



CANADIAN PENSIONS DASHBOARD FOR RESPONSIBLE INVESTING

2ND EDITION

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Disclaimer: The authors take all responsibility for the content of the report. Expert Advisory Panel members are acting in a personal capacity to help guide this initiative to achieve positive impact. Their involvement does not necessarily imply their agreement or endorsement of all aspects of the report's content. The views expressed do not necessarily represent the views of The Trottier Family Foundation.

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EXECUTIVE SUMMARY

Among large Canadian pensions, the bar for what constitutes best practice for responsible investment is rising rapidly. In just one year, the number of large Canadian funds with a commitment to achieving net-zero emissions by 2050 rose from two funds to 9 (representing \$1.8 trillion or 81% of total pension fund assets evaluated), with five of those funds having disclosed interim targets for emissions and sustainable investment allocations. Sustainable investments went from \$163 billion to \$276 billion, representing nearly 13% of the pension funds' \$2.2 trillion in assets versus 7% of \$2.1 trillion last year. We estimate that a figure representing 20% of total assets is required in order for pension funds to play their role in financing the transition to a sustainable low-carbon economy. These numbers show that sustainable investments are a prime-time part of asset allocation, but they should also be taken with a grain of salt. While there is a broad overlap in definitions, the definition of "sustainable assets" is far from standardized. It is expected that the sustainable taxonomy freshly developed by the Sustainable Finance Action Council will be a foundation for improvement on this front.

Funds made a little progress in reporting on their portfolio carbon intensities, but OTPP reported a substantial 32% reduction in portfolio carbon intensity, while OMERS reduced its intensity by 26% and AIMCO reported a 18% improvement. It is encouraging that sustainability is being baked into the governance function. A total of ten large funds (up from four last year) now tie executive compensation to the achievement of sustainability targets, although work remains to be done fleshing out the details of these links. We also saw a marked increase on environmental and social (E&S) competencies among pension fund board directors, with five fund boards being composed of 50% or more competent members, while the average of E&S-competent board members across the funds more than doubled, reaching 34%. On the composite leadership diversity metric, which is an assessment of both gender and racial diversity for the executive management team and board of directors of each fund, the average diversity was 26%, indicating virtually no progress since the first iteration of the Canadian Pensions Dashboard for Responsible Investing (the Dashboard) was published in 2021.

From a risk return perspective, it is notable that even the past year's banner performance of oil and gas stocks was not enough to pull the category out of the dungeons when it comes to total returns over the past 10 years. Most notable of all was the staggering 368% cumulative return (double that of the broad market) generated by the 430 companies focused on providing sustainable solutions, illustrating the high stakes of ensuring that assets are aligned with sustainability mega-trends. We look forward to tracking progress in the coming year as more funds add material details and texture to their reporting and targets, while increasing allocations to the sustainable solutions that will power future returns and a planet worth retiring on.

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10-POINT SUSTAINABLE PENSIONS CHECKLIST

01

Does the fund have a science-based net-zero commitment backed up with transparently reported interim emissions and green allocation targets?

02

What % of the fund's total assets under management (AUM) is invested in credible and transparently defined sustainable solutions with exposure breakdown by asset class and entity level provided on an annual basis? [20%+ of total AUM*]⁽¹⁾

03

Does the fund disclose the total portfolio carbon intensity with breakdown by asset class while achieving emissions-intensity reduction of at least 7% per annum?

04

Does the fund have a publicly disclosed pay link with detail on the target and the % of variable compensation linked to the target?

05

What is the fund's ratio of highest paid employee total compensation to median employee total compensation? [under 8:1*]

06

What % of the executive team and board of directors self-identify as a visible minority or Indigenous person? [27%+*]

07

What % of the executive team and board of directors self-identify as non-male? [50%+*]

08

What % of total E&S resolutions did the fund support in the most recent year? [75%+*]

09

What % of the board of directors has demonstrated E&S competency either by serving a sustainable-economy-focused organization, serving in an E&S-focused role or publishing in notable E&S publications? [30%+*]

10

Does the fund have a policy to ensure that both its and its investee political activities are aligned with its climate priorities?

* Indicates best practice.



OVERVIEW

The Canadian Pensions Dashboard for Responsible Investing examines how major Canadian pension funds are integrating ESG factors into their governance and impacts. This Canadian-made Dashboard incorporates best practices from similar efforts in other countries. It aims to help fund decision-makers demonstrate credible progress, have more thoughtful and informed conversations with their beneficiaries and other key stakeholders around challenging issues, and help them raise the bar.

Climate change is an existential financial risk for pensions, both in the short- and long-term, as well as at the investment and financial-system levels. Meeting pension obligations for a new beneficiary who will retire in 30 years is inextricably linked to success or failure to manage climate risk. Expectations for pension funds to adopt credible science-based targets (i.e., net-zero) and climate action plans and for new financial regulation to level the playing field across the sector are firmly grounded in the legal requirement to mitigate growing climate-related financial risks, and risks to the macro financial system. Given that climate change affects everything, including risk-adjusted financial returns, integrating climate change into fund management is a fundamental requirement for pension funds to meet their fiduciary responsibility.

The second iteration of the Dashboard has been developed collaboratively, with Corporate Knights leading the Dashboard analysis and Smart Prosperity Institute offering policy analysis, together with input from an expert advisory panel consisting of specialists in sustainable investing and pension funds.

Our assessment targeted the 28 largest funds by assets under management, with 14 providing detailed disclosure that permitted meaningful analysis. The focus was on entities that control investments and ESG integration. The Dashboard tracks the progress that 11 funds⁽²⁾ that were included in the first edition of the Dashboard have made across a suite of sustainability indicators from 2020 to 2022, with additional insights into three funds that have been added to the roster: Desjardins Group Pension Plan (DGPP), Investment Management Corporation of Ontario (IMCO), and University Pension Plan (UPP).

The governance part of the Dashboard includes a review of the pension funds' executive compensation alignment, as well as board diversity from a gender, racial and E&S competency perspective. The impact part of the Dashboard has a solutions focus, including investment exposures, financial results and engagement practices. The analysis includes all asset classes insofar as disclosure allows.

Why This Report?

The Canadian pension fund sector is a source of income security and financial prowess respected around the world. In total, the Canadian pension sector controls over \$4 trillion of assets, with more than half that total held by just the 35 largest funds (those with at least \$5 billion in assets). As the world moves from incremental to step-change speed in the sustainability transition, being on the leading edge as an asset allocator has large implications for the solvency and relevance of our pension fund system. This report is written with the intent of providing insights to ensure our pension funds; the "Maple Revolutionaries" are on the leading edge of the sustainability revolution that will determine the wealth of nations in the 21st century.



AIMS & OBJECTIVES

The main aims and objectives of the Dashboard are to:

- act as a navigation tool to highlight ESG integration;
- focus on a limited set of indicators to measure progress, which are easily understandable by a broad audience and use mostly publicly available information;
- identify sector-specific challenges and other key issues that are not being addressed in the sustainable finance landscape;
- highlight best practices by corresponding with key stakeholders in the sustainable finance space, including the pension funds themselves; and
- Track the progress that these funds are making toward their stated sustainability targets and across a wide range of ESG indicators.

The Dashboard builds on successful experiences elsewhere. Different global benchmarks such as the Global Pension Transparency Benchmark,⁽³⁾ the Asset Owners Disclosure Project⁽⁴⁾ and the Responsible Asset Allocator Initiative⁽⁵⁾ assess institutional investors' sustainability and disclosure practices. At the country level, the Dutch Association of Investors for Sustainable Development (VBDO) has a responsible investment benchmark for pension funds.⁽⁶⁾ Their aim is to motivate these funds to take sustainability into account in their investment decisions, challenge the pension funds in all aspects of the responsible investment process and raise awareness to improve performance.

The Canadian Pensions Dashboard for Responsible Investing is different from its global counterparts. Most of the global and country-level benchmarks focus on rankings and identifying disclosure practices. The Dashboard adds value to the Canadian economy because it:

- refrains from imposing ranks on different funds. Instead, the Dashboard puts practices of the top pension funds on the same canvas. This helps promote awareness and understanding of different practices by the funds. The aim, with this constructive perspective, is to promote joint learning and raise the bar for all pension funds;
- shows investment allocations for different asset classes (to the extent possible), together with sustainability governance practices and financial performance measures, with an emphasis on allocating funds toward environmentally sustainable solutions;
- puts emphasis on net-zero-emissions commitment at the portfolio level, including investment plans and carbon footprint measurements; and
- provides a medium to foster dialogue among pension funds and other stakeholders, namely government and beneficiaries.

With the release of the *2022 Canadian Pension Climate Report Card* from Shift: Action for Pension Wealth and Planet Health, a charitable initiative that works to protect pensions and the climate, the Canadian sustainable investment Dashboard has a local counterpart. Shift performed a rigorous analysis on the climate policies and strategies employed by 11 Canadian funds, all of which are included in the 2023 Dashboard, in addition to four international pensions. Their report concluded that Canadian pension funds are far from fulfilling their fiduciary duty to protect their plan members' long-term interests due to current approaches being employed for managing climate-related risks.⁽⁷⁾









SUMMARY FINDINGS

Table 1 – Summary Findings

Fund	5-Year Annualized Rate of Return ^(a)	Total AUM (CDN\$ mm)	% AUM in Sustainable Solutions 2020	% AUM in Sustainable Solutions 2021	Annual Carbon Footprint (tCO ₂ e/M\$)
AIMCO	7.8%*	\$168,300*	3%	8%*	47* (FE ^(a))
BCIMC	8.3%**	\$211,100**	1%	1%**	164*** (WACI ^(b))
CDPQ	8.9%*	\$419,800*	9%	17%*	41* (FE)
CPCP	9.3%*	\$32,322*	1%	4%*	
CPPIB	10.0%**	\$539,366**	11%	12%**	46** (FE)
DGPP	12.3%*	\$18,218*	N/A	9%*	181* (WACI)
HOOPP	10.5%*	\$114,400*	8%	7%*	40* (FE)
IMCO	N.A.	\$79,000	N/A	14%	47 (FE)
OMERS	7.5%*	\$120,919*	3%	15%*	129* (WACI)
OPTrust	9.0%*	\$27,264*			
OTPP	8.4%*	\$241,600*	14%	14%*	32* (FE)
PSP	9.0%**	\$230,500**	6%	20%**	166** (WACI)
UPP	N.A.	\$11,782	N/A		139* (WACI)
VEST	7.6%*	\$21,000*			205* (WACI)

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Basic colour scheme. See Appendix for detailed description of colour coding for each KPI.

	Best practice relative to objective standard		Yes	*	As of 31/12/2021
	Making progress		No	**	As of 31/03/2022
	Much more progress needed or no information		ND	***	As of 31/03/2021

(a) FE denotes the footprint was calculated using the financed emissions method

(b) WACI denotes the footprint was calculated using the weighted average carbon intensity method



SUMMARY FINDINGS

Table 1 – Summary Findings

Fund	Net Zero Target	Sustainability Pay Link	CEO/Average Employee Pay	Composite Leadership Diversity ⁽⁹⁾	% E&S Resolutions Supported	Board E&S Competency
AIMCO	⊗	⊗	11:1	29%	48%	27%
BCIMC	⊗	⊗	14:1	17%	61%	14%
CDPQ	✓	✓	7:1	32%		14%
CPCP	⊗	✓		27%	85%	56%
CPPIB	✓	✓	11:1	37%		67%
DGPP	⊗	✓		9%	58%	27%
HOOPP	✓	✓		20%		6%
IMCO	✓	✓	7:1	22%		56%
OMERS	✓	✓	23:1	22%		20%
OPTrust	✓	⊗	8:1	25%	45%	50%
OTPP	✓	✓	14:1	30%		46%
PSP	✓	✓	12:1	27%		50%
UPP	✓	✓	11:1	43%		21%
VEST	✓	⊗	8:1	28%	57%	33%

Basic colour scheme. See Appendix for detailed description of colour coding for each KPI.

	Best practice relative to objective standard
	Making progress
	Much more progress needed or no information

	Yes
	No
	ND

* As of 31/12/2021
 ** As of 31/03/2022
 *** As of 31/03/2021



METHODOLOGY

The objective of the Dashboard is to showcase best-in-class management of pension funds to advance ESG objectives, to motivate and inform practice improvement among pension funds, and to pilot an approach that could in the future be applied to other institutions and ecosystems. Consultation with members of an expert advisory panel was conducted for the purpose of selecting the performance indicators that would build the most comprehensive dashboard for measuring sustainable investment performance for pension funds. An assessment of the performance of 14 major Canadian pension funds on sustainable impact, sustainable governance and financial performance indicators was conducted, drawing from publicly available documents.⁽¹⁰⁾ These indicators included annualized rates of return, breakdowns of investments by asset classes, allocations of capital to sustainable solutions, measurements of carbon footprints, active sustainability commitments, and remuneration practices, among other measures. The preliminary findings were presented to the funds, allowing a period for feedback and providing the opportunity to address any gaps in the funds' public disclosure documents. A detailed description of the methodology can be found in the Appendix.





DASHBOARD RESULTS

SUSTAINABLE IMPACT

Table 2 – Sustainable Solutions

Fund	Total AUM (CDN\$ mm)	Total AUM in Sustainable Solutions (CDN\$ mm)	% AUM in Sustainable Solutions	Sustainable Solutions Definition	Asset Class Covered
AIMCO	\$168,300	\$14,000	8%	Green investments are defined based on generally accepted definitions of "green investments," such as the OECD's Annual Survey of Large Pension Funds and Public Pension Reserve Funds and includes: equity investments in pure play green companies, labelled green bonds, investments in renewable energy in private infrastructure, private renewable resources investments, which includes forestry and agriculture, and Canadian and U.S. commercial real estate investments with green building certifications.	<ul style="list-style-type: none"> Fixed income Real estate Infrastructure
BCIMC	\$211,100	\$2,800	1%	Climate solutions as defined by SDI AOP taxonomy, green bond taxonomy, green building certification and climate-themed investment strategies.	
CDPQ	\$419,800	\$71,000	17%	Low-carbon assets includes companies received SBTi certification for their decarbonization target and investments that meet the Climate Bonds Initiative criteria used to define low-carbon solutions investments.	<ul style="list-style-type: none"> Real estate Renewable energy Other
CPCP	\$32,322	\$1,342	4%	Invested in renewable energy (15% of the infrastructure portfolio), which includes wind power, hydroelectric power, solar power, biomass and energy from waste. Invested in buildings that have LEED or BOMA BEST ratings (environmental assessment and sustainable building certification programs for real estate).	<ul style="list-style-type: none"> Infrastructure Real estate
CPPIB	\$539,366	\$66,000	12%	An asset is considered to be green when at least 95% of its revenue can be classified as being derived from green activities, as defined by the International Capital Market Association (ICMA). We adopt the highest end of the 75% to 95% range that the EU Taxonomy uses to consider assets "strongly climate-aligned." We consider an asset to be in transition if the company is in a high-emitting sector and has announced a commitment to net-zero with a credible target and transition plan and is making meaningful contributions to global emissions reductions.	

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CPIB	\$539,366	\$66,000	12%	Assets are eligible if they obtain certification from a credible third party, such as the Science Based Targets initiative (SBTi) for target setting. In addition, companies that have substantial green revenues that currently fall short of the green asset threshold (i.e., 95% minimum) may also be considered for inclusion as transition assets, provided they have a credible plan to grow their green revenue share over time.	
DGPP	\$18,218	\$1,675	9%	Investments that have ESG objectives and are linked to the creation of positive effects (impact) in their investment objectives.	<ul style="list-style-type: none"> Public equity Fixed income Real estate Infrastructure Renewables
HOOPP	\$114,400	\$7,748	7%		<ul style="list-style-type: none"> Public equity Fixed income Real estate Infrastructure
IMCO	\$79,000	\$11,060	14%	<p>IMCO defines sustainable solutions as companies or projects that derive at least 50% of their business from products or services that provide climate or social solutions and address one or more of the UN Sustainable Development Goals (SDGs). Product or service threshold is based on relevant financial metric, depending on factors such as business model and business life-cycle stage.</p> <p>Companies that are involved in significant ESG controversies or cause significant harm would be ineligible to be included as sustainable solutions.</p> <p>There are two sub-categories of sustainable solutions:</p> <p>Climate solutions: Investments in companies where a majority of their business is derived from climate-solutions activities. We define climate solutions in line with ICMA Green Bond Principles, which include: renewable energy/alternative fuels, energy efficiency/clean technology, green buildings, clean transportation, climate change adaptation, circular economy/recycling, pollution prevention and emission control, sustainable agriculture and natural capital, sustainable water and wastewater management, terrestrial and aquatic biodiversity.</p> <p>Social solutions: Investments in companies where a majority of their business is derived from social-solutions activities. We define social solutions in line with ICMA Social Bond Principles, which include: access to essential services, affordable basic infrastructure, affordable housing, food security and sustainable food systems.</p>	
OMERS	\$120,919	\$18,000	15%	Investments in green assets including green buildings, renewable energy and energy efficiency assets.	<ul style="list-style-type: none"> Infrastructure
OPTrust	\$27,264				

OTPP	\$241,600	\$33,000	14%	Green investments are companies that generate clean energy, reduce demand for fossil fuels and build a sustainable economy. Investment in green assets including a stake in environmental markets innovator and natural resource manager GreenCollar and a portfolio of renewable energy assets from NextEra Energy.	
PSP	\$230,500	\$46,500	20%	PSP's green assets include investments in sustainable infrastructure, renewable energy, green buildings and certified sustainable forestry. Investments in low-carbon activities that lead to positive environmental impacts, in accordance with PSP's bespoke Green Asset Taxonomy.	<ul style="list-style-type: none"> Public equity Fixed income Real estate Infrastructure Renewables
UPP	\$11,782				
VEST	\$21,000				

SUSTAINABLE SOLUTIONS

Disclosure on investments in solutions varies significantly across the funds, with 10 of the 14 funds covered in this report providing definitions on what constitutes sustainable (low-carbon) investments within their portfolios. Eleven of the 14 funds disclose the total amount invested in self-defined low-carbon solutions, which accounts for more than \$276 billion, representing nearly 13% of total assets under management (AUM) (\$2.2 trillion). This is a growth of more than 50% from the disclosed solutions of \$163 billion in the first iteration of this report that was published in 2021, partially attributable to new fund additions that include IMCO and DGPP. Although not providing a concrete definition for what constitutes sustainable solutions, HOOPP disclosed (via direct correspondence) that \$7.7 billion of their total AUM is invested in solutions across various asset classes, including green buildings and clean energy infrastructure. If all 14 funds reported on sustainable solutions, the aggregate amount would have been much higher.

PSP is a leader among the funds, with 20% (\$46.5 billion) of its total portfolio AUM invested in sustainable solutions, defined as investments that align with the PSP Green Asset Taxonomy.⁽¹¹⁾ CDPQ has the second-highest proportion of assets invested in solutions at 17% (\$71 billion⁽¹²⁾), followed by OMERS at 15% (\$18 billion⁽¹³⁾), and IMCO and OTPP, who both report 14% of total AUM invested in solutions (\$11 billion⁽¹⁴⁾ and \$33 billion⁽¹⁵⁾ respectively). CDPQ has the largest volume of sustainable solutions, totaling \$71 billion, with CPPIB reporting the second largest portfolio of solutions at \$66 billion, which accounts for 12% of its total AUM.⁽¹⁶⁾

There was an average growth rate in the proportion of assets invested in sustainable solutions of 168% across the nine funds that disclosed solutions data from the first edition of this Dashboard. CPCP has exhibited the largest growth in sustainable solutions, reporting a 507% increase in low-carbon investments (\$221 million to \$1.3 billion⁽¹⁷⁾), while HOOPP (-2%) and BCIMC (-7%) are the only funds to report decreased exposure to solutions. Disclosure on investments across the asset classes has improved, as it was mainly limited to infrastructure investments in the 2021 report, whereas numerous funds are now reporting low-carbon investments in various asset classes, including real estate, public equities and fixed income.

RED AND GREEN FLAGS

Red flags are exclusionary screens that Corporate Knights uses to identify and screen out companies involved in certain products, services or behaviours counterproductive to sustainable development. Examples include weapons, tobacco and companies that lobby to block climate change policy. The full list of the 22 red flags employed by Corporate Knights can be found in the Appendix. Green flags are companies with no red flags that have over 20% of their revenues determined to be sustainable as per the definitions in the Corporate Knights Sustainable Economy Taxonomy. The figures in Table 3 list the percentage of disclosed public equity AUM that were mapped to the Corporate Knights database and fall under the red and green flag categories. CDPQ has the highest proportion of green flag exposure, representing 21.8% of its disclosed public equity AUM, whereas 15.6% of BCIMC's portfolio consists of companies that are red flagged, which is the highest among the funds.

Table 3 – Red and Green Flag Holdings

Red Flag Market Value %	Fund	Green Flag Market Value %
12.6%	AIMCO	12.8%
15.6%	BCIMC	12.7%
8.4%	CDPQ	21.8%
8.7%	CPCP	12.4%
9.9%	CPPIB	12.8%
3.9%	DGPP	10.5%
5.8%	HOOPP	8.2%
	IMCO	
13.5%	OMERS	8.9%
8.6%	OPTrust	7.5%
6.6%	OTPP	5.0%
13.2%	PSP	13.6%
	UPP	
8.4%	VEST	10.5%

The Corporate Knights Sustainable Economy Taxonomy

In 2018, Corporate Knights made a five-year commitment to developing a taxonomy for measuring corporate contributions to the sustainability transition by mapping revenues and investments against defined standards of “sustainable production,” including relevance to the UN Sustainable Development Goals. The goal is a global standard for calculating sustainable revenue and sustainable investments that is public, free of charge, that is integrated into the segmented reporting guidance by global accounting standards-setting bodies, and that will complement the reporting of conventional ESG metrics.

Table 4 – Carbon Footprint

Fund	Measurement Description	Carbon Footprint (tCO ₂ e/M\$)	% AUM Covered	Asset Classes Covered
AIMCO	Financed Carbon Emissions Intensity (tCO ₂ e/\$M).	47 (FE)	87%	Public equity, Private equities, Fixed income, Infrastructure, Real estate, Renewable resources
BCIMC	Measure of all asset classes under the market-value-based approach (tCO ₂ e/\$M invested). Public equities are also measured under the TCFD-recommended WACI calculation.	164 ⁽¹⁸⁾ (WACI)	100%	Public equity, Fixed income, Private markets, Real estate
CDPQ	The carbon footprint of an asset corresponds to its direct or indirect greenhouse gas emissions (Scopes 1 and 2) converted into equivalent tons of CO ₂ as defined by Greenhouse Gas Protocol (tCO ₂ e/M\$ invested).	41 (FE)	76%	Equity markets, Fixed income, Private equities, Infrastructure, Real estate
CPCP				
CPPIB	Long-term capital ownership method (tCO ₂ e/\$M invested).	46 ⁽¹⁹⁾ (FE)	100%	Non-government holdings, Government-issued securities
DGPP	Carbon intensity of our own investments compared to benchmark indexes (weighted average carbon intensity Scope 1 and 2).	181 ⁽²⁰⁾ (WACI)	40%	Public equity, Corporate fixed income
HOOPP	We included Scope 1 and Scope 2 emissions, as well as some Scope 3 emissions for select real estate assets. We use the ownership method as recommended by the Partnership for Carbon Accounting Financials and report our portfolio carbon footprint in CO ₂ e per million dollars invested. We have included long positions only; short positions are not included and have not been netted (tCO ₂ e/M\$ invested).	40 (FE)		
IMCO	We calculated our financed emissions in accordance with the PCAF guidance and the Greenhouse Gas Protocol. We include financed Scope 1 and Scope 2 emissions in our financed emissions calculation (tCO ₂ e/M\$ invested).	47 (FE)	70%	Public equity, Private equities, Global credit, Real estate, Infrastructure

OMERS	WACI measures the portfolio's carbon efficiency and considers total emissions relative to the business's revenue and the weight of the asset in the OMERS portfolio. We report annually on overall carbon footprint and WACI.	129 (WACI)	95%	<ul style="list-style-type: none"> Public equity Fixed income Real estate Private equities Infrastructure
OPTrust				
OTPP	Our approach is informed by the Partnership for Carbon Accounting Financials. Using the enterprise value-based methodology: (OTPP's Equity + Debt in issuer/Enterprise Value) * Scope 1 and 2 emissions (tCO ₂ e/M\$ invested).	32 (FE)	70%	<ul style="list-style-type: none"> Public equity Infrastructure Natural resources Public equity Real estate
PSP	PSP measures its footprint using the weighted average carbon intensity (tCO ₂ e/M\$ revenue) metric.	166 (WACI)	87%	<ul style="list-style-type: none"> Public equity Real estate Infrastructure Private markets Natural resources Credit investments
UPP	UPP measures its footprint using the weighted average carbon intensity (tCO ₂ e/\$M revenue) metric.	139 (WACI)	70%	<ul style="list-style-type: none"> Public equity Private markets Infrastructure Fixed income Real estate Private debt
VEST	In our carbon footprint analysis, the primary commonly used metrics are Financed Carbon Emissions (tonnes of CO ₂ equivalent per million dollars invested) and Weighted Average Carbon Intensity (WACI).	205 (WACI)	53%	

CARBON FOOTPRINT

The approaches employed across the funds to measuring carbon footprints continues to vary significantly, with the coverage of assets included in the footprints ranging from 40% to 100%. While 11 of the 14 funds calculate carbon footprints for their portfolios, only nine currently report a total portfolio footprint. Many funds continue to report under the market approach, which measures the footprint by taking into account only the market capitalization of investments.⁽²¹⁾ However, a growing number (CDPQ, OMERS, OTPP) report under the enterprise value method, which factors debt levels into the equation,⁽²²⁾ and there is an increase in the use of the weighted average carbon intensity (WACI) method, which measures a portfolio's exposure to carbon-intensive companies, expressed in metric tons of CO₂ equivalent per million dollars of revenue.⁽²³⁾ In addition to measuring under the enterprise value method, AIMCO⁽²⁴⁾ and OMERS⁽²⁵⁾ are now also disclosing its total portfolio footprint using WACI, whereas CPPIB has narrowed its scope and no longer reports under WACI, opting to disclose only under the long-term capital ownership approach.⁽²⁶⁾

Six funds provide breakdowns of the carbon intensity of their portfolios by asset class. Despite not reporting a total portfolio footprint, BCIMC calculates a footprint for each of its asset classes, covering 100% of its assets.⁽²⁷⁾ CPPIB is the only other fund that reports complete coverage of its assets, while reporting its footprint segmented by non-government holdings, government issued securities and long-term ownership capital. Increasing its total assets covered from 60% to 70% and decreasing its total portfolio footprint by 32% (enterprise value method), OTPP reports footprints for its public equities, private markets and fixed income asset classes.⁽²⁸⁾ The second largest reducer from 2020 to 2021 was OMERS (-26%), vastly improving the scope of assets included in the calculation from 69% to 95%.

Significantly increasing the percentage of AUM covered by its footprint calculation from 60% to 87%, AIMCO reduced its total portfolio footprint by 18% between 2020 and 2021.⁽²⁹⁾ Two of the new funds added to the Dashboard disclose their footprints by asset class, with UPP recording footprints across its six main asset classes (70% coverage),⁽³⁰⁾ while DGPP discloses footprints for its public equities and fixed income investments, representing 40% of total assets.⁽³¹⁾ OTPP reports the lowest total portfolio footprint at 32 tCO₂e/M\$ invested, followed by HOOPP (40 tCO₂e/M\$ invested⁽³²⁾) and CDPQ (41 tCO₂e/M\$ invested⁽³³⁾). OTPP and UPP are the only funds that provide the footprints of their entire portfolios in addition to a breakdown by major asset class.

Due to several funds changing their method of reporting or the scope of assets included in their measurement since the release of the first iteration of the Dashboard, it is difficult to draw conclusions for the group. As was the case for the first iteration of this Dashboard, there are many data gaps for carbon footprints and there is no common approach to dealing with them, making fund-to-fund comparisons difficult even at the specific asset class level. Additionally, due to changes in method of reporting and the percentage of assets included in the calculation, analyzing the change in portfolio emissions from 2020 to 2021 is also problematic. Because of the inconsistency in the carbon reporting methods employed by the funds, tracking progress toward the stated emission-reduction commitments is challenging.

SUSTAINABLE GOVERNANCE

Table 5 – Shareholder Resolutions

Fund	% E&S Resolutions Supported
AIMCO	48%
BCIMC	61%
CDPQ	
CPCP	85%
CPPIB	
DGPP	58%
HOOPP	
IMCO	
OMERS	
OPTrust	45%
OTPP	
PSP	
UPP	
VEST	57%

SHAREHOLDER RESOLUTIONS

Despite expanding the number of funds included in the analysis in this edition of the Dashboard, there has been a negligible improvement on disclosure of voting records for environmental and social (E&S) resolutions from 2020 to 2021. While the reporting of the number of shareholder resolutions voted on in annual/sustainability reports has increased from eight to 11 funds, only seven of the 14 funds disclosed the number of ESG proposals voted on in 2021 (AIMCO, BCIMC, IMCO, OMERS, OPTRUST, OTPP, DGPP), six of which provided the percentage of E&S proposals supported. A recent report from Investors for Paris Compliance assessed the degree to which the Climate Action 100+ signatories are voting in support of climate resolutions. Their findings indicate that the majority of shareholders voted against more of the resolutions than they supported, which included AIMCO, DGPP, CDPQ and OTPP. On the other hand, BCIMC, CPCP, IMCO and UPP were identified as supporting more climate resolutions than they voted against.⁽³⁴⁾

The number of funds disclosing the percentage of both E&S resolutions that were supported throughout the year increased to 6. In 2021, AIMCO supported 29% of the environmental and 58% of the social shareholder resolutions voted on,⁽³⁵⁾ a significant decrease in the 45% of environmental proposals that were supported in 2020. BCIMC increased the proportion of E&S resolutions supported since 2020, supporting 47% of the environmental and 74% of the social resolutions voted on in 2021.⁽³⁶⁾ VEST, which did not report this figure for 2020, supported 79% of environmental resolutions and 55% of social resolutions in 2021.⁽³⁷⁾ CPCP was the leader amongst the funds, supporting 91% of environmental and 81% of social resolutions, while DGPP and OPTRUST provided a combined figure for E&S resolutions supported, at 45% and 58% respectively.

Table 6 – Net-Zero Commitments

Fund	Commitment	Targets
AIMCO		
BCIMC	BCI is committed to using our influence to drive actions aligned with the global goal of achieving net-zero greenhouse gas emissions by 2050.	<ul style="list-style-type: none"> Invest a cumulative \$5 billion in sustainability bonds by 2025. 30% reduction in public equities carbon exposure by 2025, using 2019 as baseline. By 2030, ensure that at least 80% of carbon-intensive investments have set mature net-zero-aligned commitments or are the subject of direct or collaborative engagement by BCI.
CDPQ	"In 2019, we decided to make a strong commitment: achieve a net-zero portfolio by 2050, with a focus on decarbonizing the real economy."	<ul style="list-style-type: none"> Hold \$54 billion in green assets by 2025. Achieve a 60% reduction in carbon intensity of the total portfolio by 2030. Create a \$10-billion transition envelope to decarbonize the main industrial carbon-emitting sectors. Complete exit from oil production by the end of 2022.
CPCP		

CPPIB	"We commit our portfolio and operations to being net-zero of GHG emissions across all scopes by 2050."	Target of \$130 billion in green and transition assets by 2030.
DGPP		
HOOPP	"In 2022, HOOPP announced its commitment to achieving net-zero emissions in our portfolio by 2050."	<ul style="list-style-type: none"> • 80% of assets providing reported emissions by 2025. • Reduced our portfolio's carbon footprint to 28 tCO₂eq/\$M by 2030, compared to our baseline of 41 tCO₂eq/\$M at the end of 2021. • Committed over \$23 billion towards green investments by 2030.
IMCO	IMCO has committed to achieving net-zero emissions by 2050 or sooner and has developed a robust Climate Strategy and Climate Action Plan to help it reach net-zero GHG emissions by 2050 or sooner.	<ul style="list-style-type: none"> • 50% reduction in portfolio carbon emissions intensity by 2030, as measured against our 2019 baseline. • 20% of the portfolio invested in climate solutions by 2030.
OMERS	OMERS is committed to achieving net-zero greenhouse gas emissions across its total portfolio by 2050.	<ul style="list-style-type: none"> • Reduce carbon intensity of total portfolio by 20% by 2025. • Reduce carbon intensity of total portfolio by 50% by 2030.
OPTrust	OPTrust aims to achieve a net-zero portfolio by 2050, based on the expectation that global progress and momentum continues toward achieving net-zero greenhouse gas emissions over that timeframe.	
OTPP	Net-zero emissions by 2050. "As a leading pension plan, we have the scale and influence to help support global efforts to limit global warming to 1.5°C. This is why we are committed to achieving net-zero greenhouse gas emissions by 2050. With a long commitment to ESG, becoming net-zero is a natural next step for us and aligns with our mission to deliver secure pensions and our purpose to shape a better future. Green investing, direct-emissions elimination and avoidance, and reducing portfolio emissions are key aspects of this commitment."	<ul style="list-style-type: none"> • 45% reduction in carbon footprint of portfolio by 2025. • 67% reduction in carbon footprint of portfolio by 2030. • Target \$50 billion in green investments by 2030.
PSP	Using capital and influence to support the transition to global net-zero emissions by 2050.	<ul style="list-style-type: none"> • Anticipates 20 to 25% GHG emission reduction by 2026. • Increase green assets to \$70 billion by 2026. • Reduce holdings of carbon-intensive assets that lack transition plans by 50% by 2026.
UPP	UPP will transition its investment portfolio to net-zero GHG emissions by 2040, or sooner.	Reducing the carbon footprint of UPP's portfolio by 16.5% by 2025 and 60% by 2030 from a 2021 baseline.
VEST		

NET-ZERO COMMITMENTS

When the Canadian Pensions Dashboard for Responsible Investing was released in November 2021, only two (CDPQ and OTPP) of the 12 funds had made public commitments to achieving net-zero or carbon-neutral portfolios. With the addition of three funds to the Dashboard and the removal of OPB, the number of funds that have committed to achieving net-zero portfolio greenhouse gas emissions by 2050 or sooner has grown to 9. As seen in Table 6, some commitments have been stated without any meaningful targets or a roadmap for reaching this goal (OPTrust), while CPPIB⁽³⁸⁾ has committed to net-zero by 2050, yet its stated target is concerned only with “increasing green and transition assets to at least \$130 billion by 2030.” BCIMC has set short and medium term targets, but falls short of making a concrete commitment to a net-zero portfolio. PSP⁽³⁹⁾ has made significant capital allocation targets by 2026, including increasing investments in green assets to \$70 billion and transition assets to \$7.5 billion, coupled with a moderate anticipated reduction of portfolio emissions of 20 to 25%. A number of funds have taken a more ambitious approach, setting short and medium emission-reduction targets in addition to their commitments to net-zero portfolios by 2050. IMCO⁽⁴⁰⁾, OMERS⁽⁴¹⁾ and UPP⁽⁴²⁾ have committed to a minimum medium-term reduction of 50% in portfolio emissions intensity by 2030, whereas CDPQ and OTPP have set comparable emission-reduction targets, coupled with green asset allocation targets. CDPQ has set a short-term target of holding \$54 billion in green assets by 2025, in addition to creating a \$10-billion transition envelope to decarbonize the main industrial carbon-emitting sectors⁽⁴³⁾, while OTPP has set a medium-term target of \$50 billion in green investments by 2030.⁽⁴⁴⁾

Table 7 – Other Commitments

Fund	Supports Task Force on Climate-related Financial Disclosures (TCFD)	Investor Signatory to Climate Action 100+	UN PRI Signatory
AIMCO	✓	✓	✓
BCIMC	✓	✓	✓
CDPQ	✓	✓	✓
CPCP	⊗	✓	✓
CPPIB	✓	⊗	✓
DGPP	✓	⊗	✓
HOOPP	✓	⊗	✓
IMCO	✓	✓	✓
OMERS	✓	⊗	⊗
OPTrust	✓	✓	✓
OTPP	✓	✓	✓
PSP	✓	⊗	✓
UPP	✓	✓	✓
VEST	✓	⊗	⊗

OTHER COMMITMENTS

Most of the funds have publicly disclosed their alignment with several sustainability initiatives. These include the Task Force on Climate-related Financial Disclosures (TCFD), Climate Action 100+ and the United Nations Principles for Responsible Investing (PRI). All but one fund support the TCFD, a framework for reporting climate-related financial risks across industries,⁽⁴⁵⁾ while nine funds are signatories to Climate Action 100+, an investor-led initiative with the goal of ensuring that the world's largest corporate emitters take necessary action on climate change.⁽⁴⁶⁾ Twelve of the 14 funds are signatories of the PRI, a UN-led initiative based on six principles that are intended to contribute to a more sustainable global financial system.⁽⁴⁷⁾

While none of the funds have published formal policies related to ensuring that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of net-zero emissions, or requirements for investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the path to net-zero, five of the funds (BCIMC, CDPQ, CPCP, IMCO, UPP) are signatories of the Canadian Investor Statement on Climate Change. This statement expects that investees will ensure that lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner.⁽⁴⁸⁾ CDPQ further demonstrates its commitment by disclosing its entire list of industry association memberships.⁽⁴⁹⁾ None of the funds have a policy in place to restrict the expansion of fossil fuel infrastructure, either through the denial of debt or voting against directors, although in 2021 CDPQ announced it would complete its exit from oil production by the end of 2022 and exclude new oil pipelines from any investment activities.

Table 8 – Sustainability Pay Link

Fund	Commitment
AIMCO	
BCIMC	
CDPQ	Since 2018, a component linked to carbon-footprint-intensity-reduction targets has been added to the variable compensation calculation to support CDPQ's strategy to address climate change.
CPCP	ESG performance is now linked to executive compensation.
CPPIB	"Sustainability-related considerations are incorporated into employee objectives and compensation structures, where relevant."
DGPP	Starting in 2022, the external ESG evaluation of the Desjardins Group is part of the variable compensation of all the employees of Desjardins Group, including executives of the Desjardins Group Pension Plan.
HOOPP	ESG-related performance objectives are integrated into variable compensation, appearing in organizational scorecards as well as employee and executive scorecards.
IMCO	ESG is a key priority in IMCO's five-year strategic plan and therefore included annually as a corporate objective. The achievement of corporate objectives, including ESG, are factors that determine compensation for all IMCO staff, including the executive team.
OMERS	Compensation is assessed against taking an active role in how we advance our environmental, social and corporate governance (ESG) agenda.

OPTrust	
OTPP	We've had climate considerations on our corporate scorecard for a number of years, which, in turn, impacts compensation. This year, climate change objectives were given added weight on the scorecard, meaning they will have a greater impact on determining employee compensation in 2020.
PSP	PSP's incentive plan is aligned with PSP's strategy and priorities. The executive team's scorecard/ objectives include priorities and measures of success relating to PSP's climate investing strategy and portfolio-wide ESG data and reporting.
UPP	Sustainability performance is linked to executive compensation.
VEST	

SUSTAINABILITY PAY LINK

The sustainability pay link is a mechanism to link the remuneration of any member of a company's top-tier executive team with the achievement of environmental or social sustainability performance targets. Review of annual and sustainability reports revealed pay links among ten funds, where ESG performance has an impact on executive pay. As was the case in the first edition of the dashboard, no fund provided details on the percentage or nature of variable compensation that was linked to the stated sustainability targets.












Table 9 – CEO–Average Employee Pay


















Fund	CEO–Average Employee Pay Ratio	CEO Salary (CAD\$ million)	Total Compensation (CAD\$ million)	# of employees (FTE equivalent)
AIMCO	11:1	\$4.95	\$277.95	492
BCIMC	14:1	\$4.10	\$180.90	620
CDPQ	7:1	\$2.41	\$510.00	1450
CPCP			\$0.07	
CPPIB	11:1	\$5.35	\$1,013.00	2,000
DGPP				60
HOOPP			\$280.00	689
IMCO	7:1	\$3.50	\$102.57	207
OMERS	23:1	\$5.16	\$570.00	2498
OPTrust	8:1	\$1.90	\$81.00	346
OTPP	14:1	\$6.91	\$587.60	1,200
PSP	12:1	\$4.98	\$365.00	895
UPP		\$1.20	\$12.21	
VEST	8:1	\$1.36	\$22.70	141













CEO/AVERAGE EMPLOYEE PAY












A measure of how much the average employee at a fund makes relative to their CEO, this metric is calculated by dividing the CEO compensation by the average employee compensation. The CEO compensation value is measured as the sum of salaries, benefits, bonuses, value of employer pension contributions, value of stock options and value of stock unit plans paid to the company's CEO or highest-paid executive, whereas the average employee compensation is measured as the sum of all salaries, benefits, bonuses, value of employer pension contributions, value of stock options and value of stock unit plans paid to all employees, including senior executives, divided by the total number of full- and part-time employees.⁽⁵⁰⁾ CEO compensation is disclosed by 11 of the funds, ranging from \$0.83 million to \$6.91 million. CDPQ and IMCO had the lowest CEO–average employee pay ratios in 2021 at 7, while OMERS had the highest pay ratio at 23:1. CDPQ was the only fund included in the 2021 edition of the Dashboard that did not increase its total CEO compensation, although all funds increased the total employee compensation. BCIMC, CPPIB, OPTrust, OTPP and PSP all saw an increase in their CEO to average employee pay ratio from 2020 to 2021, while the average ratio has increased from 10:1 to 12:1.

Table 10 – E&S Board Competency

Fund	# of Directors	# E&S-Competent Directors	% E&S Competent	Names	Description
AIMCO	11	3	27.3%	 Roger Renaud	Extensive experience in social responsibility.
				 Mark Wiseman	Serves on the board of several non-profit organizations, including United Way.
				 Lorraine Mitchelmore	Has served as a board member and advisor to numerous private and non-profit organizations, including Enlighten Innovations.
BCIMC	7	1	14%	 Sheila Taylor	Positions with the ministries of health, transportation, environment and finance.
CDPQ	14	2	14%	 René Dufresne	Held the positions of director of hydroelectric development and regulation, ministère des ressources naturelles et de la faune.
				 Ravy Por	Founder of Heros de chez nous.
CPCP	9	5	56%	 Suromitra Sanatani	Consulting practice included leading First Nations consultations across British Columbia.
				 Lloyd Bryant	HP executive sponsor for HP Canada's sustainability efforts.
				 Jim Sinclair	Under Jim's leadership, the B.C. Federation of Labour has established itself as the go-to authority on the exploitation of temporary foreign workers, and the undermining of Canadian wages and working conditions that results.
				 Ron Cuthbertson	Currently a director of Wildlife Preservation Canada, a not-for-profit that does hands-on work to save animal species at risk of extinction in Canada.
				 André Hudon	Member of the board of directors of vadimUS, a clean energy solutions provider.

CPPIB	12	8	67%	 Sylvia Chrominska Global responsibility for human resources, corporate communications, government relations, public policy and corporate social responsibility of the Scotiabank Group.
				 Mary Phibbs Experienced international director, board and committee chair, finance and risk expert, ESG, governance, technology application.
				 Heather Munroe-Blum Director of Gairdner Foundation.
				 John Montalbano Non-profit service includes Gairdner Foundation, Asia Pacific Foundation, Windmill Microlending, Rideau Hall Foundation and St. Paul's Hospital.
				 Judith Athaide Sits on the board of Sustainable Development Technology Canada
				 Dean Connor Campaign Chair 2015 and Past Board Member - Toronto Rehabilitation Institute. Trustee - University Health Network.
				 Boon Sim Sits on the board of Origin Materials, a carbon negative materials company
				 Kathleen Taylor Immediate past Chair of the Board of SickKids Foundation and Chair-designate of the Board of Trustees of the Hospital for Sick Children.
DGPP	11	3	27%	 Patricia-Ann Sarrazin-Sullivan An accredited green building design and construction professional, Patricia-Ann focuses on maximizing the energy efficiency and reducing the carbon footprint of her projects. She earned sustainable investment professional certification, specializing in responsible finance, from the John Molson School of Business.
				 Claudia Champagne Authored various sustainable investment papers.
				 Dominic Laurin A certified responsible investment specialist.
HOOPP	16	1	6%	 Gerry Rochi CEO of Green Power Action.
IMCO	9	5	56%	 Robert Bertram A director of several not-for-profit boards and societies.
				 Raj Kothari Chair of the board of directors at the Toronto General & Western Hospital Foundation.
				 Colleen McMorrow Serves on the board of Plan International Canada.
				 Eric Tripp Chair of the Michael Garron Hospital Foundation board.
				 Eric M. Wetlaufer Served on the board of the UN-supported Principles for Responsible Investment (PRI).

OMERS	15	3	20%	 Michael Fenn Michael's major published research reports include <i>Bringing Sustainability to Ontario's Water Systems...</i>
				 Yung Wu Appointed to Canada's Net-Zero Advisory Body.
				 Cliff Inskip Board director at JCM Power.
OPTrust	10	5	50%	 Lindsey Burzese Currently a surface-water specialist in Hamilton with the Ontario Ministry of the Environment, Conservation and Parks.
				 Bob Plamondon Author of numerous public policy reports, including <i>Ten Steps to a Governance Checkup for the Boards of Crown Corporations and Government Agencies</i> .
				 Len Elliott Industrial health and safety inspector with Ontario Ministry of Labour and a union activist with over 30 years of involvement in the labour movement.
				 Neil Martin Industrial health and safety inspector with Ontario Ministry of Labour and a union activist, serving as the president of OPSEU Local 546 and chair of OPSEU's Central Employee Relations Committee.
				 Richard Nesbitt Served as CEO of the Global Risk Institute and is a visiting professor at the London School of Economics, where he chairs the Inclusion Initiative research institute.
OTPP	11	5	46%	 Monika Federau Developed deep expertise in strategy, digital transformation, marketing and branding, cultural transformation post-M&A transactions, and sustainability leadership.
				 Gene Lewis Gained extensive experience and expertise in the Ontario Teachers' Pension Plan by serving on committees such as the Ontario Teachers' Sustainability Workgroup and the Partners' Consultative Committee.
				 Patti Croft Past director and founding member of Women in Capital Markets.
				 Cindy Forbes Serves on the board of Assuris (non-profit), the board of UNICEF Canada and the advisory board of the Intact Centre on Climate Adaptation.
				 Lise Fournel Served on a number of not-for-profit boards and was involved with the Canadian Muscular Dystrophy Association.

PSP	10	5	50%	 Martin Glynn CSR/ESG experience during a 24-year career at HSBC, which was the first global bank to become carbon neutral.
				 Maryse Bertrand Vice-Chair of the McGill University committee to advise on matters of social responsibility.
				 Gregory Chrispin Held leadership roles and headed portfolio management teams at State Street Global Advisors where several he worked closely with endowment funds and university pension funds to help in drafting ESG investment policies.
				 Miranda Hubbs Member of the ICD Climate Strategy Advisory Board.
				 Maurice Tulloch Chair of ClimateWise, which focuses on the intersection of climate change and the insurance industry.
UPP	14	3	21%	 Hugh Mackenzie Chairs the investment committees of the Atkinson Charitable Foundation.
				 Kathy Bardswick During her tenure as CEO, she led The Co-operators' sustainability journey, receiving various domestic and global recognitions for the insurance group's efforts. Chair of Sustainable Finance Action Council.
				 Sue Wurtele A member of the faculty of the Trent University School of the Environment.
VEST	9	3	33%	 Michel Doiron Responsible for employment and social development services in Atlantic Canada.
				 Tanya Chapman Campaign co-chair, United Way of Greater Saint John.
				 Cathy Rignanesi Treasurer and board member for Hestia House (domestic violence shelter).

E&S BOARD COMPETENCY

A board member is determined to be E&S competent if they meet one of the following criteria:

- bios/LinkedIn pages explicitly state they have experience in environmental or social sustainability
- have had executive management/board experience at/with clean-economy-focused enterprises/non-profits
- authored books or highly cited papers/journals relating to the central topics of sustainability

Competency was determined through assessment of board member bios on the current fund website and a review of LinkedIn profiles. CPPIB is the leader amongst the funds with 8 competent members, followed by CPCP and IMCO, both with five directors determined to possess E&S competency.

Table 11 – Diversity

Fund	# Executives	# Non-Male Executives	% Non-Male Executives	# Racially Diverse Executives	% Racially Diverse Executives	# Board Members	# Non-Males on Board	% Non-Males on Board	# Racially Diverse on Board	% Racial Diverse on Board	Composite Leadership Diversity
AIMCO	13	5	39%	4	31%	11	5	46%	0	9%	29%
BCIMC	8	2	25%	0	0%	7	3	43%	0	0%	17%
CDPQ	18	7	39%	2	11%	13	6	46%	4	31%	32%
CPCP	16	7	44%	3	19%	9	3	33%	1	11%	27%
CPPIB	14	6	43%	3	21%	12	7	58%	3	25%	37%
DGPP	11	0	0%	0		18	4	36%	0	0%	9%
HOOPP	8	4	50%	0	0%	16	5	31%	0	0%	20%
IMCO	7	2	29%	1	14%	9	3	33%	1	11%	22%
OMERS	16	6	38%	1	6%	14	3	21%	3	21%	22%
OPTrust	8	3	38%	1	13%	10	4	40%	1	10%	25%
OTPP	9	5	56%	1	11%	11	6	55%	0	0%	30%
PSP	9	3	33%	0	0%	10	5	50%	2	18%	25%
UPP	7	5	71%	3	43%	14	8	57%	0	0%	43%
VEST	6	3	50%	1	17%	9	4	44%	0	0%	28%

DIVERSITY

Table 11 presents the diversity measures for the funds' executive management teams and boards of directors, including a composite diversity metric. Gender diversity is measured as the total number of individuals who identify as non-male, while racial diversity is measured as the number of individuals who are Indigenous or visible minorities according to the definition of the Canadian Employment Equity Act.⁽⁵¹⁾ The diversity figures were determined based on an assessment of bios, names and photos located on the current fund websites. There is a higher average of non-males on the boards of the funds (44%) than on the executive management teams (39%). UPP is a diversity leader, with the highest level of composite diversity (43%), gender diversity among board (57%) and executive management (71%), and the highest proportion of racially diverse executives at 43%. As was the case in the first edition of the Dashboard, racial diversity is significantly below gender diversity, with an average of 14% across the fund executive teams and 7% on the boards of directors. Three of the funds do not have racially diverse members on their board or executive teams, while half of the funds do not have racially diverse board members. OMERS has the highest proportion of racially diverse board members (20%).

FINANCIAL PERFORMANCE

Table 12 – Net Return

Fund	Net Return on Total Fund (5-Year Annualized)	Valuation Date				
		Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
AIMCO	7.80%				12/31/2021	
BCIMC	8.30%					3/31/2022
CDPQ	8.90%				12/31/2021	
CPCP	9.34%				12/31/2021	
CPPIB	10.00%					3/31/2022
DGPP	12.30%				12/31/2021	
HOOPP	10.50%				12/31/2021	
IMCO						
OMERS	7.50%				12/31/2021	
OPTrust	9.00%				12/31/2021	
OTPP	8.40%				12/31/2021	
PSP	9.00%					3/31/2022
UPP						
VEST	7.61%				12/31/2021	

NET RETURN

Table 12 lists the reported total net returns for the funds on a five-year annualized basis. DGPP is the leader, with a 12.3% net return over the five-year period.

Table 13 – Back test

Fund	10-Year Cumulative Return ⁽⁵²⁾	10-Year Cumulative Return (Oil & Gas Excluded)
AIMCO	162.52%	216.87%
BCIMC	228.27%	265.63%
CDPQ	158.64%	190.53%
CPPIB	195.07%	214.62%
OMERS	217.10%	279.77%
OPTrust	194.86%	218.38%
OTPP	81.58%	90.37%
PSP	191.64%	237.99%
VEST	85.69%	89.22%
Green Flags		367.93%

A 10-year back test on funds' public equity holdings was conducted in the S&P Capital IQ database to measure the impact that divestment of all oil and gas⁽⁵³⁾ stocks would have on the cumulative fund return. There are detailed public equity holdings available for nine of the funds in S&P Capital IQ, which are indicated in Table 13. In every case, divestment of oil and gas stocks led to a greater cumulative return over the 10-year period, notwithstanding the banner year oil and gas stocks had in 2022 as a result of the conflict in the Ukraine. The greatest difference in return is seen in OMERS (62%), followed by AIMCO (54%), reflecting their relatively high exposure to oil and gas sector stocks.

The green flag portfolio consists of companies that were listed as green flags (companies that derive at least 20% of revenues from sustainable solutions that align with the Corporate Knights Sustainable Economy Taxonomy) in the Corporate Knights database for FY2021. These 430 "green flag" stocks had a total market capitalization of \$16 trillion and delivered a cumulative return of 368%, which, as initially highlighted in our 2021 report, illustrates the significant opportunity cost of delaying portfolio shifts from high- to low-carbon assets.



REGULATORY LANDSCAPE AND SUSTAINABLE FINANCE DEVELOPMENTS: RECOMMENDATIONS FOR GOVERNMENTS AND PENSION FUNDS

OVERVIEW OF LARGEST CANADIAN PENSION FUNDS

Over the last four decades, the largest Canadian pension funds have changed their organizational governance structure, recruited talent, developed internal expertise, built greater accountability and transparency mechanisms to achieve their respective mandates, which range from achieving “absolute returns without undue losses” to “maintaining funded status.”⁽⁵⁴⁾

They have expanded from investing mostly in non-marketable government bonds and public equities to investing in a range of different asset classes such as private equity, infrastructure, natural resources and real estate. They have also diversified from investing primarily in domestic markets to becoming global investors, with around 50% to 80% of their assets invested outside Canada. While geographic diversification varies across funds, a substantial portion of these investments flow to the United States, with other top destinations including Europe/United Kingdom, Latin America and the Asia Pacific regions.⁽⁵⁵⁾

These changes have been the result of expert recommendations and subsequent government regulatory reforms that started in the late 1980s to create legitimate and organizationally effective pension plans.⁽⁵⁶⁾ These initiatives helped establish the larger pension funds as separate institutions with independent boards and management teams, which allowed them to conduct their operation at arm’s length from governments and sponsors. The established structures and independence have led to implementation of best practices and superior financial performance.

It is well recognized that the primary purpose of tax-qualified pension plans is to maximize financial returns to provide lifetime income to their beneficiaries for services rendered.⁽⁵⁷⁾ ESG risks are relevant to generating those returns. If these risks are not accounted for in investment analysis, it would impose material risks on the investment performance of the pension funds and ultimately put the beneficiaries at risk of not getting their income.

However, pension funds, with large pools of capital and investment expertise across geographies and asset classes, have a responsibility in tackling systems-level risks (e.g., climate change, social inequality, etc.) and investing their assets in line with sustainability objectives. Acting as responsible stewards of capital within planetary and societal boundaries is consistent with the ultimate objective of securing long-term stable financial returns. This includes the responsibility to assist in mitigating climate-related financial risks and deploying capital in ways that rapidly transform energy systems and facilitating the economic transition to net-zero emissions by 2050 or sooner, in line with Canada’s Net-Zero Emissions Accountability Act.

REGULATORY AND GOVERNANCE LANDSCAPE

An analysis from the United Nations Principles for Responsible Investment (UN PRI) states that “Canada’s pension standards legislation does not expressly prohibit or permit investing for sustainability impact, but considering sustainability factors and pursuing sustainability impact goals are actions compatible with pension plan administrators’ statutory and common law duties where such factors are relevant to the fund’s financial performance.”⁽⁵⁸⁾

Regulations and guidance can play a key role in clarifying and achieving these broader objectives. In the absence of clearer regulation and direction from regulators, Canadian asset owners and asset managers may be hesitant to use investment decisions and policy engagement to pursue positive sustainability objectives. However, the issuance of regulatory clarification and changes is likely to be impacted by the variations in regulatory and supervisory structures across the large pension funds. The largest eight Canadian pension funds are overseen by five different supervisory structures, mainly at the provincial level.⁽⁵⁹⁾

Implications for Governments and Regulators

- The fragmented regulatory and governance structure and lack of a single authoritative body providing guidelines on practices creates challenges in aligning the large pension funds toward achieving sustainability objectives. Thus, there is a need for a coordinated approach between federal and provincial bodies to address these gaps.
- The Office of the Superintendent of Financial Institutions (OSFI) has released a guideline (B-15) on climate risk management for federally regulated financial institutions, which includes some of the larger pension funds.⁽⁶⁰⁾ The Canadian Association of Pension Supervisory Authorities (CAPSA) has also developed draft guidelines on ESG considerations in pension plan management.⁽⁶¹⁾ Both these guidelines will be key to incorporating climate risks and opportunities in pension funds’ financial management.
- Additional (and in certain cases non-traditional) policy levers may need to be used to properly align pension funds toward broader sustainability objectives in line with maximizing financial returns and to meet their fiduciary responsibilities.

SUSTAINABLE FINANCE DEVELOPMENTS AFFECTING CANADIAN PENSION FUNDS

Alongside the domestic regulatory and governance structures, there are sustainable finance developments that have different impacts on Canadian pension funds. Since the Canadian Pensions Dashboard for Responsible Investing was released in 2021, these developments, both globally and in Canada, have mainly taken place in *net-zero target setting and transition planning*, *green and transition taxonomy developments*, and *climate-related financial disclosures*, all of which have implications for the pension funds.

NET-ZERO TARGET SETTING AND TRANSITION PLANNING

Different approaches and frameworks in net-zero target setting and transition planning have been formulated, including:

- The Net Zero Asset Owners Alliance's (NZAOA) Target Setting Protocol has established and upgraded a target-setting approach in terms of sectors, sub-portfolio, engagement and financing transition to contribute to real economy greenhouse gas (GHG) reductions.⁽⁶²⁾
- The Paris Aligned Investment Initiative's (PAII) Net-Zero Investment Framework not only includes some of the broader attributes in NZAOA, but also incorporates target-setting guidance, actions and metrics at the strategic-asset-allocation and individual-asset-class level (covering sovereign bonds, corporate bonds, publicly listed equity and real estate until now).⁽⁶³⁾
- The Glasgow Financial Alliance for Net Zero (GFANZ), a global coalition of 550-plus financial institutions that brings together seven financial-sector-specific net-zero alliances into a global strategic alliance, has developed net-zero transition plan frameworks along with guidance for financial institutions.⁽⁶⁴⁾
- The Science Based Targets Initiative (SBTi) has articulated foundational guidance on what it means to reach net-zero for a financial institution, including the components and metrics for setting credible science-based net-zero targets, and is currently working on a monitoring, reporting and verification standard to track progress for financial institutions.

Implication for Canadian Pension Funds

- While some of the large Canadian pension funds are members or signatories of these initiatives, the approaches recommended by NZAOA, PAII and SBTi provide precedence for all the pension funds to adopt these approaches in their target-setting and transition-planning practices. This will help establish credibility in their net-zero commitments, especially incorporation of target setting and transition planning at the strategic-asset-allocation and portfolio-asset-class level recommended by some of these initiatives.
- It is important to recognize that there are challenges in setting net-zero targets and developing transition plans. These are mainly lack of uniform GHG emissions data, non-uniform disclosure of net-zero targets across portfolio entities, non-development of target-setting methodologies for different asset classes, etc.⁽⁶⁵⁾ However, solutions to these challenges are underway with the development of GFANZ's guidance on net-zero transition planning, development of net-zero public data utility and Canadian Climate Institute's data repository 440Megatonnes.⁽⁶⁶⁾
- Adoption of or alignment with practices in line with these net-zero target-setting and transition-planning frameworks is critical. It will not only enable the large Canadian pension funds to credibly translate their net-zero commitments into strategic plans and actions with target and metrics to check progress, but also to align with best practices adopted by other global investors.

TAXONOMIES TO CLASSIFY GREEN AND TRANSITION INVESTMENTS

A taxonomy is a tool meant to help mobilize capital allocation to economic activities consistent with credible net-zero transition pathways and climate mitigation objectives. Different countries and entities have been developing taxonomies as a means of classifying green and transition investments by relying on high-level principles, lists of approved activities, technical screening criteria or a combination of all (e.g., EU taxonomy for sustainable activities, Climate Bonds Initiative taxonomy, etc.).

This includes some of the Canadian pension funds, which updated their approach since the release of the Dashboard in 2021. Two examples are provided below.

- Canada Pension Plan Investment Board (CPPIB) considers an asset to be green “when at least 95% of its revenue can be classified as being derived from green activities, as defined by the International Capital Market Association.” In addition, CPPIB considers an asset to be in transition “if the company is in a high emitting sector and has announced a commitment to net-zero with a credible target and transition plan, and is making meaningful contributions to global emissions reductions.”⁽⁶⁷⁾
- PSP Investments has developed a bespoke Green Asset Taxonomy based on the carbon intensity and transition plan credibility of its portfolio assets to show exposure toward green assets, transition assets and carbon-intensive assets.⁽⁶⁸⁾

Notably, a technical expert group under Canada’s Sustainable Finance Action Council (SFAC) has developed and released a Canadian taxonomy report to guide investment decision-making, with a governance structure and a framework architecture for labelling both green and transition activities.⁽⁶⁹⁾

Implication for Canadian Pension Funds

- Currently, pension funds are investing in green and transition assets as part of their commitments to reach net-zero emissions. However, the methodologies used by pension funds to define “green” or “transition” investments vary significantly across the funds. As seen from the CPPIB and PSP Investments examples above, some pension funds lump together “green” and “transition” investments, while others use different methodologies to define green and transition assets separately.
- Recognizing that each pension fund has a different starting point in its portfolio, it is crucial for pension funds to provide further clarity on how they are classifying these investments to increase credibility and transparency of their net-zero plans.
- It is also important for the pension funds to be aligned with or adopt the newly developed Canadian taxonomy. This would not only prevent market distortions in investment decisions but also develop uniformity in measurement and reporting on green and transition investments targets and progress (e.g., as % of AUM per year).

CLIMATE-RELATED FINANCIAL DISCLOSURE REQUIREMENTS

To create a global baseline of sustainability standards, the International Sustainability Standards Board (ISSB) was created at the UN Climate Change Conference (COP26). Since then, the ISSB has released exposure drafts on general disclosures and climate-related disclosures that outline proposed requirements to identify, measure and disclose climate-related risks and opportunities.⁽⁷⁰⁾

The ISSB standards, which are expected to be effective from January 2024, will require companies to disclose all scopes of GHG emissions, including Scope 3 emissions, with commensurate guidance, reliefs and safe-harbour provisions.⁽⁷¹⁾ The standards will also require reporting companies to utilize scenario analysis to inform assessments of climate resilience.⁽⁷²⁾ ISSB has also confirmed requirements for financed emissions associated with three industries – asset management and custody activities, commercial banks and insurance companies.⁽⁷³⁾

The US Securities and Exchange Commission (SEC) proposed new rules for climate-related disclosures in 2022.⁽⁷⁴⁾ The SEC proposal requires companies to disclose Scopes 1 and 2 GHG emissions, material Scope 3 emissions and relevant metrics for emission-reductions targets (if set by companies). Similarly, the European Financial Reporting Advisory Group (EFRAG) has recently approved an updated version of the European Sustainability Reporting Standards (ESRS), which outlines requirements for detailed corporate reporting on a broad range of environmental, social and governance (ESG) issues.⁽⁷⁵⁾

In Canada, OSFI has issued guidance that will enable stakeholders to understand the financial impact of climate change on federally regulated financial institutions. CAPSA's draft guidelines on ESG considerations encourage pension funds to keep pace with disclosure developments and industry best practices, including industry-specific guidelines or recommendations for pension funds set out by ISSB and the Task Force on Climate-related Financial Disclosures (TCFD). This is on top of the Canadian Securities Administrator's (CSA) proposed disclosure requirements for publicly listed companies in Canada.⁽⁷⁶⁾

Implication for Canadian Pension Funds

- Given the global sustainability standards developments from the ISSB, regional developments through SEC and EFRAG, and domestic guidelines on ESG and climate disclosures from CAPSA and OSFI respectively, the onus is on the Canadian pension funds to improve their own climate-related financial disclosures and meet these standards.
- Underlying climate disclosures from portfolio assets is fundamental to enable pension funds themselves to improve their own disclosures. Indeed, the largest Canadian pension funds have jointly asked for better disclosures from their portfolio companies.
- It is important for the pension funds to keep track of current ISSB disclosure requirements and help existing portfolio companies and assets implement these requirements as they are set in 2023, and invest in new companies and assets that are aligned or trying to align with these requirements.



WHAT CAN GOVERNMENTS DO?

In the face of the progress made by the largest pension funds and rapidly changing sustainable finance developments, governments can provide further impetus to Canadian pension funds to commit to net-zero emissions, improve transparency and credibility of their progress, integrate net-zero investment strategies and reallocate capital to support the domestic net-zero transition.

ENSURING REGULATORY ALIGNMENT

Within the regulatory context, there is a need for clarification on when sustainability impacts can or must be considered by pension funds in administering their fiduciary responsibilities. Governments can provide them through regulations and guidance on sustainability risks and impact management in investment policies and processes. Both OSFI and CAPSA provide guidelines on climate and ESG considerations respectively.

However, with a fragmented regulatory landscape across federal and provincial jurisdictions, governments and regulators may be required to use additional policy levers to ensure alignment and properly incorporate ESG risks and opportunities in risk management and investment practices. Some of these policy levers were discussed in the 2021 Canadian Pensions Dashboard for Responsible Investing.⁽⁷⁷⁾ This includes amendments to the Canada Pension Benefits Standards Act/Pension Benefits Standards Regulation, to create new provisions regarding net-zero and broader ESG alignment and incorporate them in the statement of investment policies and procedures (SIPP). In addition, proposed changes to the Income Tax Act to create new provisions that would require pension funds to demonstrate net-zero and broader ESG alignment of their portfolios to maintain their tax-exempt status.

Other approaches that have been suggested include the proposed Bill S-243 Climate-Aligned Finance Act, which recommends legislative changes to adopt target-setting, planning, reporting requirements and implementation progress reviews.⁽⁷⁸⁾ The *Roadmap to a Sustainable Financial System in Canada* recommends development, implementation and periodic ministerial review of credible climate plans for financial institutions through changes to or strengthening of existing regulations and development of guidance and directions to align the financial system with climate goals.⁽⁷⁹⁾

Considering that the top global risks are related to ESG factors, the negative impact they may have on long-term financial performance and financial stability, and potential regulatory misalignments with other markets such as the U.S. and EU, these recommendations need to be considered by policy-makers. However, deeper and rigorous analysis is needed, particularly for phasing in implementation, as even the large pension funds are in different stages of their net-zero commitments and planning. Regulators and other associated bodies also need to further build their internal capacities to assess the impact of these policies on pension funds and work with them to implement these changes and refine and upgrade them moving forward.

HELPING IMPROVE CLIMATE-RELATED FINANCIAL DISCLOSURES

Federal and provincial regulators can improve climate-related financial disclosures in Canada by finalizing the CSA instruments and OSFI guidelines for publicly listed companies and federally regulated financial institutions respectively. While it may not have a direct impact on most of the larger funds' disclosure requirements, the requirements and guidelines will help improve disclosures from their portfolio assets.

As the large pension funds are global investors, it is important that the Canadian disclosure requirements are aligned as much as possible with the global standards that will be set by the ISSB and interoperable at the regional level with SEC and EFRAG as their proposals are finalized. It is also important for disclosure standards to cover large private companies, which will face material climate risks but might not fall under CSA's disclosure requirement jurisdiction. Lack of alignment or disclosure gaps could not only induce climate risks in different parts of the economy but also lead to reduced investor confidence and competitive disadvantages for Canadian companies in global markets. In this regard, SFAC's recommendations to the government on the most effective ways to implement climate-related financial disclosures across the Canadian economy will be of primary importance.⁽⁸⁰⁾

SUPPORTING CAPITAL ALLOCATION FOR THE NET-ZERO TRANSITION

Furthermore, the federal government can play a leading role to help direct much-needed capital flows toward Canada's net-zero transition requirements. With total needs ranging between \$125 and \$140 billion annually through 2050, public sector financing alone cannot meet the level of capital required for the low-carbon transition.⁽⁸¹⁾ Hence, leveraging private sector investment will be critical to reaching net-zero emissions by mid-century. Canadian pension funds, as patient allocators of long-term capital, are in an ideal position to meet some of the large-scale investment requirements in Canada.

However, as noted before, the larger pension funds are global investors, and much of their capital is invested outside Canada. The Canadian green and transition taxonomy and net-zero capital allocation strategy, as planned through SFAC, can enable the largest pension funds to invest in the domestic net-zero transition.

The completion of the Canadian green and transition taxonomy can help develop the transition finance market (e.g., align the issuance and use of proceeds for transition or sustainability-linked bonds). The net-zero capital allocation strategy can help analyze the financing needs across sectors of the economy and identify financing models and risk-sharing mechanisms that will allow pension funds to invest across different asset classes and maximize their risk-adjusted returns.

Governments also need to create policy frameworks and implementation structures that enable large Canadian pension funds to co-invest in climate-aligned projects and companies with other government funding programs and institutions such as the Strategic Investment Fund, the Canada Infrastructure Bank and the upcoming Canada Growth Fund. They may also focus on developing de-risking and transaction-enabling instruments (e.g., concessionary debt, anchor equity, revenue guarantees or offtake agreements, carbon contracts for difference, etc.) to increase the bankability of projects.⁽⁸²⁾



WHAT CAN PENSION FUNDS DO?

Canada's largest pension funds can improve their practices to tackle climate-related financial risks and invest in climate-related opportunities in light of sustainable finance and regulatory developments. Based on recommendations in *Building Climate Resilience in Canada's Pension Funds*, they can take actions in the following four areas:⁽⁸³⁾

COMMITMENTS

Pension fund administrators should continue to adopt or improve their net-zero emissions targets for 2050 or sooner as a means to build climate resilience and guard against climate risks associated with the low-carbon transition in order to improve their long-term financial performance and meet their fiduciary obligations. This will match the pace of change committed by Canada and the ambitions and expectations set forth by the United Nations' High-Level Expert Group on the NetZero Emissions Commitments of Non-State Entities.⁽⁸⁴⁾

The commitments need to include interim short- and mid-term emission-reduction targets (both absolute and intensity-based targets) to set immediate guardrails for realistic pathways to net-zero emissions. Pension funds may reassess starting points for commitments through continual improvement in sectoral transition pathways and measurement of the full scope of greenhouse gas emissions (Scope 1,2 and 3).

Pension funds may also set additional targets to align strategies with emerging opportunities and knowledge of physical risks.

IMPLEMENTATION

To implement these commitments, pension funds need to be invested in climate resilient areas. Considering GFANZ's transition financing strategies, this means continued investments in climate solutions, building portfolios of assets that are already aligned or aligning with net-zero pathways with credible plans for reaching net-zero emissions, and managed phaseout (via early retirement) of high carbon assets.⁽⁸⁵⁾ Pension funds need to target a portfolio of sustainable investments accounting for a minimum of 20% of their total AUM, under a standardized comparable definition for what constitutes sustainable investment.

- For new investments, pension funds might make credible, time bound, net-zero and interim target setting and transition planning from material portfolio companies and assets a requirement for new credit or equity investments.
- For existing investments, pension funds might require, and also assist, if required, portfolio companies and assets to set net-zero targets and develop transition plans.
- For investments managed by external asset managers, pension funds should require them to invest in new assets with credible, science-based net-zero commitment by updating their mandates with these managers and provide directions on managing climate-related risks and aligning with net-zero pathways, as needed.⁽⁸⁶⁾

Pension funds need to develop and outline policies and procedures to implement their net-zero commitments, including in the areas of emission-reduction target setting, scaling up green and transition investments, investment phase-out in high-emitting assets, stakeholder engagement and sustainability pay links for board and executive management.

Pension funds need to continue engagement with their portfolio companies' boards and management, exercise shareholder ownership rights by voting proxies or other resolutions to implement their own net-zero commitments.

Pension funds need to raise the bar on sustainable governance by improving the environmental and social competency of their boards of directors and management and improve sustainability pay links.

Pension funds can also engage with different levels of governments, regulators and standard setters and other stakeholders (e.g., civil society, academia, etc.) to promote better climate- and ESG-oriented policies, ESG-aligned practices and climate-related financial disclosures.

BUILDING CREDIBILITY

Pension funds need to build trust in their net-zero commitments and plans. They should join initiatives such as the NZAOA, PAII and others and require portfolio companies to have their net-zero targets vetted by SBTi or other initiatives.

Once methodologies are established, pension funds themselves should have their own net-zero targets vetted through third-party certification standards.

Regular communications to demonstrate progress on key metrics through robust reporting is key to building credibility.

DISCLOSURES

Pension funds should continually ensure that their portfolio assets are following best practices in climate-related financial disclosure as the ISSB will finalize climate-related disclosure standards in 2023.⁽⁸⁷⁾

The funds themselves should disclose or source the resulting information in their own reporting to stakeholders in line with practices from NZAOA, PAII, SBTi and others. This includes aggregated and disaggregated information on both financed emissions (both absolute and intensity-based emissions in line with upcoming disclosure requirements and best practices) and green and transition investments across asset class, based on clearly laid-out definitions.

Pension funds should improve disclosures of their environmental and social shareholder voting resolutions and detail the goals and progress for other engagements.

The funds need to improve disclosure around the details of their executive sustainability pay links, with visibility into the percentage of variable compensation tied to the stated environmental and/or social targets.



WHAT CAN BENEFICIARIES DO?

Pension plan beneficiaries want to know more about how their pension plans integrate ESG and climate considerations and value ESG disclosures. However, without consistent disclosures year over year and comparability with other plans, beneficiaries may lack information on sustainability impact and governance practices and might not be able to collectively engage with the funds themselves on these issues.

The Dashboard provides information on the practices adopted by the largest pension funds on sustainability impacts and governance practices. With successive iterations, it can act as a measure of progress against clear metrics. This information provides useful comparisons that can help beneficiaries not only understand the sustainable finance landscape but also ask pension funds specific questions on different sustainability dimensions and gauge the funds' plans to address them.⁽⁸⁸⁾ There is precedence for pension fund beneficiaries having more direct involvement in providing their views and guiding their pension plans' ESG/sustainable investment decision-making in other countries, and similar practices may be adopted in Canada.⁽⁸⁹⁾

CONCLUSION

Since 2021, there has been notable progress in the commitments made by major Canadian pension funds supporting the transition to the low-carbon economy. The number of funds that have made public net-zero portfolio emission commitments by 2050 or sooner has grown from two to 9, which accounts for 81% of total pension fund assets that were evaluated in this Dashboard. The total amount of sustainable investments held by the funds has grown from 7% of total AUM to 13%, although the definition of what constitutes a sustainable investment can vary significantly across funds and therefore pose challenges comparatively. Despite the positive trend seen on the sustainable impact indicators, more effort is needed to ensure that these funds are fulfilling their fiduciary duty to their plan members by managing the significant risks and opportunities associated with climate change.

All funds are encouraged to set credible science-based net-zero targets for achieving net-zero portfolio emissions by 2050 or sooner, with roadmaps that specify short and intermediate GHG emission-reduction targets coupled with sustainable solution asset-management allocations. Only CDPQ, HOOPP, IMCO, OTPP and PSP have set targets that include both emission-reduction and asset allocation targets. As we estimate that a sustainable investment allocation figure representing 20% of total assets is required for pension funds to play their role in financing the transition to a sustainable low-carbon economy, the majority of the funds included in the Dashboard are far from achieving this.⁽⁹⁰⁾ Of the 14 funds assessed, there were \$276 billion of identified sustainable investments out of a total of \$2.2 trillion AUM. Not only does the total amount of sustainable investments fall short of the target, but this total is currently mapped to inconsistent definitions that are set by the funds themselves, including tens of billions of investments in run-of-the-mill real estate that would not meet stringent sustainability criteria. Moving forward, we expect to see funds mapping their investments to a standardized definition of what constitutes sustainable investment. The work being done by Canada's Sustainable

Finance Action Council in developing a Canadian green and transition taxonomy is setting the foundation for this much-needed standardization of definitions. On the emission-reduction front, OTPP is setting the example, reporting a 32% reduction in portfolio carbon footprint from 2020 to 2021 while disclosing its full fund footprint that includes a breakdown by major asset classes. All funds need to be targeting a minimum 7% annual reduction in emissions intensity, granularly reported with coverage on the vast majority of AUM and broken down by major asset class, with a mild preference for reporting under the WACI method versus the financed emissions approach (as it is the preferred metric of TCFD, works across asset classes and is good for setting targets and attribution).

Significant progress is still needed on the sustainable governance indicators included in this assessment, despite the advancements made on increasing the degree of environmental and social competency on the fund boards. The level of composite gender and racial diversity on both the executive management teams and boards of directors sits well below identified best practice and is virtually unchanged since the release of the first iteration of the Dashboard. The number of funds reporting the percentage of environmental and social resolutions that were voted on has increased from three to six. All funds are encouraged to transparently disclose their voting records and support E&S resolutions, providing credible rationale if support is withheld. Despite a slight increase in the number of funds reporting a pay link between the achievement of social and/or environmental sustainability targets and the remuneration of executives, none currently disclose the percentage of variable compensation that is linked to the achievement of said targets. Granular disclosure on the details of the pay link, with a minimum of 20% of a CEO's variable pay being tied to the target, is the standard for best practice moving forward. Lastly, all funds are encouraged to reinforce their governance standards by publishing formal policies related to ensuring that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of net-zero emissions. Additionally, they should set requirements for investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the path to net-zero, and enforce policies that restrict of the expansion of fossil fuel infrastructure inconsistent with the Paris Agreement.

While impressive progress was made in the past year, there is an urgent imperative to speed up the pace of adaptation so that our pension funds can keep up with the pace of change in the low-carbon global economy that is rapidly ramping up.



APPENDICES

LIST OF FUND NAMES

Acronym	Fund
AIMCO	Alberta Investment Management Corporation
BCIMC	British Columbia Investment Management Corporation
CDPQ	Caisse de dépôt et placement du Québec
CPCP	Canada Post Pension
CPPIB	Canada Pension Plan Investment Board
DGPP	Desjardins Group Pension Plan
HOOPP	Healthcare of Ontario Pension Plan
IMCO	Investment Management Corporation of Ontario
OMERS	Ontario Municipal Employees Retirement System
OPTrust	Ontario Public Service Employees Union Pension Trust
OTPP	Ontario Teachers' Pension Plan
PSP	Public Sector Pension Investment Board
UPP	University Pension Plan
VEST	Vestcor

CORPORATE KNIGHTS RED FLAGS

Metric	Description
Access to medicine laggards	Lagging pharmaceutical companies in the bottom quartile of the Access to Medicine ranking.
Access to nutrition laggards	Lagging food companies in the bottom quartile of the Access to Nutrition index.
Adult entertainment	Companies operating in the adult entertainment industry based on Motley Fool, Wespath, Sin Stocks and RedLightNetwork report listings.
Blocking climate policy	Companies who have been red flagged by InfluenceMap for engaging in a manner largely opposing Paris-aligned climate policy in an active and often strategic manner.

Blocking climate resolutions	Asset managers that are voting negatively on climate policy resolutions according to InfluenceMap's voting record (bottom quartile).
Cement carbon laggards	Companies in the cement industry that were divested by Norges Bank Investment Management (NBIM) for climate change reasons (internal Corporate Knights analysis).
Civilian firearms	Companies that manufacture civilian automatic and semi-automatic firearms, magazines, or parts prohibited under New Zealand law that were divested from by the NZ SuperFund.
Controversial weapons	Companies involved with cluster munition, anti-personnel mine, and nuclear weapons manufacturing that were divested by NBIM and NZ SuperFund.
Conventional weapons	The top 25 weapons producers as tracked by Stockholm International Peace Research Institute (SIPRI) for companies that earn more than 50% of revenue from weapons.
Deforestation & palm oil laggards	Companies engaging in deforestation as deemed by Chain Reaction Research or NBIM. List of companies obtained from Deforestation Free Funds, which NBIM has divested from.
Energy	Companies that operate in the fossil fuel industry with less than 50% of new investments (most recently available) in themes consistent with decarbonization.
Farm animal welfare laggards	Laggard companies in farm animal welfare practices according to CK Red Flag list (made in consultation with animal welfare experts).
For-profit prisons	Companies that are recommended for divestment by the Project of the American Friends Service Committee and that demonstrate involvement in the various aspects of the prison industry.
Gambling	Companies that operate in the gambling industry
Gross corruption violations	Companies that have been divested from by NBIM due to gross corruption violations.
Monetary sanctions	Companies whose ratio of fines, penalties, or settlements/revenue for the last 12 months exceeds 1% are also excluded.
Government sanctions	Companies on the Canadian or U.S. government sanctions list for investors.
Oil sands laggards	Oil sands companies that were divested from by NBIM.
Severe environmental damage	Companies that have caused several environmental damage and have been excluded by NBIM.
Severe human rights violations	Companies that have committed several human rights violations or have violated individuals' rights in situations of war or conflict and have been excluded by NBIM.
Thermal coal	Identifies companies with more than 10% of generation or revenue is from thermal coal. Exception: If the company has less than 20% of generation or revenue that is from thermal coal AND <ul style="list-style-type: none"> • has no plans for expansion of coal AND • at least 50% of its investments are sustainable (according to the CK Sustainable Taxonomy) then the company is not excluded Source: Global Coal Exit List (GCEL)
Tobacco	Identifies companies that earn revenue from tobacco, and those excluded by NBIM and NZ SuperFund

DETAILED METHODOLOGY

5-year annualized rate of return – A quantitative measure of a fund’s annual rate of return (net-nominal) performance averaged over a five-year period, expressed as a percentage. Sourced from the most recent published annual report. If the measure is not disclosed, marked as ND.

“Sustainable solutions” definition – A qualitative measure of a fund’s approach to measuring sustainable investments. Current pension fund practice in Canada for defining “sustainable solutions” ranges from referencing an external taxonomy to specific themes such as sustainable infrastructure, renewable energy, green buildings and certified sustainable forestry. Examples of external taxonomies for “sustainable solutions” include Climate Bonds Initiative (CBI) Taxonomy and EU Taxonomy (both focused specifically on sustainable environmental solutions), as well as the CK Sustainable Economy Taxonomy, which integrates the CBI and EU Taxonomy alongside sustainable social solutions (such as affordable medicine). Definitions of solutions were retrieved from annual reports, sustainability reports, responsible investing reports and fund websites. If no definition or reference to solutions is provided, marked as ND.

Total assets under management (AUM) – A quantitative measure of the total market value of the investments that a fund is managing, sourced from the most recent published annual report. Measured in Canadian dollars.

Value of disclosed holdings – A quantitative measure of the market value of the disclosed public equity holdings. Must include the name and total market value of the investment in the portfolio. Sourced from the most recent public filings on the fund’s website or from S&P’s Capital IQ database.

AUM by asset class – A quantitative measure of the total market value of the investments within each fund’s reported asset class, sourced from the most recent published annual report. Measured in Canadian dollars.

AUM in solutions – A quantitative measure of the total market value of the investments in solutions, including breakdowns within each fund’s reported asset class (if reported), sourced from the most recent published annual/sustainability report. Measured in Canadian dollars. If the measure is not disclosed, marked as ND.

% AUM in solutions – A quantitative measure of the total market value of AUM in solutions divided by the total market value of all AUM, expressed as a percentage. If the measure is not disclosed, marked as ND.

Green flag exposure – A quantitative measure of the percentage of total public equity AUM holdings that have a sustainable revenue ratio of 20%+ under the Corporate Knights Sustainable Economy Taxonomy.

Red flag exposure – A quantitative measure of the percentage of total public equity AUM holdings in the Corporate Knights universe that have been screened out of ranking eligibility for involvement in certain products, services or behaviours counterproductive to sustainable development. See the list of exclusionary screens in the Appendix.

Carbon footprint metric definition – A qualitative measure of the disclosed definition for measuring the carbon footprint of a fund's portfolio, sourced from annual reports, sustainability reports and fund websites for the most recent fiscal year. If the measure is not disclosed, marked as ND.

Fund carbon footprint – A quantitative measure of the carbon footprint of the fund's total portfolio, also listed by asset class if disclosed by the fund. Calculated based on the carbon footprint metric definition provided by the fund. Expressed in tonnes of carbon dioxide equivalent per million dollars (CDN\$) invested ($\text{tCO}_2\text{e}/\M). Sourced from annual reports, sustainability reports and fund websites for the most recent fiscal year. If the measure is not disclosed, marked as ND.

% of assets covered by the carbon footprint metric – A quantitative measure of the percentage of total AUM that is covered by the reported carbon footprint of the fund, expressed as a percentage. Sourced from annual reports, sustainability reports and fund websites for the most recent fiscal year. If the measure is not disclosed, marked as ND.

% of E&S shareholder resolutions supported – A quantitative measure of the number of environmental and social shareholder resolutions that were supported by the fund in the most recent fiscal year. Calculated as the total number of E&S resolutions supported divided by the total number of E&S resolutions voted on. Both the numerator and denominator need to be reported; otherwise, marked as ND. Sourced from annual reports, sustainability reports and proxy voting documents.

Sustainability pay link – A qualitative measure, the sustainability pay link is a mechanism to link the remuneration of any member of a company's top-tier executive team with the achievement of environmental or social sustainability performance targets.

CEO-average employee pay – A quantitative measure, the ratio of the CEO (or highest paid executive's) compensation to the average employee.

Executive management gender diversity – A quantitative measure of gender diversity on the executive management team for the fund. The total number of senior executives who are not male (defined as the top-tier executives as indicated on the company website). Based on assessment of bios, names and photos on the current company website. Calculated as the number of non-male executives divided by the total number of executives, expressed as a percentage.

Executive management racial diversity – A quantitative measure of racial diversity on the executive management team for the fund. The total number of senior executives who are Indigenous or visible minorities according to the definition of the Canadian Employment Equity Act. Based on assessment of bios, names and photos on the current company website. Calculated as the number of racially diverse executives divided by the total number of executives, expressed as a percentage.

Supports Task Force on Climate-related Financial Disclosures (TCFD) – A qualitative measure of whether a fund has publicly disclosed alignment with the TCFD. Determined through a search of the TCFD supporter database.

E&S board competency – A board member is determined to be E&S competent if they meet one of the following criteria:

- bios/LinkedIn pages explicitly state they have experience in environmental or social sustainability;
- have had executive management/board experience at/with clean-economy-focused enterprises/non-profits; or
- authored books or highly cited papers/journals relating to the central topics of sustainability

Competency was determined through assessment of board member bios on the current fund website and a review of LinkedIn profiles.

Investor signatory to Climate Action 100+ – A qualitative measure of whether a fund is a signatory to Climate Action 100+. Determined through a search of the Climate Action 100+ signatory database.

United Nations Principles for Responsible Investments (PRI) signatory – A qualitative measure of whether a fund is a signatory to the United Nations PRI. Determined through a search of the UN PRI signatory database.

ESG mandate – A qualitative measure of whether a fund has a publicly stated policy for the integration of environmental, social and governance (ESG) considerations into the investment decision-making process by the fund managers.

Asset allocation targets for net-zero GHG emissions and/or sustainable solutions – A measure of whether a fund has set a net-zero emissions target, including any short-, medium- and long-term targets related to emissions or investments in sustainable solutions. Sourced from annual reports, sustainability reports and fund websites. If the measure is not disclosed, marked as ND.

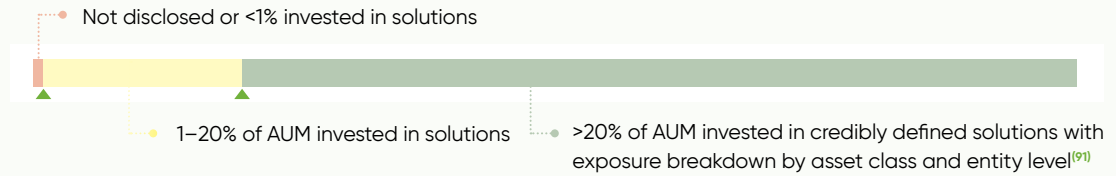
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner – A qualitative measure of whether a fund has published a formal policy related to the alignment of lobbying activities with a just transition to the LCE. Sourced from annual reports, sustainability reports and fund websites. If the measure is not disclosed, marked as ND.

Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner – A qualitative measure of whether a fund has published a formal policy related to climate policy advocacy undertaken by investees that supports a just transition to the LCE. Sourced from annual reports, sustainability reports and fund websites. If the measure is not disclosed, marked as ND.

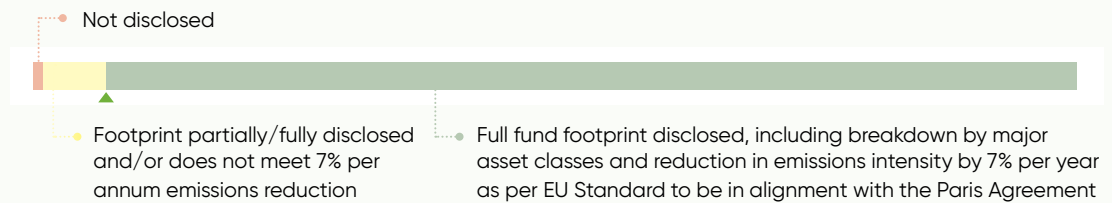
Policy to restrict the expansion of fossil fuel infrastructure – A qualitative measure of whether the fund has policies in place (i.e., voting against directors or denial of debt) to restrict the expansion of fossil fuel infrastructure.

KPI COLOUR CODING DEFINITIONS

Implication for Canadian Pension Funds



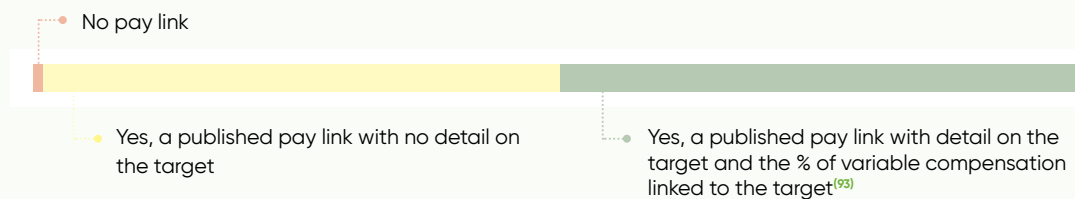
Annual Carbon Footprint



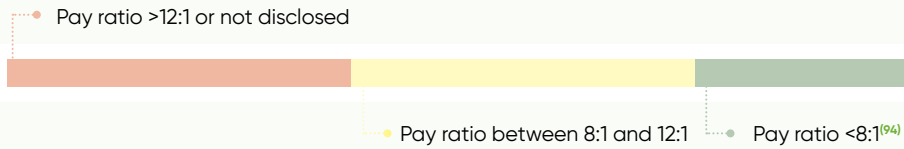
Net-Zero Target



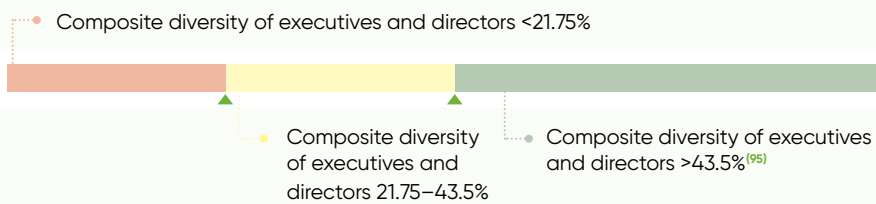
ESG Pay Link



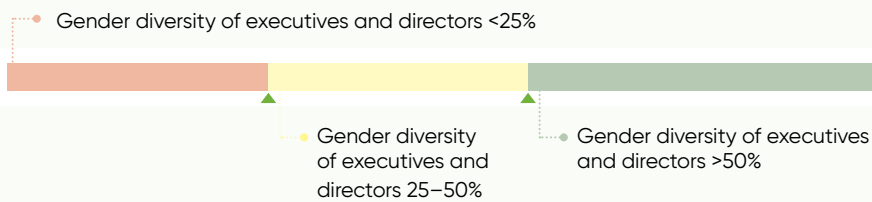
CEO/Average Employee Pay



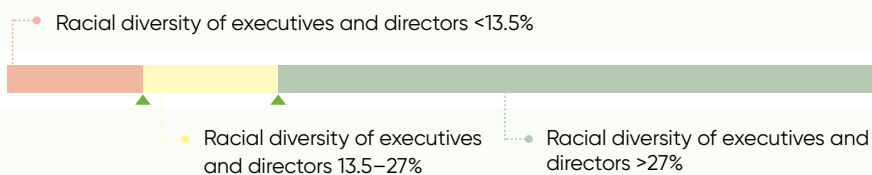
Composite Leadership Diversity



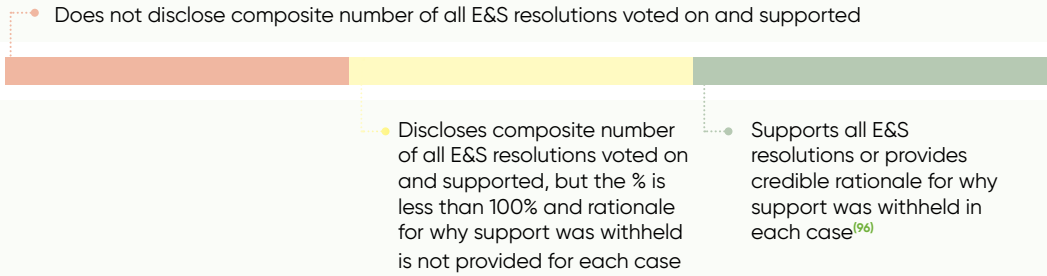
Leadership Gender Diversity



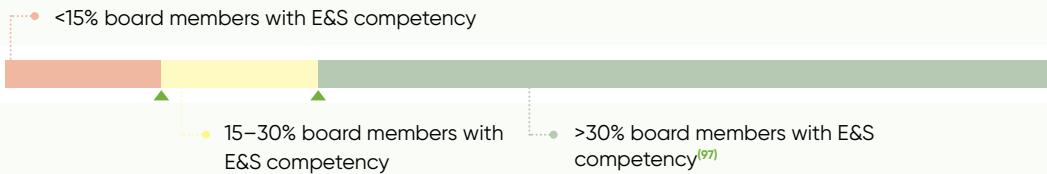
Leadership Racial Diversity



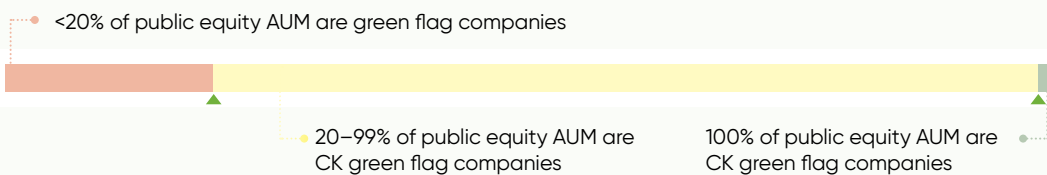
% E&S Resolutions Supported



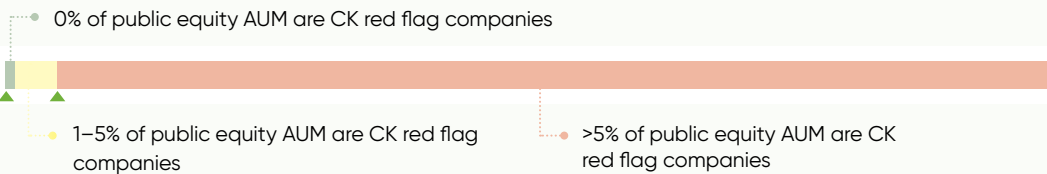
Board E&S Competency



Leadership Gender Diversity



Red Flag Exposure



SCORECARDS

AIMCO (Alberta Investment Management Corporation)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	7.8%	2021 Annual Report
Total AUM (CDN\$)	\$168,300,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$51,900,000,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$8,200,000,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$48,400,000,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$18,300,000,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$10,600,000,000	2021 Annual Report
Other Asset Class AUM (CDN\$)	\$1,800,000,000	2021 Annual Report
Value of Disclosed Holdings (CDN\$)	\$15,449,607,192	Capital IQ (Public 13F Filings dated 2022-03-31)

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	Green investments are defined based on generally accepted definitions of 'green investments', such as the OECD's Annual Survey of Large Pension Funds and Public Pension Reserve Funds and includes: equity investments in pure play green companies, labelled green bonds, investments in renewable energy in private infrastructure, private renewable resources investments which includes forestry and agriculture, and Canadian and U.S. commercial real estate investments with green building certifications.	2022 TCFD Report
Total AUM in Solutions (CDN\$)	\$14,000,000,000	2022 TCFD Report
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		2020 Responsible Investment Report
Other Asset Class AUM in Solutions (CDN\$)	\$500,000,000	Green Bond Report 2022

% Total AUM in Solutions (CDN\$)	8.3%	
% Public Equity AUM in CK Green Flag Companies	12.8%	CK Database
% Public Equity AUM in CK Red Flag Companies	12.6%	CK Database

Carbon Footprint

Description	Value	Source
Carbon Footprint Metric Definition	Financed Carbon Emissions Intensity (tCO ₂ e/\$M)	2022 TCFD Report
% of Assets Covered By Carbon Footprint Metric	87.0%	2022 TCFD Report
Fund Carbon Footprint	47	2022 TCFD Report
Fund Carbon Footprint Public Equities	49	2022 TCFD Report
Fund Carbon Footprint Fixed Income	33	2022 TCFD Report
Fund Carbon Footprint Private Markets	13	2022 TCFD Report
Fund Carbon Footprint Real Estate	12	2022 TCFD Report
Fund Carbon Footprint Infrastructure	105	2022 TCFD Report
Fund Carbon Footprint Private Debt		

Pay

Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	⊗	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	10.7	2021 Annual Report

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported	48.0%	2020 Responsible Investment Report
Executive Management Gender Diversity (% non-male)	38.5%	Leadership Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	30.8%	Leadership Webpage
Board Gender Diversity (% non-male)	45.5%	Board Webpage
Board Racial Diversity (% visible minority or indigenous)	9.0%	Board Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	27.3%	Board Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2020 Responsible Investment Report
Investor Signatory to Climate Action 100+ (Yes/No)	✓	2020 Responsible Investment Report
PRI Signatory (Yes/No)	✓	2020 Responsible Investment Report
ESG Mandate (Yes/No)	✓	Responsible Investing Webpage
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	⊗	
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)	⊗	
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)	⊗	
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)	⊗	

BCIMC (British Columbia Investment Management Corporation)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	8.3%	2022 Annual Report
Total AUM (CDN\$)	\$211,100,000,000	2022 Annual Report
Public Equity AUM (CDN\$)	\$64,300,000,000	2022 Annual Report
Private Equity AUM (CDN\$)	\$24,800,000,000	2022 Annual Report
Fixed Income AUM (CDN\$)	\$78,000,000,000	2022 Annual Report
Real Estate AUM (CDN\$)	\$33,600,000,000	2022 Annual Report
Infrastructure AUM (CDN\$)	\$20,200,000,000	2022 Annual Report
Other Asset Class AUM (CDN\$)	\$7,800,000,000	2022 Annual Report
Value of Disclosed Holdings (CDN\$)	\$14,488,448,776	Capital IQ (Public 13F Filings dated 2022-03-31)

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	Climate solutions as defined by SDI AOP taxonomy, green bond taxonomy, green building certification, and climate-themed investment strategies	2022 Climate Action Plan
Total AUM in Solutions (CDN\$)	\$2,800,000,000	2021 ESG Report
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)		
% Total AUM in Solutions (CDN\$)	1.3%	
% Public Equity AUM in CK Green Flag Companies	13.1%	CK Database
% Public Equity AUM in CK Red Flag Companies	15.2%	CK Database

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	Different approaches used for different asset classes. Measure of all asset classes under the market value-based approach (tCO ₂ e/\$M invested). Additionally, public equity is measured using the WACI method (tCO ₂ e/\$M revenue).	2021 ESG Report
% of Assets Covered by Carbon Footprint Metric	100.0%	Email Correspondence
Fund Carbon Footprint	Not disclosed	
Fund Carbon Footprint Public Equities	164	2021 ESG Report
Fund Carbon Footprint Fixed Income	47	2021 ESG Report
Fund Carbon Footprint Private Markets	227	2021 ESG Report
Fund Carbon Footprint Real Estate	7	2021 ESG Report
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	⊗	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	14.0	2022 Annual Report

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported	61.0%	Email Correspondence
Executive Management Gender Diversity (% non-male)	25.0%	Leadership Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	0.0%	Leadership Webpage
Board Gender Diversity (% non-male)	42.9%	Board Webpage
Board Racial Diversity (% visible minority or indigenous)	0.0%	Board Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	14.3%	Board Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2021 ESG Report
Investor Signatory to Climate Action 100+ (Yes/No)	✓	2021 ESG Report
PRI Signatory (Yes/No)	✓	2021 ESG Report
ESG Mandate (Yes/No)	✓	ESG Webpage
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	Invest a cumulative \$5bn in sustainability bonds by 2025. 30% reduction in public equities carbon exposure by 2025, using 2019 as baseline By 2030, ensure at least 80% of carbon-intensive investments have set mature net-zero aligned commitments or are the subject of direct or collaborative engagement by BCI	2022 Climate Action Plan
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)	⊗	
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)	⊗	
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)	⊗	

CDPQ (Caisse de dépôt et placement du Québec)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	8.9%	2021 Annual Report
Total AUM (CDN\$)	\$419,800,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$118,700,000,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$82,500,000,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$129,400,000,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$42,100,000,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$45,300,000,000	2021 Annual Report
Other Asset Class AUM (CDN\$)		
Value of Disclosed Holdings (CDN\$)	\$202,176,000,000	2021 Annual Report

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	Low-carbon assets includes companies received SBTi certification for their decarbonization target and investments that meet the Climate Bonds Initiative criteria used to define low-carbon solutions investments.	2021 Sustainable Investing Report Email correspondence
Total AUM in Solutions (CDN\$)	\$71,000,000	2021 Sustainable Investing Report Email correspondence
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)	\$12,000,000,000	
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)	\$27,000,000,000	2021 Sustainable Investing Report
% Total AUM in Solutions (CDN\$)	17%	
% Public Equity AUM in CK Green Flag Companies	21.7%	CK Database
% Public Equity AUM in CK Red Flag Companies	7.5%	CK Database

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	The carbon footprint of an asset corresponds to its direct or indirect greenhouse gas emissions (scopes 1 and 2) converted into equivalent tons of CO ₂ as defined by GHG Protocol.	2021 Sustainable Investing Report
% of Assets Covered By Carbon Footprint Metric	76%	2021 Sustainable Investing Report
Fund Carbon Footprint	41	2021 Sustainable Investing Report
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✔	
Sustainability Pay Link - Description of the sustainability-related performance target(s).	Moreover, since 2018, a component linked to carbon footprint intensity reduction targets has been added to the variable compensation calculation to support CDPQ's strategy to address climate change.	2021 Annual Report
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).	\$3,800,000.00	2021 Annual Report
CEO/Average Employee Pay (Ratio)	7.0	Email correspondence

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported	Not disclosed	2021 Sustainable Investing Report
Executive Management Gender Diversity (% non-male)	38.9%	Leadership Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	11.1%	Leadership Webpage
Board Gender Diversity (% non-male)	46.1%	Board Webpage
Board Racial Diversity (% visible minority or indigenous)	31.0%	Board Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	14.0%	Board Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2021 Sustainable Investing Report
Investor Signatory to Climate Action 100+ (Yes/No)	✓	2021 Sustainable Investing Report
PRI Signatory (Yes/No)	✓	2021 Sustainable Investing Report
ESG Mandate (Yes/No)	✓	Investment Strategy to Address Climate Change document
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	In 2019, we also decided to make a strong commitment: achieve a net-zero portfolio by 2050, with a focus on decarbonizing the real economy. Other targets: <ul style="list-style-type: none"> • \$54 billion in low-carbon assets by 2025; • 60% reduction in carbon intensity by 2030; • Complete our exit from oil production by the end of 2022; • \$10 billion transition envelope. 	2021 Sustainable Investing Report
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)	⊗	Policy Governing the Exercise of Voting Rights of Public Companies 2021 Sustainable Investing Report
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)	⊗	Policy Governing the Exercise of Voting Rights of Public Companies 2021 Sustainable Investing Report
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)	⊗	CDPQ Climate Strategy 2021 Sustainable Investing Report

CPCP (Canada Post Pension)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	9.3%	2021 Annual Report
Total AUM (CDN\$)	\$32,322,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$13,888,763,400	2021 Annual Report
Private Equity AUM (CDN\$)	\$1,784,174,400	2021 Annual Report
Fixed Income AUM (CDN\$)	\$11,070,285,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$3,707,333,400	2021 Annual Report
Infrastructure AUM (CDN\$)	\$1,477,115,400	2021 Annual Report
Other Asset Class AUM (CDN\$)		
Value of Disclosed Holdings (CDN\$)	\$24,340,566,015	Email correspondence

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	Invested in renewable energy (15% of the infrastructure portfolio), which includes wind power, hydroelectric power, solar power, biomass and energy from waste. Invested in buildings that have LEED or BOMA BEST ratings (environmental assessment and sustainable building certification programs for real estate).	2021 Annual Report
Total AUM in Solutions (CDN\$)	\$1,342,000,000	2021 Annual Report
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)	\$1,100,000,000	2021 Annual Report
Infrastructure AUM in Solutions (CDN\$)	242000000	2021 Annual Report
Other Asset Class AUM in Solutions (CDN\$)		
% Total AUM in Solutions (CDN\$)	4.2%	
% Public Equity AUM in CK Green Flag Companies	11.8%	CK Database
% Public Equity AUM in CK Red Flag Companies	8.4%	CK Database

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition		
% of Assets Covered By Carbon Footprint Metric		
Fund Carbon Footprint		
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✓	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)		

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported	0.78	2021 Proxy Voting Summary
Executive Management Gender Diversity (% non-male)	43.8%	Leadership Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	18.8%	Leadership Webpage
Board Gender Diversity (% non-male)	33.3%	Board Webpage
Board Racial Diversity (% visible minority or indigenous)	11.1%	Board Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	55.6%	Board Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	⊗	2021 Annual Report
Investor Signatory to Climate Action 100+ (Yes/No)	✓	2021 Annual Report
PRI Signatory (Yes/No)	✓	2021 Annual Report
ESG Mandate (Yes/No)	✓	Statement of Investment Policies and Procedures
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	⊗	Company submission
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)	⊗	
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)	⊗	Corporate Governance Principles and Proxy Voting Guidelines
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)	⊗	

CPPIB (Canada Pension Plan Investment Board)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	10.0%	2022 Annual Report
Total AUM (CDN\$)	\$539,366,000,000	2022 Annual Report
Public Equity AUM (CDN\$)	\$146,580,000,000	2022 Annual Report
Private Equity AUM (CDN\$)	\$169,820,000,000	2022 Annual Report
Fixed Income AUM (CDN\$)	\$40,212,000,000	2022 Annual Report
Real Estate AUM (CDN\$)	\$48,690,000,000	2022 Annual Report
Infrastructure AUM (CDN\$)	\$48,345,000,000	2022 Annual Report
Other Asset Class AUM (CDN\$)	\$85,719,000,000	2022 Annual Report
Value of Disclosed Holdings (CDN\$)	\$144,459,000,000	Company website

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	An asset is considered to be green when at least 95% of its revenue can be classified as being derived from green activities, as defined by the International Capital Market Association (ICMA). We adopt the highest end of the 75%-95% range that the E.U. Taxonomy uses to consider assets "strongly climate-aligned." We consider an asset to be in transition if the company is in a high emitting sector and has announced a commitment to net zero with a credible target and transition plan, and is making meaningful contributions to global emissions reductions. Assets are eligible if they obtain certification from a credible third-party, such as the Science Based Targets initiative (SBTi) for target setting. In addition, companies which have substantial green revenues that currently fall short of the green asset threshold (i.e., 95% minimum) may also be considered for inclusion as transition assets, provided they have a credible plan to grow their green revenue share over time.	2022 Report on Sustainable Investing
Total AUM in Solutions (CDN\$)	\$66,000,000,000	2022 Report on Sustainable Investing
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		

Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)	\$66,000,000,000	2022 Report on Sustainable Investing
% Total AUM in Solutions (CDN\$)	12.2%	
% Public Equity AUM in CK Green Flag Companies	12.8%	CK Database
% Public Equity AUM in CK Red Flag Companies	8.3%	CK Database

Carbon Footprint

Description	Value	Source
Carbon Footprint Metric Definition	Long term capital ownership method - Weighted Average Carbon Intensity (tCO ₂ e/\$million revenues)	2022 Report on Sustainable Investing
% of Assets Covered By Carbon Footprint Metric	100%	Email correspondence
Fund Carbon Footprint		2022 Report on Sustainable Investing
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay

Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✓	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	10.6	2022 Annual Report

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported		
Executive Management Gender Diversity (% non-male)	43.0%	Leadership Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	21.0%	Leadership Webpage
Board Gender Diversity (% non-male)	58.0%	Board Webpage
Board Racial Diversity (% visible minority or indigenous)	25.0%	Board Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	36.4%	Board Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2022 Report on Sustainable Investing
Investor Signatory to Climate Action 100+ (Yes/No)	⊗	2022 Report on Sustainable Investing
PRI Signatory (Yes/No)	✓	2022 Report on Sustainable Investing
ESG Mandate (Yes/No)	✓	Investment Beliefs Webpage
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	We commit our portfolio and operations to being net zero of GHG emissions across all scopes by 2050. Target of \$130bn in green and transition assets by 2030.	2022 Report on Sustainable Investing
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/ No)		
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/ No)		
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)		

DGPP (Desjardins Group Pension Plan)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	12.30%	2021 Annual Report
Total AUM (CDN\$)	\$18,218,917,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$4,350,675,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$1,331,595,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$8,000,000,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$1,855,027,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$1,908,729,000	2021 Annual Report
Other Asset Class AUM (CDN\$)	\$700,000,000	2021 Annual Report
Value of Disclosed Holdings (CDN\$)		

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	Investments that have ESG objectives and are linked to the creation of positive effects (impact) in their investment objectives.	Company Correspondence
Total AUM in Solutions (CDN\$)	\$1,674,878,419	Company Correspondence
Public Equity AUM in Solutions (CDN\$)	\$461,263,202	Company Correspondence
Private Equity AUM in Solutions (CDN\$)	\$0	Company Correspondence
Fixed Income AUM in Solutions (CDN\$)	\$139,300,000	Company Correspondence
Real Estate AUM in Solutions (CDN\$)	\$128,165,217	Company Correspondence
Infrastructure AUM in Solutions (CDN\$)	\$801,650,000	Company Correspondence
Other Asset Class AUM in Solutions (CDN\$)	\$144,500,000	Company Correspondence
% Total AUM in Solutions (CDN\$)	9.20%	Company Correspondence
% Public Equity AUM in CK Green Flag Companies	10.50%	Company Correspondence
% Public Equity AUM in CK Red Flag Companies	3.90%	Company Correspondence

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	Carbon intensity of our own investments compared to benchmark indexes (weighted average carbon intensity scope 1 and 2)	Company Correspondence
% of Assets Covered By Carbon Footprint Metric	40%	Company Correspondence
Fund Carbon Footprint		Company Correspondence
Fund Carbon Footprint Public Equities	180.8 (tCO ₂ e/\$M)	Company Correspondence
Fund Carbon Footprint Fixed Income	406.38 (tCO ₂ e/\$M)	Company Correspondence
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✓	Company Correspondence
Sustainability Pay Link - Description of the sustainability-related performance target(s).		Company Correspondence
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)		

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported	58.00%	Company Correspondence
Executive Management Gender Diversity (% non-male)	0%	
Executive Management Racial Diversity (% visible minority or indigenous)	0%	
Board Gender Diversity (% non-male)	36.0%	2021 Annual Report
Board Racial Diversity (% visible minority or indigenous)	0.0%	2021 Annual Report
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	17.0%	2021 Annual Report

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	Company Correspondence
Investor Signatory to Climate Action 100+ (Yes/No)		Company Correspondence
PRI Signatory (Yes/No)	✓	2021 Annual Report
ESG Mandate (Yes/No)	✓	Responsible Investment Webpage
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	⊗	Company Correspondence
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)	⊗	Company Correspondence
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)	⊗	Company Correspondence
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)	⊗	Company Correspondence

HOOPP (Healthcare of Ontario Pension Plan)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	10.5%	2021 Annual Report
Total AUM (CDN\$)	\$114,400,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$57,342,000,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$15,363,000,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$100,294,000,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$17,916,000,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$2,662,000,000	2021 Annual Report
Other Asset Class AUM (CDN\$)		
Value of Disclosed Holdings (CDN\$)	\$25,242,159,160	Capital IQ (Public 13F Filings dated 2022-03-31)

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)		
Total AUM in Solutions (CDN\$)	\$7,748,000,000	2021 Annual Report
Public Equity AUM in Solutions (CDN\$)	1000000000	2021 Annual Report
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)	550000000	2021 Annual Report
Real Estate AUM in Solutions (CDN\$)	\$5,800,000,000	Email Correspondence
Infrastructure AUM in Solutions (CDN\$)	398000000	2021 Annual Report
Other Asset Class AUM in Solutions (CDN\$)		
% Total AUM in Solutions (CDN\$)	6.8%	
% Public Equity AUM in CK Green Flag Companies	8.2%	CK Database
% Public Equity AUM in CK Red Flag Companies	5.8%	CK Database

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	We included scope 1 and scope 2 emissions, as well as some scope 3 emissions for select real estate assets. We use the ownership method as recommended by the Partnership for Carbon Accounting Financials and report our portfolio carbon footprint in CO ₂ e per million dollars invested. We have included long positions only; short positions are not included and have not been netted.	TCFD Disclosures Webpage
% of Assets Covered By Carbon Footprint Metric		
Fund Carbon Footprint	40.4	TCFD Disclosures Webpage
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✔	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)		

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported		
Executive Management Gender Diversity (% non-male)	50.0%	Leadership Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	0.0%	Leadership Webpage
Board Gender Diversity (% non-male)	31.3%	Board Webpage
Board Racial Diversity (% visible minority or indigenous)	0.0%	Board Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	6.3%	Board Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2021 Annual Report
Investor Signatory to Climate Action 100+ (Yes/No)	⊗	2021 Annual Report
PRI Signatory (Yes/No)	✓	2021 Annual Report
ESG Mandate (Yes/No)	✓	Sustainable Investing Webpage
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	HOOPP is committed to achieving net-zero carbon emissions in our portfolio by 2050.	Sustainable Investing Webpage
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)		
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)		
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)		

IMCO (Investment Management Corporation of Ontario)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	N/A	2021 Annual Report
Total AUM (CDN\$)	\$79,000,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$26,300,000,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$4,600,000,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$17,200,000,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$11,900,000,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$6,300,000,000	2021 Annual Report
Other Asset Class AUM (CDN\$)	\$12,700,000,000	2021 Annual Report
Value of Disclosed Holdings (CDN\$)		

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	<p>IMCO defines sustainable solutions as companies or projects that derive at least 50% of their business from products or services that provide climate or social solutions and address one or more of the SDG goals. Product or service threshold is based on relevant financial metric, depending on factors such as business model and business lifecycle stage.</p> <p>Companies that are involved in significant ESG controversies or cause significant harm would be ineligible to be included as sustainable solutions.</p> <p>There are two sub-categories of sustainable solutions:</p> <p>Climate Solutions: Investments in companies where a majority of their business is derived from climate solutions activities. We define climate solutions in line with ICMA Green Bond Principles, which include: Renewable energy/ alternative fuels, Energy efficiency/ clean technology, Green buildings, Clean transportation, Climate change adaptation, Circular economy / recycling, Pollution prevention & emission control, Sustainable agriculture & natural capital, Sustainable water & wastewater management, Terrestrial and aquatic biodiversity.</p> <p>Social Solutions: Investments in companies where a majority of their business is derived from social solutions activities. We define social solutions in line with ICMA Social Bond Principles, which include: Access to essential services, Affordable basic infrastructure, Affordable housing, Food security and sustainable food systems</p>	Climate Action Plan provides climate solution definition
Total AUM in Solutions (CDN\$)	\$11,060,000,000	
Public Equity AUM in Solutions (CDN\$)		

Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)		
% Total AUM in Solutions (CDN\$)	14.0%	Climate Action Plan
% Public Equity AUM in CK Green Flag Companies		
% Public Equity AUM in CK Red Flag Companies		

Carbon Footprint

Description	Value	Source
Carbon Footprint Metric Definition	tCO ₂ e/M\$ - We calculated our financed emissions in accordance with the PCAF1 guidance and the Greenhouse Gas Protocol2. We include financed scope 1 and scope 2 emissions in our financed emissions calculation. Scope 1 emissions are direct emissions that occur from sources controlled by a company (e.g., company facilities) and scope 2 emissions are indirect emissions associated with the company's purchase of electricity, steam, heating and cooling.	2021 ESG Report
% of Assets Covered By Carbon Footprint Metric	70%	2021 ESG Report
Fund Carbon Footprint	47	2021 ESG Report
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay

Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✔	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		

Sustainability Pay Link – The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link – The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	7.1	2020 Annual Report

Governance

Description	Value	Source
% of E&S Shareholder Resolutions Supported		
Executive Management Gender Diversity (% non-male)	28.6%	Executive Team Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	14.3%	Executive Team Webpage
Board Gender Diversity (% non-male)	33.3%	Board of Directors Webpage
Board Racial Diversity (% visible minority or indigenous)	11.1%	Board of Directors Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	55.6%	Board of Directors Webpage

Signatories and Policies

Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✔	2021 Annual Report
Investor Signatory to Climate Action 100+ (Yes/No)	✔	2021 Annual Report
PRI Signatory (Yes/No)	✔	2021 Annual Report
ESG Mandate (Yes/No)	✔	ESG Screening Guideline
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	Committed to net-zero GHG emissions in portfolio by 2050 or sooner	2021 ESG Report Climate Action Plan
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)	✘	Stewardship Guideline Climate Action Plan
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)	✘	Stewardship Guideline Climate Action Plan
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)	✘	2021 ESG Report Climate Action Plan

OMERS (Ontario Municipal Employees Retirement System)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	7.5%	2021 Annual Report
Total AUM (CDN\$)	\$120,919,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$18,697,000,000	2021 Financial Statements (Note 3)
Private Equity AUM (CDN\$)	\$25,365,000,000	2021 Financial Statements (Note 3)
Fixed Income AUM (CDN\$)	\$20,865,000,000	2021 Financial Statements (Note 3)
Real Estate AUM (CDN\$)	\$23,604,000,000	2021 Financial Statements (Note 3)
Infrastructure AUM (CDN\$)	\$29,691,000,000	2021 Financial Statements (Note 3)
Other Asset Class AUM (CDN\$)	\$19,067,000,000	2021 Financial Statements (Note 3)
Value of Disclosed Holdings (CDN\$)	\$8,714,510,224	Capital IQ (Public 13F Filings dated 2022-03-31)

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	Investments in green assets including green buildings, renewable energy, and energy efficiency assets	2021 Annual Report
Total AUM in Solutions (CDN\$)	\$18,000,000,000	2021 Annual Report
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)	\$18,000,000,000	2021 Annual Report
% Total AUM in Solutions (CDN\$)	14.9%	
% Public Equity AUM in CK Green Flag Companies	8.9%	CK Database
% Public Equity AUM in CK Red Flag Companies	13.5%	CK Database

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	Weighted Average Carbon Intensity (tCO ₂ e/\$million revenues)	2021 Annual Report
% of Assets Covered By Carbon Footprint Metric	95.0%	2021 Annual Report
Fund Carbon Footprint	129	2021 Annual Report
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✓	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	22.6	2021 Annual Report Greater Toronto's Top 2023 Employers

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported		
Executive Management Gender Diversity (% non-male)	38.0%	Page 20 of 2021 annual report
Executive Management Racial Diversity (% visible minority or indigenous)	6.3%	Leadership Webpage
Board Gender Diversity (% non-male)	21.0%	Board Webpage
Board Racial Diversity (% visible minority or indigenous)	21.0%	Board Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	20.0%	Board Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	⊗	2021 Annual Report
Investor Signatory to Climate Action 100+ (Yes/No)	⊗	
PRI Signatory (Yes/No)	⊗	
ESG Mandate (Yes/No)	☑	Vision and Mission Webpage
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	OMERS is committed to achieving net-zero greenhouse gas emissions by 2050 and a 20% carbon intensity reduction by 2025.	Our Approach to Climate Change
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)		
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)		
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)		

OPTrust (Ontario Public Service Employees Union Pension Trust)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	9.00%	2021 Annual Report
Total AUM (CDN\$)	\$27,264,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$1,887,000,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$4,017,000,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$9,604,000,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$3,981,000,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$3,364,000,000	2021 Annual Report
Other Asset Class AUM (CDN\$)		
Value of Disclosed Holdings (CDN\$)	\$427,437,649	Capital IQ (Public 13F Filings dated 2022-03-31)

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)		
Total AUM in Solutions (CDN\$)		
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)		
% Total AUM in Solutions (CDN\$)		
% Public Equity AUM in CK Green Flag Companies	7.50%	CK Database
% Public Equity AUM in CK Red Flag Companies	8.60%	CK Database

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition		
% of Assets Covered By Carbon Footprint Metric		
Fund Carbon Footprint		
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✔	Email correspondence
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	8.1	2021 Annual Report Email correspondence

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported	45%	
Executive Management Gender Diversity (% non-male)	38.00%	About OPTrust Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	13.00%	About OPTrust Webpage
Board Gender Diversity (% non-male)	40.00%	About OPTrust Webpage
Board Racial Diversity (% visible minority or indigenous)	10.00%	About OPTrust Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	50.00%	Email Correspondence

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2021 Responsible Investment Report
Investor Signatory to Climate Action 100+ (Yes/No)	✓	2021 Responsible Investment Report
PRI Signatory (Yes/No)	✓	2021 Responsible Investment Report
ESG Mandate (Yes/No)	✓	Responsible Investing Webpage
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	OPTrust aims to achieve a net-zero portfolio by 2050, based on the expectation that global progress and momentum continues toward achieving net-zero greenhouse gas emissions over that timeframe.	
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)		
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)		
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)		

OTPP (Ontario Teachers' Pension Plan)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	8.40%	2021 Annual Report
Total AUM (CDN\$)	\$241,600,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$27,200,000,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$55,100,000,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$45,200,000,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$26,300,000,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$26,100,000,000	2021 Annual Report
Other Asset Class AUM (CDN\$)	\$48,000,000,000	2021 Annual Report
Value of Disclosed Holdings (CDN\$)	\$12,810,396,277	Capital IQ (Public 13F Filings dated 2022-03-31)

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	Green investments are companies that generate clean energy, reduce demand for fossil fuels and build a sustainable economy. Investment in green assets including a stake in environmental markets innovator and natural resource manager GreenCollar and a portfolio of renewable energy assets from NextEra Energy.	2021 Annual Report
Total AUM in Solutions (CDN\$)	\$33,000,000,000	2021 Annual Report
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)	\$33,000,000,000	2021 Annual Report
% Total AUM in Solutions (CDN\$)	13.70%	
% Public Equity AUM in CK Green Flag Companies	5.00%	CK Database
% Public Equity AUM in CK Red Flag Companies	6.60%	CK Database

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	Our approach is informed by the Partnership for Carbon Accounting Financials. Using the enterprise value-based methodology: (OTPP's Equity + Debt in issuer/Enterprise Value) Scope 1 and 2 emissions (tCO ₂ e/M\$ invested).	2021 Annual Report
% of Assets Covered By Carbon Footprint Metric	70%	2021 Annual Report
Fund Carbon Footprint	32	2021 Annual Report
Fund Carbon Footprint Public Equities	41	2021 Annual Report
Fund Carbon Footprint Fixed Income	88	2021 Annual Report
Fund Carbon Footprint Private Markets	20	2021 Annual Report
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✓	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	14.1	2021 Annual Report

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported		
Executive Management Gender Diversity (% non-male)	55.60%	Leadership Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	11.10%	Leadership Webpage
Board Gender Diversity (% non-male)	54.50%	Leadership Webpage
Board Racial Diversity (% visible minority or indigenous)	0.00%	Leadership Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	45.50%	Leadership Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2021 Responsible Investment Report
Investor Signatory to Climate Action 100+ (Yes/No)	✓	2021 Responsible Investment Report
PRI Signatory (Yes/No)	✓	2021 Responsible Investment Report
ESG Mandate (Yes/No)	✓	Responsible Investing Webpage
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	In 2021, we made a commitment to achieve net-zero greenhouse gases by 2050. As part of this commitment, we will almost halve our emissions intensity by 2025. By 2030, we will cut our emissions intensity by two-thirds.	Environmental Impact Webpage
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)		
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)		
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)		

PSP (Public Sector Pension Investment Board)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	9.00%	2021 Annual Report
Total AUM (CDN\$)	\$230,500,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$99,900,000,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$35,400,000,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$0	2021 Annual Report
Real Estate AUM (CDN\$)	\$31,100,000,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$23,500,000,000	2021 Annual Report
Other Asset Class AUM (CDN\$)	\$40,600,000,000	2022 Annual Report
Value of Disclosed Holdings (CDN\$)	\$20,492,575,964	SEC (Public 13F Filings dated 2022-03-31)

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	PSP's green assets include investments in sustainable infrastructure, renewable energy, green buildings and certified sustainable forestry. Investments in low carbon activities that lead to positive environmental impacts, in according with PSP's bespoke Green Asset Taxonomy	2022 Green Asset Taxonomy Paper
Total AUM in Solutions (CDN\$)	\$46,500,000,000	2022 Responsible Investment Report
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)		
% Total AUM in Solutions (CDN\$)	20.20%	
% Public Equity AUM in CK Green Flag Companies	13.60%	CK Database + Public 13F filings dated March 31, 2022.
% Public Equity AUM in CK Red Flag Companies	13.20%	CK Database + Public 13F filings dated March 31, 2022.

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	Weighted Average Carbon Intensity (tCO ₂ e/\$million revenues)	2022 TCFD Report
% of Assets Covered By Carbon Footprint Metric	87%	2022 TCFD Report
Fund Carbon Footprint	166	2022 TCFD Report
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		
Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✓	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	12.2	2021 Annual Report

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported		
Executive Management Gender Diversity (% non-male)	33.30%	Senior Management Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	0.00%	Senior Management Webpage
Board Gender Diversity (% non-male)	50.00%	Board of Directors Webpage & 2022 Annual Report
Board Racial Diversity (% visible minority or indigenous)	18.20%	Board of Directors Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	50.00%	2022 Annual Report

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	☑	2022 Climate-Related Financial Disclosures
Investor Signatory to Climate Action 100+ (Yes/No)	☒	
PRI Signatory (Yes/No)	☑	2022 Responsible Investment Report
ESG Mandate (Yes/No)	☑	Investment Beliefs + Responsible Investment Policy
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	☑	2022 Climate Strategy Roadmap
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)	☒	Responsible Investment Policy + Climate Strategy Roadmap
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)	☒	Climate Strategy Roadmap
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)	☒	PSP Corporate View on Climate Change; PSP Green Bond Framework

UPP (University Pension Plan)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	Not applicable.	
Total AUM (CDN\$)	\$11,782,881,000	2021 Annual Report
Public Equity AUM (CDN\$)	4061991000	2021 Annual Report
Private Equity AUM (CDN\$)	717788000	2021 Annual Report
Fixed Income AUM (CDN\$)	3135763000	2021 Annual Report
Real Estate AUM (CDN\$)	379846000	2021 Annual Report
Infrastructure AUM (CDN\$)	194352000	2021 Annual Report
Other Asset Class AUM (CDN\$)	3293141000	2021 Annual Report
Value of Disclosed Holdings (CDN\$)		

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)	Not available.	
Total AUM in Solutions (CDN\$)	Not available.	
Public Equity AUM in Solutions (CDN\$)	Not available.	
Private Equity AUM in Solutions (CDN\$)	Not available.	
Fixed Income AUM in Solutions (CDN\$)	Not available.	
Real Estate AUM in Solutions (CDN\$)	Not available.	
Infrastructure AUM in Solutions (CDN\$)	Not available.	
Other Asset Class AUM in Solutions (CDN\$)	Not available.	
% Total AUM in Solutions (CDN\$)	Not available.	
% Public Equity AUM in CK Green Flag Companies	Not available.	
% Public Equity AUM in CK Red Flag Companies	Not available.	

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	Weighted Average Carbon Intensity (tCO ₂ e/\$million revenues)	2021 Annual Report
% of Assets Covered By Carbon Footprint Metric	70.0%	2021 Annual Report
Fund Carbon Footprint	139	2021 Annual Report
Fund Carbon Footprint Public Equities	53	2021 Annual Report
Fund Carbon Footprint Fixed Income	68	2021 Annual Report
Fund Carbon Footprint Private Markets	38	2021 Annual Report
Fund Carbon Footprint Real Estate	11	2021 Annual Report
Fund Carbon Footprint Infrastructure	149	2021 Annual Report
Fund Carbon Footprint Private Debt	36	2021 Annual Report

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	✓	
Sustainability Pay Link - Description of the sustainability-related performance target(s).	Not disclosed publicly.	
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).	Not disclosed publicly.	
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).	\$700,000.00	2021 Annual Report
CEO/Average Employee Pay (Ratio)	11	2021 Annual Report

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported	Not applicable.	
Executive Management Gender Diversity (% non-male)	71.4%	UPP Governance Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	42.9%	UPP Governance Webpage
Board Gender Diversity (% non-male)	57.1%	UPP Governance Webpage
Board Racial Diversity (% visible minority or indigenous)	0.0%	UPP Governance Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	21.4%	UPP Governance Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2021 Annual Report
Investor Signatory to Climate Action 100+ (Yes/No)	✓	
PRI Signatory (Yes/No)	✓	
ESG Mandate (Yes/No)	✓	Responsible Investing Policy
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]	UPP will transition its investment portfolio to net-zero GHG emissions by 2040, or sooner.	2021 Annual Report
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)	Not disclosed publicly.	
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)	Not disclosed publicly.	
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)	Not disclosed publicly.	

VEST (Vestcor)

Financials		
Description	Value	Source
5-year annualized rate of return (net nominal %) (2017-2021)	7.61%	
Total AUM (CDN\$)	\$21,000,000,000	2021 Annual Report
Public Equity AUM (CDN\$)	\$6,961,000,000	2021 Annual Report
Private Equity AUM (CDN\$)	\$1,306,000,000	2021 Annual Report
Fixed Income AUM (CDN\$)	\$9,368,000,000	2021 Annual Report
Real Estate AUM (CDN\$)	\$1,341,000,000	2021 Annual Report
Infrastructure AUM (CDN\$)	\$1,251,000,000	2021 Annual Report
Other Asset Class AUM (CDN\$)		
Value of Disclosed Holdings (CDN\$)	\$8,200,000,000	Capital IQ (Public 13F Filings dated 2022-03-31)

Solutions		
Description	Value	Source
Sustainable Solutions Definition Used by Pension Fund (if any)		
Total AUM in Solutions (CDN\$)		
Public Equity AUM in Solutions (CDN\$)		
Private Equity AUM in Solutions (CDN\$)		
Fixed Income AUM in Solutions (CDN\$)		
Real Estate AUM in Solutions (CDN\$)		
Infrastructure AUM in Solutions (CDN\$)		
Other Asset Class AUM in Solutions (CDN\$)		
% Total AUM in Solutions (CDN\$)		
% Public Equity AUM in CK Green Flag Companies	10.50%	CK Database
% Public Equity AUM in CK Red Flag Companies	8.40%	CK Database

Carbon Footprint		
Description	Value	Source
Carbon Footprint Metric Definition	Weighted Average Carbon Intensity (WACI)	Responsible Investment Report
% of Assets Covered By Carbon Footprint Metric	53%	
Fund Carbon Footprint	205	Responsible Investment Report
Fund Carbon Footprint Public Equities		
Fund Carbon Footprint Fixed Income		
Fund Carbon Footprint Private Markets		
Fund Carbon Footprint Real Estate		
Fund Carbon Footprint Infrastructure		
Fund Carbon Footprint Private Debt		

Pay		
Description	Value	Source
Sustainability Pay Link - mechanism to link the remuneration of any member of a fund's top tier executive team with the achievement of environmental or social sustainability performance targets (Yes/No)	⊗	
Sustainability Pay Link - Description of the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term) that is tied to the sustainability-related performance target(s).		
Sustainability Pay Link - The total amount of the CEO's annual variable compensation (short-term and long term).		
CEO/Average Employee Pay (Ratio)	8	2021 Annual Report

Governance		
Description	Value	Source
% of E&S Shareholder Resolutions Supported	57%	
Executive Management Gender Diversity (% non-male)	50.00%	Corporate Overview Webpage
Executive Management Racial Diversity (% visible minority or indigenous)	16.70%	Corporate Overview Webpage
Board Gender Diversity (% non-male)	44.40%	Governance Webpage
Board Racial Diversity (% visible minority or indigenous)	0.00%	Governance Webpage
Board ESG Competency (% with ESG experience - includes experience in impact function and/or impact organizations)	33.00%	Governance Webpage

Signatories and Policies		
Description	Value	Source
Supports Taskforce on Climate-related Financial Disclosures (TCFD) (Yes/No)	✓	2021 Annual Report
Investor Signatory to Climate Action 100+ (Yes/No)	⊗	
PRI Signatory (Yes/No)	⊗	
ESG Mandate (Yes/No)	✓	Responsible Investing Guidelines
Asset Allocation Targets for Net-Zero GHG emissions and/or Sustainable Solutions [specify targets and dates]		
Policy to ensure that fund lobbying activities and industry association memberships are aligned with a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (Yes/No)		
Require investees to ensure that any climate-related policy advocacy undertaken supports a just transition and the ambition of achieving global net-zero emissions by 2050 or sooner (including industry associations) (Yes/No)		
Policy to restrict the expansion of fossil fuel infrastructure (i.e., voting against directors or denial of debt) (Yes/No)		



ENDNOTES

- (1) The additional annual investment required to achieve net-zero-aligned clean energy goals – US\$3.8 trillion (US\$5 trillion required minus actual annual investment of US\$1.2 trillion) – according to the IEA. Based on the broad assumption that 25% to 75% of the investment gap will be filled in by long-term private sector investors, comprising insurance funds (US\$26.8 trillion) and pension funds (US\$57 trillion making up 57% of long-term capital pools), which works out to US\$071 to 2.1 trillion per year from the global pension funds, representing 2% to 6% of global pension fund AUM. Canadian pension funds would likely be on the higher end of this spectrum given their long experience and existing high exposures to the infrastructure asset class, where the bulk of the investment gap exists. Canadian pension funds have average investment holding periods of 6.4 years, which implies an average exposure of 20% allocated to solutions. For further information, see:
 - [iea.org/reports/net-zero-by-2050](https://www.iea.org/reports/net-zero-by-2050)
 - [oecd.org/finance/private-pensions/globalpensionstatistics.htm](https://www.oecd.org/finance/private-pensions/globalpensionstatistics.htm),
 - unfccc.int/files/adaptation/workstreams/loss_and_damage/application/pdf/unep.pdf
 - pionline.com/assets/docs/CO110363512.PDF
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 - unfccc.int/files/adaptation/workstreams/loss_and_damage/application/pdf/unep.pdf
- (2) While Ontario Pension Board (OPB) provided information for this analysis, in order to avoid duplication and maintain consistency, we do not list them in the main dashboard table, which includes their investment manager, The Investment Corporation of Ontario (IMCO).
- (3) Top1000Fund.Com & CEM Benchmarking (2020). *Global Pension Transparency Benchmark*. top1000funds.com/global-pension-transparency-benchmark/
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- (8) Net return on total fund
- (9) Average of executive gender diversity, executive racial diversity, board gender diversity and board racial diversity
- (10) Includes annual reports, sustainability reports, responsible investing reports, fund websites, 13-F filings, S&P's Capital IQ database, UN PRI signatory directory, Climate Action 100+ directory, TCFD directory, LinkedIn profiles and news articles.

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- (14) Figure sourced through direct correspondence.
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- (16) CPPIB. (2022). *2022 Report on Sustainable Investing*.
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- (17) Figure sourced through direct correspondence.
- (18) Total fund footprint not disclosed, this is the reported value for the public equity portfolio.
- (19) Total fund footprint not disclosed, this is the reported value for the public equity portfolio.
- (20) Total fund footprint not disclosed, this is the reported value for the public equity portfolio.
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[spglobal.com/esg/insights/creating-a-carbon-footprint#:~:text=Weighted%2DAverage%20Carbon%20Intensity\(TCFD,carbon%2Dto%2Drevenue%20intensity.](https://spglobal.com/esg/insights/creating-a-carbon-footprint#:~:text=Weighted%2DAverage%20Carbon%20Intensity(TCFD,carbon%2Dto%2Drevenue%20intensity.)
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