





Green Bonds

In 2018, CPP Investments became the first pension fund manager to issue a green bond and has been a consistent issuer of green bonds since then. Green bonds provide CPP Investments with additional funding as we pursue investments in green assets. CPP Investments has issued eight green bonds, totaling more than \$7.5 billion gross. The issuances have been in Australian dollars, Canadian dollars, euros and U.S. dollars. Our Sustainable Investing Committee (SIC) determines which assets are eligible for green bond proceeds in accordance with the Green Bond Framework. CPP Investments confirms that the use of net proceeds and impact metrics listed in this report are in accordance with the framework. More information on our Green Bond Program can be found on our website. As of March 31, 2023, the framework, includes:

Renewable Energy

 Acquisition, development, generation, transmission and distribution of renewable energy including wind power, solar power and green hydrogen

Green Buildings

 Purchase, development and/or redevelopment of properties that are, or are expected to be, certified as LEED Platinum or equivalent levels in other certification programs

Low Carbon/Clean Transportation

 Development, deployment and operation of clean transportation assets including in public and private transport

Energy Efficiency

 Development, deployment and operation of technologies, products, or systems that provide significant improvements in energy efficiency (>30% per International Energy Agency and EU Taxonomy)

The 2022 revision of the Green Bond Framework incorporates CPP Investments' commitment to net zero; strengthens and clarifies project eligibility criteria; specifies treatment of temporarily notionally unallocated net proceeds and expands on CPP Investments' processes for transparency, reporting and verification. The Framework received a dark green rating (the highest possible rating) from Shades of Green, formerly part of CICERO, a leader in providing second opinions on the qualification of debt for green bond status.

This Report covers the period from April 1, 2022 – March 31, 2023 and is based on our **2022 Framework** published in June 2022.

Green Impact Summary Fiscal Year 2023

Notional allocation of net proceeds by eligible category:

91% renewable energy versus9% green buildings

Outstanding amount of net proceeds at end of reporting period:

\$6.4B of net proceeds from green bonds versus **\$6.79B** green assets

(*values were converted at FX rates at the end of reporting periods for each respective period)

Breakdown of notional allocation of net proceeds between new and existing investments:1

\$6.79B of green assets are split with **89%** going to existing investments and **11%** going to new investments

1. New investments are assets added to the register in the most recent fiscal year ended. Existing investments are all assets added prior.

Green Bond Impact Report

Green Bond Register

The Green Bond Register documents the net proceeds of green bond issuances and to which asset, proceeds have been allocated. Below are the 2023, 2022 and 2021 Green Bond Registers. The 2020 Register has been removed from this year's reporting. It is available in previous years' reports on our <u>website</u>. All figures are in Canadian dollars unless otherwise noted.

Green Bond Register 2023¹

Year ended March 31, 2023

Register for 2023	Currency	Local Currency	CAD Equivalent
Bonds			
CPPIBC 3 06/15/28	CAD	961,930,000	961,930,000
Total Bonds		961,930,000	961,930,000
Renewable Energy			
Pattern Energy ²	USD		
Octopus Energy Development Partnership	EUR		
Renewable Power Capital (RPC)	EUR		
Renewable Power Capital (RPC)	GBP		
Maple Power – Eolien Maritime France ³	EUR		
Total Assets			1,049,095,251
Exchange Rates			
USD/CAD	1.35335		
EUR/CAD	1.47035		
GBP/CAD	1.67335		

Green Bond Register 2022¹

Period ended March 31, 2022

Register for 2022	Currency	Local Currency	CAD Equivalent
Bonds			
Total Bonds		_	-
Renewable Energy			
Pattern Energy ²	USD		
Total Assets		_	-
Exchange Rates			
USD/CAD	1.24905		
EUR/CAD	1.38975		
BRL/CAD	0.2628		
AUD/CAD	0.9380		

Green Bond Register 2021¹

Year ended June 30, 2021

Register for 2021	Currency	Local Currency	CAD Equivalent
Bonds			
CPPIBC 2.414 02/25/41	AUD	149,763,000	139,227,731
CPPIBC 2.79 03/12/41	AUD	119,815,200	111,386,647
CPPIBC 1.5 06/23/28	AUD	747,390,000	694,813,898
Total Bonds		1,016,968,200	945,428,275
Renewable Energy			
Pattern Energy ²	USD		
Maple Power - Eolien Maritime France	EUR		
Total Assets			1,222,335,001
Exchange Rates			
USD/CAD	1.2383		
EUR/CAD	1.4685		
BRL/CAD	0.2468		
AUD/CAD	0.9297		

- The C\$ values of bonds and assets reported in the 2021 Register are based on FX rates on the last business day in June of the respective reporting year. The C\$ values of bonds and assets reported in all other registers after 2021 are based on FX rates on the last business day in March in the respective
- The C\$ values or bonds and assets reported in an orner register's arter 2021 the backs of this asset investment amounts during this period. The CAD value of this asset reported across all reporting years is based on FX rates on June 30, 2020. Pattern Energy from the 2022 Register has been re-allocated to the 2023 Register as it was not used for any issuance in 2022.

 This asset was decreased in this year's register as there was a return of proceeds to the shareholders.

 The investment value for Maple Power Hohe See/Albatros was reduced this year due to an error made in a previous year. It is not reflected in the 2023 register as it is not a true asset investment increase or decrease.
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Impact of Operational Renewable Energy Projects¹

Investment	Location	Date of Initial Investment	Description	Technology	Gross Capacity (GW)²	CPP Investments' Prorata Capacity (GW)	CPP Investments' Ownership
Pattern Energy	Canada/ United States/ Japan	Mar-20	A company with a portfolio of 34 renewable energy projects in the United States, Canada and Japan	Wind/Solar	3.89	2.71	70%
Cordelio Power	Canada	Apr-18	Portfolio of six Canadian operating wind and solar power projects	Wind/Solar	0.40	0.20	51%
Enbridge	Canada/ United States	May-18	North American onshore renewable power assets	Wind/Solar	1.92	0.86	44%
Votorantim Energia	Brazil	Dec-17	Two operational wind parks located in Northeastern Brazil	Wind	0.57	0.18	32%
Maple Power – Hohe See/ Albatros	Germany	May-18	Two German offshore wind projects	Wind	0.61	0.15	25%
Maple Power – Eolien Maritime France	France	Mar-21	Three offshore wind farms in France, two of which remain under construction	Wind	0.48	0.12	49%
Renewable Power Capital (RPC)	Europe	Dec-20	Platform created to invest in solar, wind and battery storage technologies across Europe	Wind/Solar	0.17	0.17	100%
Octopus Energy Development Partnership	Europe	Jun-22	The mandate of the partnership is to invest in onshore renewables development opportunities (mainly wind, solar and batteries) in Europe	Wind/Solar	under construction	under construction	97%
Total					8.03	4.39	

Figures are rounded up.

1. For period April 1, 2022 to March 31, 2023.

2. Net capacity represents the total capacity of the sites wholly or partially owned by CPP Investments' portfolio companies, after deducting any minority interests.

Green Buildings

Qualitative Summary

Investment	Location	Description	CPPIB Ownership	Certification
Richmond Adelaide Centre ¹	Canada	255,313 sq. ft. (111 Richmond) and 1,039,746 sq. ft. (100 Adelaide) Multipurpose Commercial Space	50%	LEED EB Platinum
Eau Claire Tower	Canada	659,839 sq. ft. Multipurpose Commercial Space	50%	LEED CS Platinum
Centennial Place	Canada	1,458,600 sq. ft. Multipurpose Commercial Space	50%	LEED EB Platinum

Quantitative Summary - Energy Use Intensity (EUI) and Carbon Emission Intensity (CEI)²

Investment	EUI	Industry Standard EUI ³	EUI Variation from Industry Standard ⁴	CEI	Industry Standard CEI ³	CEI Variation from Industry Standard ⁴
	(MJ/sq. ft.)	(MJ/sq. ft.)		(kg CO ₂ e/sq. ft.)	(kg CO ₂ e/sq. ft.)	
Richmond Adelaide Centre – 111 Richmond ⁵	116.82	91.97	32%	5.21	3.06	70%
Richmond Adelaide Centre – 100 Adelaide	69.06	91.97	-25%	1.87	2.61	-28%
Eau Claire Tower	69.26	91.97	-25%	7.80	11.68	-33%
Centennial Place	74.83	91.97	-19%	7.82	11.68	-33%

Richmond Adelaide Centre includes 111 Richmond and 100 Adelaide.

Data for performance period of Jan 1, 2022 to Dec 31, 2022. Figures are rounded.

Industry standard EUI and CEI values are updated and calculated from data provided in the 'EnergyStar Portfolio Manager's Canadian Energy Use Intensity by Property Type – Technical Reference (April, 2021)' and 'EnergyStar Portfolio Manager's Estimating Fuel Mix and Energy Cost – Technical Reference (April, 2022)'.

EUI and CEI variation metrics are for the entire asset and not the pro rata percentage of CPP Investments.

111 Richmond has a higher EUI and CEI due to significant retail/restaurant space type on ground floor, longer hours of operation, high energy using technology tenants and an older steam heating system with minor operational improvements expected in 2023.



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