut green bond in 2018 was oversubscribed by two-fold, highlighting a growing appetite for green assets. We achieved another first in January 2019 with the inaugural sale of a euro-denominated green bond issued by a pension fund manager. As of June 30, 2021, we have issued green bonds in four different currencies (AUD, CAD, EUR and USD) and have six outstanding green bond issuances totalling over $5 billion. Green bonds provide us with additional funding as we pursue long-term investments eligible under our Green Bond Framework. The Framework determines which projects are eligible for green bond proceeds and, as of October 2021, includes renewable energy (wind and solar), green buildings (LEED Platinum certified), low carbon/clean transportation and energy efficiency.

Principle 2: Evolve our strategy as transition pathways emerge and global standards for decarbonization materialize.

The environmental sustainability of our investments is increasingly important to the financial sustainability of the CPP Fund. It follows that the performance of the portfolio we manage depends in part on how well it transitions with a climate-resilient economy and our ability to adapt to the evolving landscape. With this in mind, we contribute to global standard-setting that fosters economy-wide GHG emissions reduction and company-specific disclosure on the path to net zero.

To facilitate better investment decisions, we have long advocated for greater transparency from all companies and standardization of ESG disclosure, including our participation as one of the only two global pension fund managers represented on the Task Force on Climate-related Financial Disclosures (TCFD).

Additionally, we believe it's time to evolve from a theoretical top-down view of what should be done across sectors, to a bottom-up view of steps individual businesses can actually take today to abate emissions. In order to facilitate this process, we have proposed a framework and standardized template to measure the capacity of organizations to abate their GHG emissions. Read more about this proposed decision-useful, consistent and auditable approach to transition reporting here.

Because we are invested widely and deeply across global markets, we also continue to advocate for system-wide enhancements, including the use of our voting power on initiatives such as board diversity, governance, human rights and climate change.

THE FUTURE OF CLIMATE CHANGE REPORTING

CPP Investments proposes market adoption of a reporting framework that will direct companies to project their capacity to abate greenhouse gas (GHG) emissions. This "Abatement Capacity Assessment" framework would help fill critical information gaps for boards, executives, regulators and investors about a company's ability to abate GHG emissions. We invite all interested parties to join us in accelerating the greening of our economy by helping us to refine this proposal and unlock its potential to become a decision-useful, consistent and auditable approach to transition reporting. Click here for more details on this proposed framework.

CONTRIBUTING TO THE DEVELOPMENT OF GLOBAL STANDARDS FOR CLIMATE-RELATED DISCLOSURE

As one of only two global pension funds represented on the TCFD, we continue to support its implementation as the industry standard for climate-related disclosure. Similarly, our Head of Sustainable Investing represents CPP Investments on SASB Standards' Investor Advisory Group (IAG). SASB Standards guide the disclosure of financially material sustainability information by companies to their investors. The IAG includes senior investment professionals from over 50 global asset managers committed to improving ESG-related management and disclosure.

CPP Investments is also a member of the Taskforce on Scaling Voluntary Carbon Markets (TSVCM), a global private-sector initiative working to scale up robust, transparent and liquid markets for the trading of voluntary carbon credits in support of net-zero goals. Given the importance of an economic incentive to catalyze and support transition activities, we view this initiative as a critical opportunity to deliver a market-led solution.

Principle 3: Exert influence to create value and mitigate risk.

Climate change has become a critical focus of boardrooms globally and of our approach to active ownership. We are committed to supporting our portfolio companies as they identify and mitigate climate risk.

As an active owner, we seek to thoroughly evaluate our portfolio companies' climate change strategies and integrate our assessments into our valuations and ongoing asset-management strategies. Many of our portfolio companies that are high carbon emitters have already set carbon neutrality as an achievable goal, and we support them in those efforts. Carbon neutrality, however, is just one part of a company's path to net zero.

We communicate the clear expectation that it is the responsibility of company boards to identify and oversee climate risk and move their companies along an appropriate transition pathway. It is our responsibility to hold those boards accountable for that risk, and we do. Our large, active ownership positions in many companies provide us a direct way to express our views to management and directors as they exercise their duty. Additionally, exercising our voting rights is one of our most effective levers to spur boards to assume this responsibility and influence change.

CONDUCTING CLIMATE-RELATED RISK ASSESSMENTS BEFORE INVESTING

Climate change has forced prudent investors to hedge against climate risk, making the data related to that risk more important. Since 2019, we quantitatively assess climate change-related impacts in our most material individual investments, in both public and private markets. We also require our General Partners and external managers to complete an ESG disclosure at the start of each relevant new private investment and we follow up annually to capture updates on all ESG matters that impact our investment theses.

FOCUSING BOARDS ON CLIMATE CHANGE

Our Proxy Voting Principles and Guidelines make clear that we may conclude a board is failing to act in the best interests of a company where it fails to demonstrate adequate oversight of climate risks and opportunities. For companies that contribute the largest climate change risks in our public equities portfolio, where boards have failed to demonstrate adequate consideration of physical and transition-related impacts from climate change, we will vote against the reappointment of the chair of the committee responsible for oversight of climate change (or an appropriate equivalent committee). We will consider escalating this voting practice to the entire risk committee or equivalent, the board chair and entire board where we see inaction in addressing this area in future years. We report on the number of companies we actively vote against under this new climate change voting policy in our Report on Sustainable Investing. We introduced our climate change voting policy in March 2021.

AS OF JUNE 31, 2021:

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

THIS RESULTED IN:

53 *votes against directors*

17 *companies where our engagement led to material commitments and improvements on climate-related disclosures and practices*

When we conclude a company is at risk of permanently impairing its value, we will reflect this in our investment decisions. This is the basis of active management, the very foundation of our strategy. Identifying risks and opportunities associated with the energy evolution is central to many of our investment decisions. We seek to invest in companies well-positioned to innovate and support the transition to net zero. The path to net zero will be non-linear; innovations may alter transitions. With this in mind, we will continue to keep our *Proxy Voting Principles and Guidelines* current.

Principle 4: Support a responsible transition based on our investment beliefs and expertise.

The likelihood of reaching global net-zero goals will be significantly improved if the ingenuity, expertise and resources of existing companies, including some current high emitters, are retained in our global toolkit. Our ability to take large stakes in enterprises, and hold those stakes for the long term, gives us additional tools to support the overall transition to net zero and generate superior long-term investment returns. These long-duration investments across industries also help us accumulate substantive insights we can apply across our portfolio. We learn from our portfolio companies and they in turn seek our perspective.

At CPP Investments, we believe blanket divestment from oil and gas companies detached from investment considerations means losing our ability to enable the energy evolution and apply constructive influence through impactful engagement. Yet, inaction is not an option. That's why we are using our influence to encourage companies to develop viable transition strategies.

As the transition progresses, we expect many high-emitting companies will innovate, developing new, greener technologies to support a decades-long transition. We believe helping essential, high-emitting businesses decarbonize is critical to addressing climate change and that helping them successfully navigate the economy-wide evolution to a low-carbon future will preserve and deliver value for patient long-term investors like CPP Investments. As such, we recently introduced a new investment approach which aims to identify attractive opportunities to fund and support companies that are committed to creating value by lowering their emissions over time, consistent with CPP Investments' time horizon advantage. Though encumbered with high emissions today, we believe select companies can profitably transition over the mid- to long-term, with the right interplay of leadership, accountability, innovation and capital. Learn more about our new decarbonization investment approach here.

An example of the type of innovation that has enormous potential to enable such a transition is the sequestration of carbon emissions through carbon capture, utilization, and storage (CCUS) technology. We are invested in Canada's largest CCUS project through Wolf Midstream, a portfolio company that owns the Alberta Carbon Trunk Line. This large-scale CCUS project can transport up to 14.6 million tonnes of CO_2 per year, equal to the impact of capturing the CO_2 from more than 3 million cars in Alberta.

INVESTING IN TECHNOLOGICAL ADVANCEMENTS

We factor in the impact of technological advances in the energy industry as we make our investment decisions. One such example is our growing exposure to companies that will benefit from improvements in battery technology and related demand growth stemming from the electrification of cars. Sila Nanotechnologies, a company in our Thematic Investing portfolio, specializes in the design and manufacture of silicone anode material that greatly improves efficiency for batteries for use in automobiles and electronics.

Principle 5: Report on our actions, their impacts and our portfolio emissions.

Appraising the full extent of our portfolio's emissions and their future trajectory requires considerable disclosure from the companies in which we invest. That is why we work with companies to improve the quantity, quality and comparability of climate disclosures by advocating for broad alignment with the Task Force on Climate-related Financial Disclosures (TCFD).

We are undertaking analysis to define and measure GHG emissions across the Fund so that our stakeholders will be able to clearly gauge its status. We do not expect linear year-over-year decreases in our carbon footprint,[3] but rather an absolute decline over decades.

We will continue to report in alignment with current TCFD guidelines. This includes reporting our Weighted Average Carbon Intensity and carbon footprint, measuring the carbon intensity of our investment portfolio and the amount of carbon emissions that are generated per $1 million of portfolio value, respectively.

As at June 30, 2021, the Weighted Average Carbon Intensity and carbon footprint of the Fund are estimated to be 148 tonnes/$M revenue and 51 tonnes/$M invested respectively.[4] It is important to note that these carbon metrics are impacted by the carbon emissions reported by the companies in our portfolio and sensitive to financial metrics such as market value and revenues. Fluctuations in these financial metrics can significantly impact actual changes in reported emissions in any given year. Further, if we identify short-term opportunities to invest in a carbon-intense industry, with the aim of supporting their transition and generating superior returns for beneficiaries while doing so, carbon metrics likewise may fluctuate in the short term but improve over the long term.

See our *Report on Sustainable Investing* for a full list of our carbon footprint metrics. Climate and net-zero specific metrics and methodologies continue to evolve, with new ones being introduced on a regular basis. We will continue to monitor advancements in this area and consider adopting new metrics and/or methodologies as applicable.

For more on CPP Investments' approach to energy, climate and the environment, please see our *Report on Sustainable Investing*.

3. Based on our long-term capital ownership and measured in tonnes of CO_2 e/$ million invested.
4. These figures are based on Scope 1 and Scope 2 GHG emissions for our Total Fund for non-government-issued securities and our carbon footprint metric is based on our long-term capital ownership.