

Financed emissions of investment portfolios

Understanding climate-related risk as part of sustainable investing

Climate change can have a significant impact on financial markets and investment returns. Co-operators seeks to manage the investment risks and opportunities associated with climate change and the transition to a low-emissions, resilient economy.

In 2014, Co-operators became the first Canadian insurer to sign the [United Nations-supported Principles for Responsible Investment](#) (PRI's) [Montreal Carbon Pledge](#), a commitment to measure and publicly disclose the carbon footprints, or financed emissions, of investment portfolios. In 2021 we reaffirmed our commitment to climate action by joining the UN-convened Net-Zero Asset Owner Alliance, which as of early 2023 brought together over 80 asset owners from across the world managing US\$11 trillion in assets to support the climate transition. As part of that commitment we have set a carbon emissions reduction goal of 25% by year end 2025 and 50% by 2030 from 2020 base year. We recognize that investors alone cannot help economies reach net-zero goals and that policymakers, industry and society are all critical stakeholders on this journey. Through these commitments we want to do our part to contribute to the critical pathway to net zero.

Measuring and understanding carbon footprints and other climate-related risks aligns with the approach to active investing taken by our investment manager, Addenda Capital. In 2015 Addenda became a signatory to the Montreal Carbon Pledge and was the first Canadian asset manager to disclose the carbon footprints of all its equity funds. In 2021, Addenda joined the Net Zero Asset Managers Initiative and their initial targets were published in October 2022.¹

Co-operators recognizes that carbon emissions disclosure data quality and methods are continually evolving, and as such we are committed to reporting using global best practice guidelines. In 2020, the Partnership for Carbon Accounting Financials (PCAF) released the [Global GHG Accounting and Reporting Standard for the Financial Industry](#). It provides a standardized approach to greenhouse gas (GHG) accounting and reporting for financial services companies. We began using the PCAF methodology to calculate the financed emissions of our listed equity and corporate bond portfolios in 2020. The PCAF methodology includes a data quality metric, which we have disclosed along with each of our financed emission metric results. It highlights the varying carbon emissions data quality available by asset class (see Weighted average carbon intensity). Beginning in 2022, Co-operators will report annual financed emissions as of June 30th of each year. This provides optimal alignment between our reporting cycle and the cycle of company emissions disclosures.

Our financed emissions metrics

We measure and monitor the financed emissions of our investments using three metrics:

1. Absolute emissions measures our share of the absolute greenhouse gas (GHG) emissions of our listed equity and corporate bond investment portfolios. It is expressed in tonnes of carbon dioxide equivalent (CO₂e) emissions.
2. Economic emission intensity measures the absolute emissions normalized by the market value of our listed equity and corporate bond investment portfolios. It is expressed in tonnes of CO₂e per million dollars invested.
3. Weighted average carbon intensity measures the average carbon intensity (emissions per unit of investee company sales) of our investments, revealing our exposure to carbon-intensive companies. It is expressed in tonnes CO₂e per million dollars of sales.

We first disclosed the financed emissions of our equity investments in 2015 and added other asset classes in 2016. New asset classes will be included over time as methodologies are developed.

¹<https://www.netzeroassetmanagers.org/signatories/addenda-capital-inc/>

Absolute emissions

As of June 30, 2022, Co-operators listed equity and corporate bond investments were associated with 284,540 tonnes of carbon dioxide equivalent greenhouse gases (emissions sources scopes 1 and 2 only²) emitted by companies in our portfolio. The primary driver in the difference between this year's result and prior years was increased carbon emissions sub-sector data availability. For this reason, the current year result is not directly comparable to past years. Without this change in methodology, we estimate carbon emissions would have been similar or slightly higher than 2021. The PCAF data quality score for June 30, 2022 was 2.4, worsening slightly from 2.3 in 2021. While the use of more granular sub-sector data improved the accuracy of our emissions, it did not improve the quality score as these emissions remain estimates, not actual reported emissions by companies. These refinements to the methodology are driven to reflect the most accurate data available at the time of analysis. This also highlights that carbon emissions reporting, data quality and methods are continuously improving and evolving. We will be reviewing prior year results for potential restatement to allow trend analysis.

Our financed absolute emissions far exceed the emissions from our operations, which totaled 20,532 tonnes of carbon dioxide equivalent emissions in 2022 (see [Our Carbon Footprint](#)). Co-operators has maintained net carbon neutral status since 2020 through internal reductions, purchases of renewable energy certificates and purchases of carbon offsets. The fact that our financed emissions are more than 13 times the emissions from our operations reinforces the importance of our approach to sustainable investing, which emphasizes stewardship and advocacy, and encourages the companies we own to manage their climate risks and decrease their emissions.

Absolute emissions of investment portfolios

2022: 284,540 tonnes of carbon dioxide equivalent

Results using previous methodology:

2021: 369,645 tonnes of carbon dioxide equivalent

2020: 366,888 tonnes of carbon dioxide equivalent

Economic emission intensity

As of June 30, 2022, Co-operators listed equity and corporate bond investments had an economic emission intensity of 57.5 tonnes of carbon dioxide equivalent per million dollars invested. Again, while we provide prior year results for transparency, the current year result is not directly comparable to prior years given the change in data availability described above (prior year results may be restated in future reporting).

Economic emission intensity of investment portfolios

2022: 57.5 tonnes of carbon dioxide equivalent/\$1 million invested

Results using previous methodology:

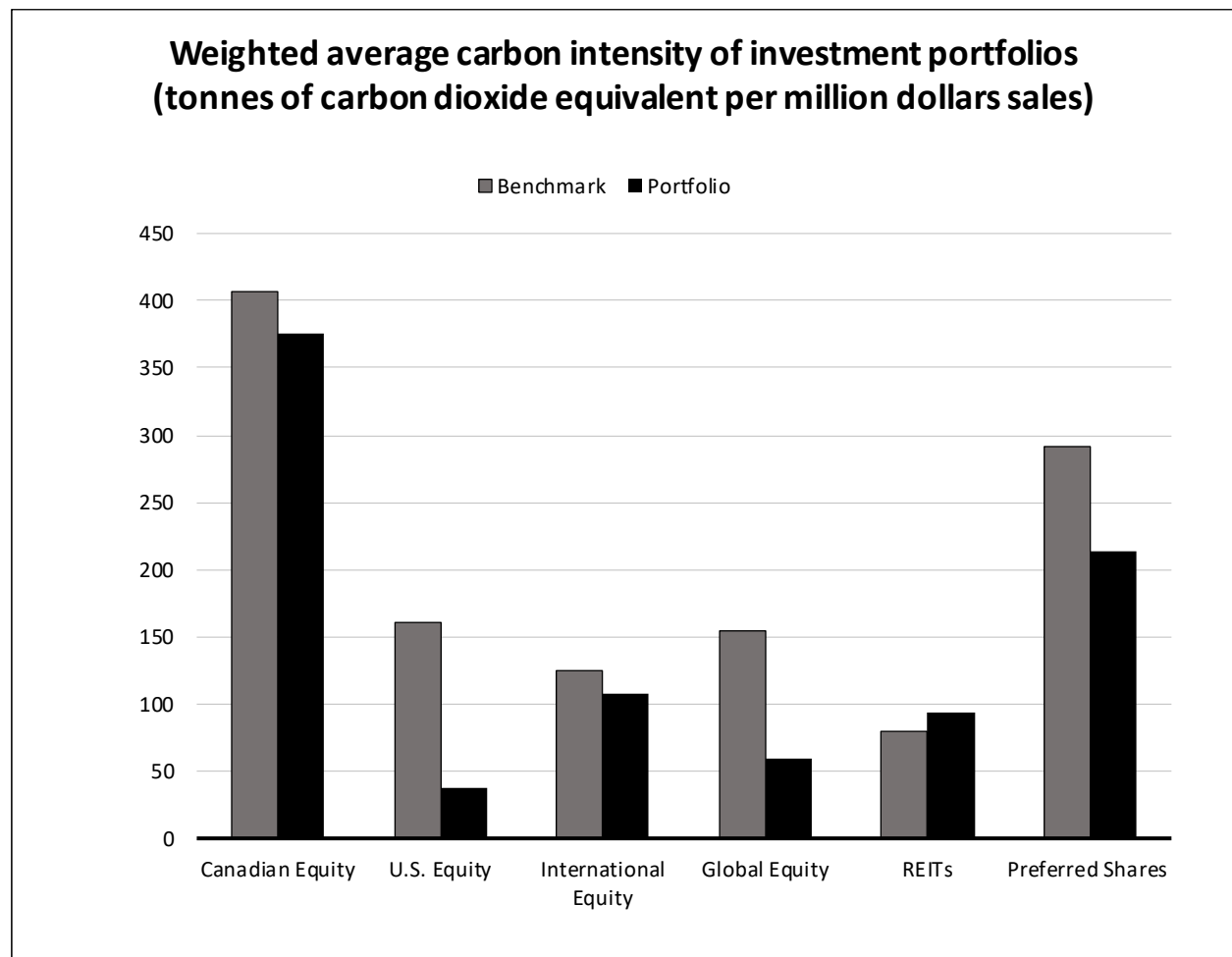
2021: 67.0 tonnes of carbon dioxide equivalent/\$1 million invested

2020: 77.7 tonnes of carbon dioxide equivalent/\$1 million invested

²PCAF (2020, p.19). The Global GHG Accounting and Reporting Standard for the Financial Industry. First edition.

Weighted average carbon intensity

The weighted average carbon intensities of some of the portfolios representative of Co-operators investments are shown in the graph below. Co-operators REIT portfolio has slightly higher emissions on average than the benchmark while the weighted average carbon intensities of our other portfolios are below the benchmark.



Methodology: How we calculate our financed emissions

The methodology for measuring financed emissions is evolving, and many data gaps exist. As noted above, we have begun basing our calculations on the PCAF methodology. The following key points from our methodology ensure transparency in our approach.

1. Data sources:
 - a. Reported and estimated greenhouse gas emissions data from MSCI ESG Research.
 - b. Market and fundamental data from Bloomberg.
 - c. Index data from MSCI and S&P.
2. Greenhouse gas emissions data are from 2021 and 2020 year-end and cover scopes 1 and 2. Enterprise value including cash (EVIC) data are from Bloomberg as of June 30, 2022.
3. Asset classes covered: Our disclosure covers listed equity and corporate bonds which includes our Canadian, U.S., and international companies, as well as our REIT and preferred share portfolios.
4. Holdings analyzed: Representative investment portfolios for different asset classes were selected to calculate the weighted average carbon intensities, as the same investment strategies are often used across multiple accounts. The absolute emissions calculations included the invested assets of all companies across The Co-operators group of companies.
5. Absolute emissions calculations:

- a. For companies with reported or estimated emissions data from MSCI ESG Research and enterprise value including cash (EVIC) from Bloomberg: We used each company's most recent total scope 1 and 2 emissions, multiplied by the amount Co-operators has invested in the company, divided by the EVIC of the company.
 - b. For companies that do not have reported or estimated emissions data or EVIC from MSCI ESG Research: We estimated our share of the company's absolute emissions by multiplying the average carbon emissions intensity at the GICS Sub-industry level from MSCI ESG Research and/or Bloomberg, the GICS industry asset turnover ratios from Bloomberg, and the amount Co-operators has invested in the company (following Option 3c of the PCAF methodology for calculating financed emissions of listed equity and corporate bonds).³
6. Data quality: The PCAF methodology has introduced the concept of a data quality metric, which we have calculated and disclosed. The application of the scores is outlined in the table below.

PCAF Data Quality Score

Score	When score is used
1 (best)	Company reported emissions that have been independently verified and enterprise value including cash known
2	Company reported emissions that have not been independently verified and enterprise value including cash known
3	Company emissions are estimated using physical metrics or company-specific economic metrics, and enterprise value including cash known
4	Company emissions are estimated using industry-specific economic metrics and enterprise value including cash known
5 (worst)	Company emissions are estimated using industry-specific economic metrics and enterprise value including cash is not known

³ Note that in 2021 the methodology was updated for companies that did not have reported or estimated emissions data and EVIC from Bloomberg. In 2018-2020, we estimated the tonnes of carbon dioxide equivalent per million dollars per industry using MSCI ESG data and multiplied that by the amount Co-operators had invested in the company. For the industry averages, we used the most granular Bloomberg Industry Classification System industry available that had at least 6 companies with either reported or estimated data from MSCI ESG, removed the top and bottom emitters in the industry, and took the average of the remaining companies.