

BAY STREET CLIMATE REPORT

Tackling the Global Carbon
Footprint of Toronto's
Financial Industry



The Toronto Climate Observatory

The Toronto Climate Observatory (TCO) is an interdisciplinary initiative hosted at the University of Toronto. Our mission is to reimagine how communities around the Greater Toronto Area (GTA) understand and adapt to the impacts of climate change, and support place-based, plural, and just climate action. Read more about our work at <http://climateobservatory.ca>

Suggested Citation

Oshinowo, T., Nesbitt-Jerman, A., Soden, R. 2024. Bay Street Climate Monitor: Tackling the Global Carbon Footprint of Toronto's Financial Industry. Toronto Climate Observatory. Toronto, ON. Available online at: <http://climateobservatory.ca/baystreetclimatemonitor>

Open Data & Transparency in Research

The data and methods used to produce the calculations in this report can be found at: <https://github.com/torontoclimateobservatory/Bay-St-Climate-Calculations>

**TORONTO
CLIMATE
OBSERVATORY**



School of the Environment
UNIVERSITY OF TORONTO

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Acronyms & Abbreviations

BOCC 2023	Banking on Climate Chaos 2023
C40 p	Cities Climate Leadership Group
CDP	Carbon Disclosure Project
CEPA	Canadian Environmental Protection Act Registry
COP29	The 2024 United Nations Climate Change Conference
CSA	Canadian Securities Administrators
CSDS	Canadian Sustainability Disclosure Standards
FI	Financial institution
IPCC	Intergovernmental Panel on Climate Change
G7	The Group of Seven (consisting of Canada, France, Germany, Italy, Japan, the UK & the US)
GHG	greenhouse gas
M&A	Mergers and acquisitions
OSFI	Office of the Superintendent of Financial Institutions (Canada)
PCAF	Partnership for Carbon Accounting Financials
TCFD	Task Force on Climate-related Financial Disclosures
TFI	Toronto Finance International
tCO ₂ e	tonnes of carbon dioxide equivalent

Acknowledgements

Rohini Patel, Richard Brooks, Alex Walker, Olaf Weber, and Julie Segal made important contributions to the development of this report. Thank you to Caleb Schwartz, Aditi Agarwal, and Patrick DeRochie for providing independent reviews of the data and analysis.

This report was produced by the Toronto Climate Observatory. Research was conducted by Tololupe Oshinowo, Allegra Nesbitt-Jerman, and Robert Soden. Designed by Mari Zhou.

The estimates of financed emissions presented in this analysis, derived from publicly available information, are not conclusive or comprehensive and do not encompass the full range of activities by the selected institutions. These figures should be regarded as indicative estimates only. The opinions expressed in this report are based on the documents cited in the endnotes, which we encourage readers to review. While the information in this report is believed to be reliable and accurate, no representation or warranty, express or implied, is made regarding the accuracy or completeness of any information obtained from third-party sources.

We acknowledge that this study was conducted on the traditional territory of many nations, including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee, and the Wendat peoples, and is now home to many other diverse First Nations peoples. We recognize the enduring presence of Indigenous peoples on this land and acknowledge our responsibility to respect and uphold their rights and sovereignty in our work.

EXECUTIVE SUMMARY

With record heat waves and increasingly wet winters, Toronto has begun to experience the first-hand effects of climate change with increasing frequency. The City has its own climate change mitigation plan, the TransformTO Net Zero Strategy, which is notable for its important efforts to achieve a net-zero Toronto by 2040. However, this strategy is missing an essential component of our City's contribution to global climate change: Toronto's financial industry.

Toronto's finance sector is the financial capital of the country, where many of the largest financial institutions in Canada maintain their headquarters and/or largest offices. While Canada's financial policy and regulation is determined at a provincial and federal level, Toronto has direct engagements and many close relationships with these financial institutions. The City therefore has an important responsibility to hold financial institutions accountable for their financed emissions. This report's findings outline an urgent need and opportunity for Toronto's financial industry to take more robust, science-aligned climate action, and the role that the City of Toronto can play in supporting this transition. In particular, the study reveals that:

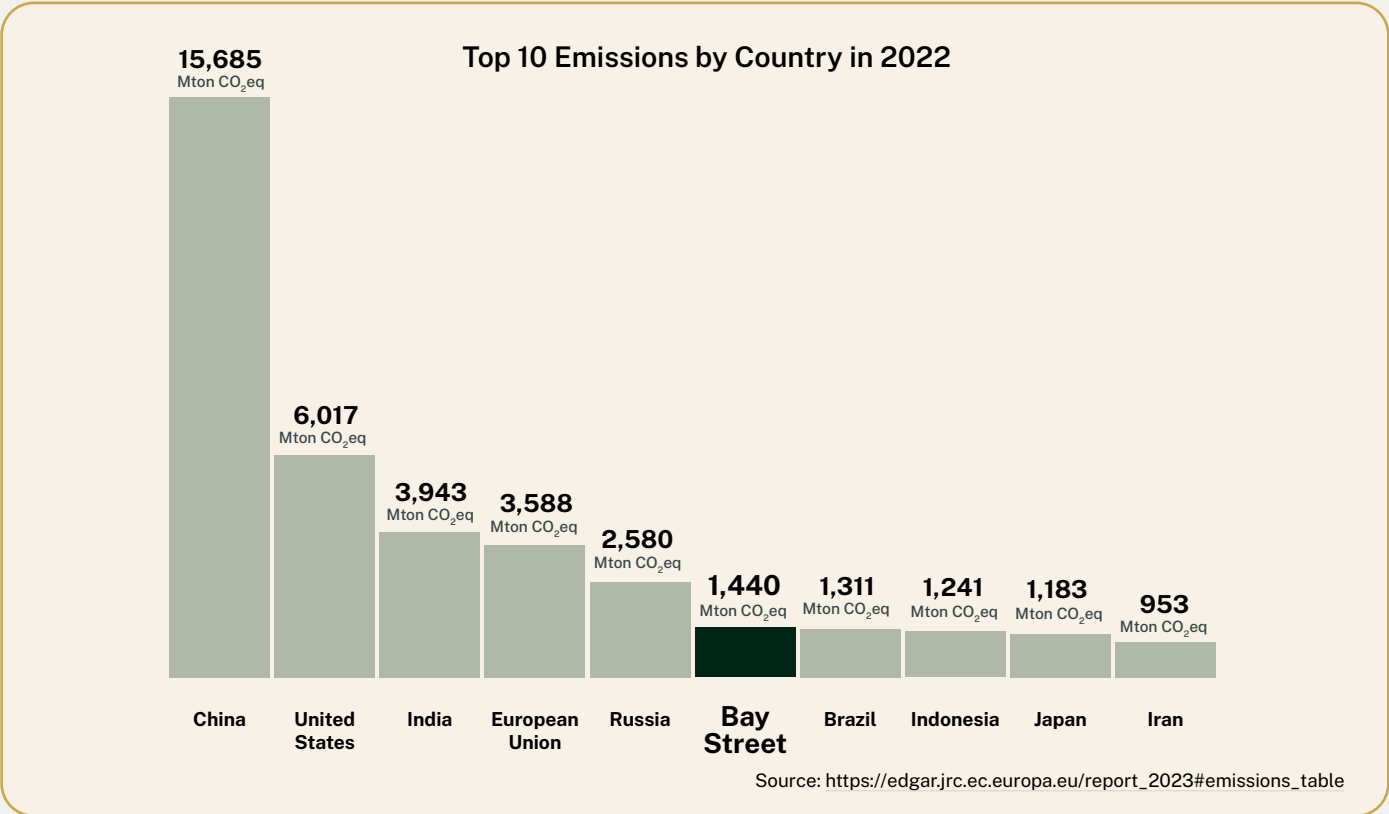
- › In 2022, the largest Toronto-based financial institutions (FIs) collectively funneled **over \$1.43 trillion CAD** (\$1.1 trillion USD) in financing towards fossil fuel companies via loans, bonds, and equity, resulting in up to *1.44 billion tCO₂e* of emissions in 2022. **This is almost one-hundred times the City of Toronto's total reported emissions** (14,800,000



If Bay Street was a country, it would be the 5th largest climate polluter in the world, behind only China, the United States, Russia, and Japan.

tCO₂e) and **almost twice as much as Canada's overall for the same year** (756,810,000 tCO₂e). If Bay Street was a country, it would be the 5th largest climate polluter in the world, behind only China, the United States, Russia, and Japan.

- › While these numbers are striking, the estimates in this report should be viewed as minimum estimates of the global emissions facilitated by Toronto-based FIs. This is because there are **significant discrepancies and widespread underreporting** between FIs' reported emissions and those calculated by our research team and those reported by other third parties.
- › Furthermore, despite the widely recognized standardized methodologies developed by third-party organizations such as PCAF for reporting emissions, corporate approaches **varied widely** across FIs, leading to inconsistencies and often the exclusion of significant categories of emissions altogether.
- › While improving reporting practices is necessary, this should be pursued with the development and publication of **credible climate transition plans**, wherein FIs commit to emissions reductions in addition to regularly and transparently reporting progress on these commitments. These transi-



tion plans, in alignment with Paris Agreement climate goals, should be mandated and enforced by federal regulatory bodies such as the Office of the Superintendent of Financial Institutions and the department for Innovation, Science and Economic Development (ISED), under the Canada Business Corporation Act. Provincial security regulators for the FI’s asset management and mutual fund branches will also need to be involved. Toronto leadership should take responsibility to push forward these climate transition plans and coordinate action needed from these government bodies.

As the largest financial hub in Canada and one of the world’s most influential cities, Toronto holds a unique opportunity to improve corporate climate accountability on a global scale. This task is increasingly urgent, as it can take years or even decades

to see the effects of climate policy decisions made today, while global projections such as the Climate Clock¹ estimate that there is only about five years left to correct course before the locked-in impacts of climate change become exponentially worse. Although efforts like the TransformTO Net Zero Strategy are necessary and laudable, they offer only a limited picture of Toronto’s current contributions to climate change. The City of Toronto and its political leadership are positioned to play a significant role in advancing climate-conscious policy at the federal and provincial level, such as mandating credible climate transition plans and standardizing sustainability reporting and disclosures across Canada’s financial landscape. Further, by leveraging its close relationships with the local financial industry, it can take a more active role in supporting sustainability transitions at home.

1 Climate Clock, n.d. <https://climateclock.world/>.

1. INTRODUCTION

As one of the world's most important financial centres, Toronto poses a pivotal role in shaping the trajectory of both Canada and the rest of the world's transition towards a sustainable, low-carbon economy. However, with headquarters for various banks, asset managers, and pension funds lining Bay Street and the downtown, the City is home to many institutions whose current activities are accelerating the global climate crisis. In this report, we examine the impact Toronto-based FIs currently have on carbon emissions and climate pollution worldwide and offer opportunities for the City of Toronto to play a leadership role in global climate action.

This report describes an initial assessment of the global carbon footprint of the largest entities in Toronto's financial sector, referred to as their 'financed emissions'. Our analysis uses a carbon accounting methodology modeled after the Partnership for Carbon Accounting Financials' (PCAF) Global GHG Reporting, a globally accepted reporting standard. Currently, Toronto's mainline net-zero strategy — colloquially referred to as "TransformTO" — only accounts for the operational activity of Toronto-based FIs. This means that the strategy only considers FI's emissions related to buildings, transportation, and waste, and does not consider emissions from their investment and lending activities, which is where the vast majority of their contributions to GHG emissions



In 2022 only China, the United States, the EU as a whole, India, and Russia were responsible for more climate emissions than those attributable to Toronto's FIs.

stem from. This report captures a more complete picture of the carbon emissions these institutions facilitate by tracking their top loans, bonds, and investments in energy companies across the globe. Eighteen FIs are considered in this report, and although not exhaustive, represented over 86% of the Toronto financial sector's aggregated market cap in 2022 based on Bloomberg data.²

Our study indicates that in 2022 the financed emissions of Toronto-based FIs resulted in up to *1.44 billion* tCO₂e in GHG emissions. This is a globally significant amount of emissions, made possible as a result of financing from Toronto-based firms. These emissions far surpass those reported by the City of Toronto, as well as those of Canada overall. In the same year, the city of Toronto's aggregate GHG emissions per capita were 14,800,000 tCO₂e³, while the entirety of Canada's were 756,810,000 tCO₂e.⁴ In 2022 only China, the United States, the EU as a whole, India, and Russia were responsible for more climate emissions than those attributable to Toronto's FIs.⁵

2 Bloomberg Terminal 2024.

3 Ronan, Patrick, Maryam Shekarrizfard, and Ekaterina Tzekova. "Carbon Emissions Inventory for the Greater Toronto and Hamilton Area." The Atmospheric Fund, 2022. <https://carbon.taf.ca/regions/toronto>.

4 Crippa, M., D. Guizzardi, F. Pagani, M. Banja, and M. Muntean. "GHG Emissions of All World Countries." Luxembourg: Office of the European Union, 2023. https://edgar.jrc.ec.europa.eu/report_2023.

5 *ibid.*

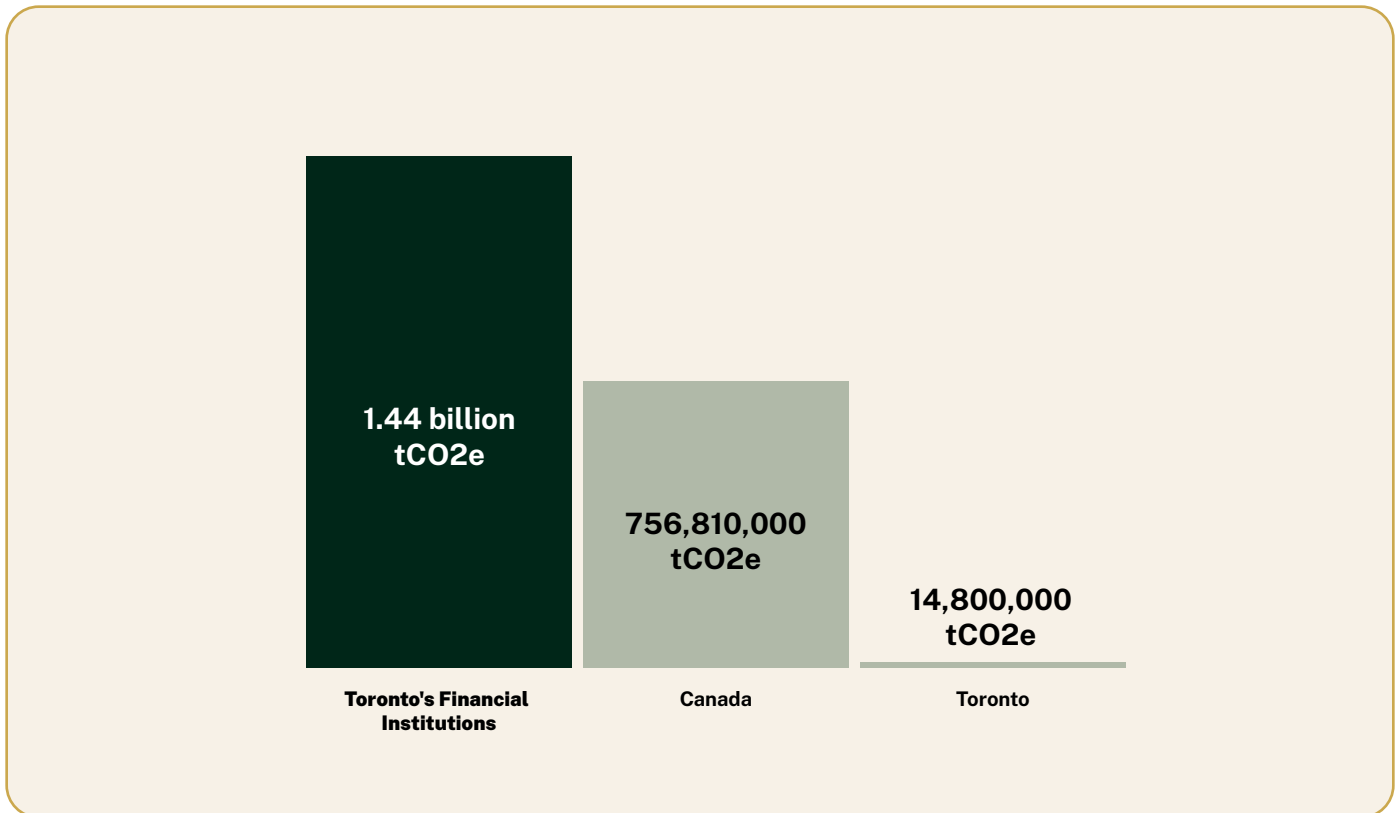


Figure 1: FIs’ Financed Emissions in Perspective: Comparison to Canada and the City of Toronto.

Our findings underscore the role that Toronto plays in the global financial system’ contributions to the climate crisis. Not only are these emissions accelerating the climate emergency, they also create economic and financial risks for the FIs themselves as climate-related risks and impacts could seriously affect the operations of these companies, thus threatening the stability of Canada’s financial sector and economy as a whole.⁶

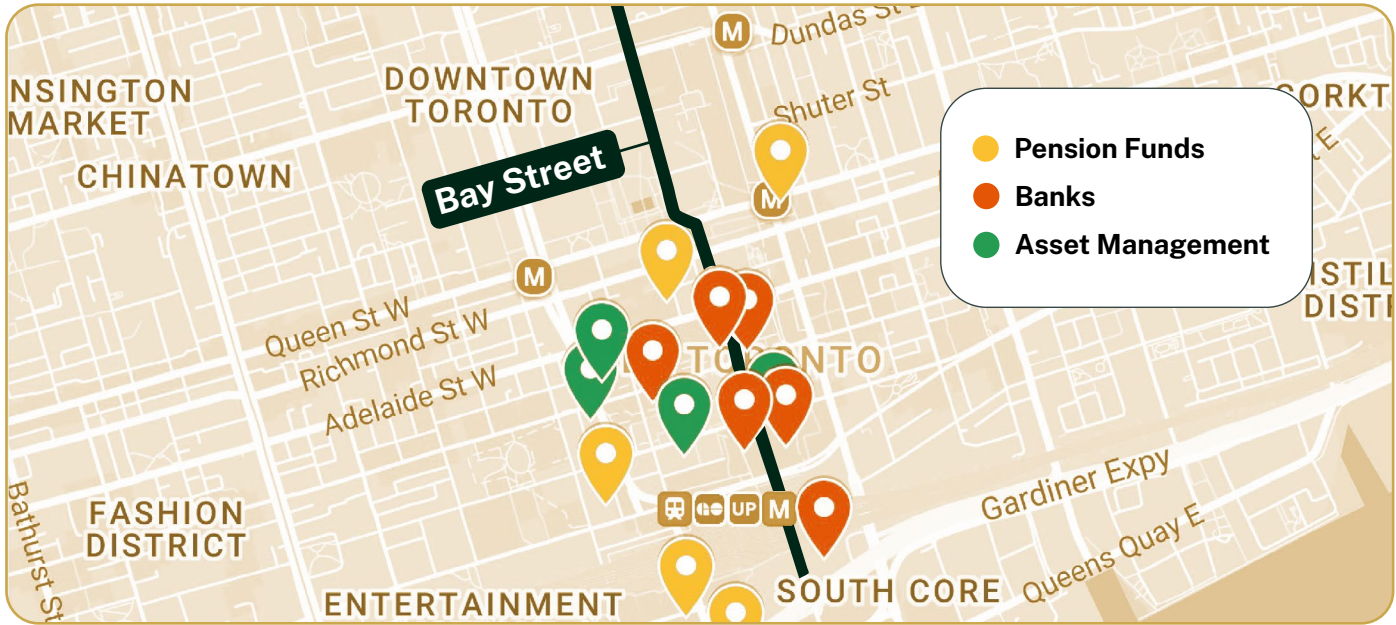
A key take-away from this report is the need for mandatory, credible, and transparent climate tran-

sition plans from these financial institutions, to show how they plan to reduce their financed emissions and advance climate resilience. The government and regulators must not rely on voluntary high-level pledges and increasing disclosure, an argument that has been clearly outlined in a recent report by the United Nations-backed Race to Zero campaign.⁷ In addition, the Intergovernmental Panel on Climate Change (IPCC) itself has argued that stringent regulation and comprehensive policy frameworks are necessary to steer economies away from climate disaster, and to ensure substantial capital allocation towards climate finance and emergency mitigation.⁸ Our analysis only adds evidence to this growing call for better regulation.

6 Office of the Superintendent of Financial Institutions. “Climate Risk Management.” Guideline, 2023. <https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/climate-risk-management>.

7 Bloomberg, Mike, Agnes Kalibata, Manuel Pulgar Vidal, Racquel Moses, and Sarah Battouty. “The Pivot Point.” United Nations Framework Convention on Climate Change, 2022. <https://climatechampions.unfccc.int/wp-content/uploads/2022/09/R2Z-Pivot-Point-Report.pdf>.

8 Gulev, S.K., P.W. Thorne, J. Ahn, F.J. Dentener, and C.M. Domingues. “Chapter 2: Changing State of the Climate System.” In *Climate Change 2021: The Physical Science Basis*, 287–422. Cambridge University Press, 2021. <https://www.ipcc.ch/report/ar6/wg1/chapter/chapter-2/>.



To be transparent, transition plans must be accompanied by regular and standards-based reporting of financed emissions by FIs. Due to significant inconsistencies and wide-spread under-reporting of climate emissions, the estimates provided are very likely an undercount of the actual emissions supported by Bay Street FIs. Similar problems have been noted by multiple other third-party reports and news outlets,^{9,10,11} undermining the credibility of the sustainability promises made by Toronto’s financial sector and making it difficult to evaluate the current situation or track progress towards the commitments made by our FIs.

As we will argue in this report, the City of Toronto must make finding ways to influence the activities of Bay Street a part of its efforts on climate action. The financial sector is a major part of the City’s economy and politics, and our local government has actively

partnered with the sector for mutual benefit for decades. This relationship means that the City has its own degree of accountability for the financed emissions generated by the activities of Bay Street FIs, and thus must take responsibility to address and resolve the current state of their climate impacts.



Due to significant inconsistencies and wide-spread under-reporting of climate emissions, the estimates provided are very likely an undercount of the actual emissions supported by Bay Street FIs.

9 “Al Gore and the Climate TRACE Coalition Release Detailed Inventory of the Sources of GHG Emissions Worldwide.” Sharm El Sheikh, Egypt, November 9, 2022. <https://unfccc.int/event/al-gore-and-the-climate-trace-coalition-release-detailed-inventory-of-the-sources-of-ghg-emissions>.

10 Matson, Lilly. “What Corporations Aren’t Disclosing about Their CO2 Emissions.” The University of New South Wales, November 20, 2023. <https://www.unsw.edu.au/newsroom/news/2023/11/what-corporations-aren-t-disclosing-about-their-co2-emissions>.

11 Environmental Defence Fund. “New Data Show U.S. Oil & Gas Methane Emissions Over Four Times Higher than EPA Estimates, Eight Times Greater than Industry Target,” July 31, 2024. <https://www.edf.org/media/new-data-show-us-oil-gas-methane-emissions-over-four-times-higher-epa-estimates-eight-times>.

2. BACKGROUND AND METHODS

Toronto’s financial sector is a major facilitator of global climate change emissions. The Toronto Stock Exchange (TSX) is a leader in oil and gas listings, and also sees 40% of all trading come from outside Canada.¹² This means that Toronto has the ability to drive significant shifts towards sustainability in the financial industry. Beyond the sheer size of the sector, Toronto’s vibrant cultural landscape and diverse population amplify its voice in global discourse and have the potential to make it a beacon for progressive change and innovation. This combination of economic and cultural significance positions Toronto uniquely to spearhead initiatives in support of global climate goals and set a benchmark for other cities worldwide.

Currently, Toronto’s FIs hold substantial influence over the City’s transition towards a low-carbon, sustainable economy, as institutions like TD, RBC, and

Scotiabank are major actors in loan issuance worldwide. Although strides have been made in amplifying the importance of climate risk management, particularly spurred by initiatives such as the Task Force on Climate-related Financial Disclosures (TCFD), the focus has predominantly still centered on assessing risks within the financial sector itself. Similarly, while concepts like double materiality—the idea that companies should consider how their business activities impact both the environment and society, as well as how sustainability issues may affect their financial performance—are well-known in the industry, Toronto FIs still fall short when it comes to applying these concepts in the real world. This in turn hinders the City’s—and Canada’s—transition to a green economy and undermines global efforts to limit temperature rise.



What is TransformTO and the “Net Zero Strategy”?

TransformTO is Toronto’s comprehensive climate action strategy aimed at reducing GHG emissions and building resilience to climate change. Initially approved by Toronto City Council in July 2017, the strategy encompasses long-term goals to lower emissions, enhance public health, foster economic growth, and improve social equity. The more ambitious Net Zero Strategy, adopted in December 2021, builds on this foundation and targets achieving net zero emissions community-wide by 2040. The strategy evolved from Toronto’s declaration of a climate emergency in October 2019, which highlighted the urgency to expedite climate mitigation and adaptation efforts.

The Net Zero Strategy outlines specific actions and targets to reduce emissions across key sectors such as buildings, transportation, and waste, including:

1. **Buildings:**
 - All new constructions are to be near-zero emissions.
 - Existing buildings' emissions will be cut by 50% from 2008 levels.
2. **Energy:**
 - 50% of community energy will come from renewable or low-carbon sources.
 - 25% of commercial and industrial areas will use low-carbon thermal energy.
3. **Transportation:**
 - 30% of vehicles will be electric.
 - 75% of trips under 5km will be made by walking, biking, or public transit.
4. **Waste:**
 - 70% of residential waste will be diverted from landfills.

To meet these goals, the strategy emphasizes the need for rapid action, additional regulatory powers, significant investment, and coordination with other governmental levels. Ideally through strategic planning, robust targets, and broad community engagement, Toronto aims to lead North America in climate action and achieve net zero emissions by 2040. It is important to note that while in theory these objectives are straightforward, FIs based in Toronto threaten to offset any material progress that the city makes due to their lack of climate regard in their business practices.

While Toronto has set clear climate targets through TransformTO, these targets make little reference to the financial sector's role in climate change, and consequently overlook a key aspect of Toronto's contributions to climate change. Toronto benefits significantly from its financial sector, and has actively sought to attract more businesses to Bay Street with initiatives like Toronto Finance International (TFI). For example, since establishing TFI in 2001, the financial sector has become one of the largest contributors to GDP in Toronto, generating billions in revenue for the city and attracting talent and expertise from all over the world.¹³

However, these benefits do not come without important caveats for the average Torontonians. In 2019, Toronto's City Council unanimously declared a climate emergency.¹⁴ This motion passed in response to the ever-intensifying effects of climate change, which threatened Toronto residents and ecosystems alike in the form of severe heat waves and storms. The increasing frequency of storms that historically would have been considered anomalous has also led to general increases in costs associated with home insurance, mortgages,¹⁵ and health insurance¹⁶ for inhabitants of the city — all now proven to be necessary in the wake of 2024's widespread flooding in downtown Toronto, resulting from unprecedented rainfall and \$1 billion in insured losses alone. If Toronto's FIs fail to align their investments with climate goals, they risk

further impacting the City's public health, infrastructure, and overall quality of life.

Furthermore, as Toronto's financial sector continues to heavily invest in and finance the fossil fuel industry, the health and stability of the sector itself is exposed to risks. The IPCC has generally identified two avenues of climate-related exposure: physical and transition risks.¹⁷ Physical risks refer to the physical hazards related to climate change, such as sea level rise, while transition risks refer to transformations in the energy economy which could negatively impact FIs. The IPCC has warned that climate-related transition risk is massively underestimated by FIs as well as public stakeholders. This not only poses a risk for the sector's future, but also limits the sector's potential to be an enabler of the net-zero transition. The IPCC maintains that consistent, credible, and forward-looking political leadership is central to strengthening the financial sector as an enabler. As past research has shown, because investments in high carbon-emitting industries are at risk, financial sectors in resource-based countries like Canada are particularly vulnerable.¹⁸ Toronto's leadership, as the overseers of this financial sector, need to take responsibility to ensure Toronto's FIs are protected from these climate-related risks.

Right now public stakeholders, ranging from governments to advocacy organizations in environmental and responsible finance, are increasingly vocal about

13 Toronto Finance International. "The Impact of Toronto's Financial Sector." The Conference Board of Canada, July 6, 2023. <https://www.conferenceboard.ca/in-fact/the-impact-of-torontos-financial-sector/>.

14 Toronto City Clerk. "Declaring a Climate Emergency and Accelerating Toronto's Climate Action Plan -by Mayor John Tory, Seconded by Councillor Mike Layton." City of Toronto, October 2, 2019. <https://secure.toronto.ca/council/agenda-item.do?item=2019.MM10.3>.

15 O'Hara, Clare, and Jeffrey Jones. "Climate Change Is Making Insurance More Expensive and More Limited – and It's Only Going to Get Worse." The Globe and Mail, December 1, 2023. <https://www.theglobeandmail.com/business/article-insurance-coverage-climate-change/>

16 Clark, Dylan, Ryan Ness, Dena Coffman, and Dale Beugin. "The Health Costs of Climate Change: How Canada Can Adapt, Prepare, and Save Lives." Canadian Institute for Climate Choices, June 2021. <https://climateinstitute.ca/reports/the-health-costs-of-climate-change/>

17 Kreibiehl, S., T. Yong Jung, S. Battiston, P.E. Carvajal, and C. Clapp. "Chapter 15: Investment and Finance." In *Climate Change 2022: Mitigation of Climate Change*. Intergovernmental Panel on Climate Change, 2022. <https://www.ipcc.ch/report/ar6/wg3/chapter/chapter-15/>.

18 Rubin, Jeff. "The Case for Divesting From Fossil Fuels in Canada." Centre for International Governance Institution, October 2016. <https://www.cigionline.org/static/documents/documents/CIGI%20Paper%20no.112web.pdf>.



the extensive carbon footprint associated with the financial sector. Though there has been some progress towards self-disclosure of carbon emissions with initiatives like PCAF and the Greenhouse Gas Protocol, achieving meaningful transparency remains hindered by failures and inconsistencies in reporting practices from company to company. Further exacerbating this issue, many companies choose not to fully comply with these third-party methods, inhibiting the opportunity for comparative analyses or identifying concrete trends over time.

This report intends to add evidence to this discussion, and amplify existing recommendations to resolve these challenges. Our research focuses on some of Toronto’s most prominent FIs, including banks, asset management firms, and pension funds. These FIs were chosen based on criteria established by the Government of Canada’s Office of the Superintendent of Financial Institutions (OSFI)¹⁹ and industry disclosures, leading to the inclusion of Canada’s largest six banks, the top six publicly traded asset management firms with a market cap over \$10 billion CAD, and six of Canada’s top pension funds headquartered in Toronto. Though not exhaustive, these eighteen FIs represent roughly 86% of the financial sector in Canada in 2022, based on data from Bloomberg.²⁰

After establishing this group of FIs, we analyzed their financed emissions, using ownership data for two asset classes. This included the global top 20 energy companies by investment, vis a vis FIs based on rankings from *Investing in Climate Chaos 2023*,²¹ and the top 25 companies by aggregated bonds and loans for each of the Big 5 banks based on rankings from *Banking on Climate Chaos 2023*.²² After removing duplicates, we had a pool of 128 energy companies.

Using a carbon accounting methodology modeled after the PCAF Global GHG Reporting and Accounting Standard,²³ we calculated each FI’s financed emissions by applying one accountability formula for

19 Office of the Superintendent of Financial Institutions (OSFI). “Capital Adequacy Requirements (CAR) 2024 Chapter 1 - Overview of Risk-Based Capital Requirements”. October 31, 2023. <https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/capital-adequacy-requirements-car-2024-chapter-1-overview-risk-based-capital-requirements>.

20 Bloomberg Terminal 2024.

21 Urgewald, *Investing in Climate Chaos 2023*. April 13, 2023, <https://investinginclimatechaos.org/>.

22 Rainforest Action Network, Indigenous Environmental Network, BankTrack, Oil Change International, Reclaim Finance, and Sierra Club, *Banking on Climate Chaos: Fossil Fuel Finance Report 2023*, April 12, 2023, www.bankingonclimatechaos.org

Banking on Climate Chaos 2024 - Banking on Climate Chaos

The world’s 60 biggest banks committed \$6,900,000,000 over 8 years to the fossil fuel industry, driving climate chaos & causing deadly local community impacts.

www.bankingonclimatechaos.org, 2024.

23 Partnership for Carbon Accounting Financials. “The Global GHG Accounting and Reporting Standard for the Financial Industry.” Accessed August 13, 2024. <https://carbonaccountingfinancials.com/standard>.

investments and another for lending across all companies. This allowed us to get a more comprehensive understanding of Bay Street’s global impact on climate. To accomplish this, our report and subsequent analysis draw on publicly available data to derive the Scope 1 (direct), Scope 2 (operational), and

Scope 3 (indirect) financed emissions of the top FIs in Toronto, encompassing borrowers’ and investees’ total emissions across the global energy sector.

Further details on our selection process and methodology are provided in Appendix A of this report.

It’s not just emissions! What does “financing” fossil fuels actually mean?

The Bay du Nord controversy

Bay du Nord is an offshore oil facility currently being built off the northeast coast of Newfoundland and Labrador. Majority owned by Equinor, this project will open an entirely new oil basin located in the Flemish Pass,²⁴ accessing five new oil discoveries and significantly increasing the region’s oil production.²⁵ The project is estimated to produce up to one billion barrels of oil in its lifetime, averaging 200,000 barrels of oil a day.²⁶ While the federal government gave its environmental approval for Bay du Nord in 2022, Equinor stalled the project due to significant cost increases. While the company reassess the project over a three-year pause,²⁷ community and climate advocates are seizing the opportunity to to stop further development and financing of the facility.

Opposition from Mi’kmaq communities

Since the project was approved in 2022, a number of Indigenous communities and groups and climate advocates have stressed the ecological harm Bay du Nord could inflict, and the clear gaps in the federal government’s environmental assessment. The assessment process did not consider the impacts of shipping the oil across Canadian waters, nor did it model any impacts from potential oil spills along the tanker routes. A single oil spill has potential to devastate local ecosystems and cause enduring harm

24 Government of Newfoundland and Labrador. “Deepwater: The New Frontier in Our Offshore,” 2018. <https://www.gov.nl.ca/iet/energy/petroleum/offshore/projects/bay-du-nord/>.

25 CBC News. “Bay Du Nord on Hold for up to 3 Years.” May 31, 2023. <https://www.cbc.ca/news/canada/newfoundland-labrador/bay-du-nord-on-hold-1.6860387>.

26 Roberts, Terry. “Outsourcing FPSO on the Table as Equinor Pursues Options to Revive Stalled Bay Du Nord.” CBC News, January 26, 2024. <https://www.cbc.ca/news/canada/newfoundland-labrador/equinor-bay-du-nord-update-1.7094693>.

27 Reed, Ed. “Equinor’s Bay Du Nord Project Passes 1bn Barrels of Reserves.” Energy Voice, February 5, 2022. <https://www.energyvoice.com/oilandgas/americas/exploration-production-americas/547145/equinors-bay-du-nord-project-passes-1bn-barrels-of-reserves/>.



to Mi'kmaq communities who live on the connected waterways.²⁸ Mi'kmaq leaders have specifically noted the devastating effects of potential oil spills on the Atlantic Salmon population, and the irreparable damage a spill could have on the ocean's regional ecosystem.²⁹

Mi'gmawe'l Tplu'taqnn Inc. (MTI),³⁰ an organisation representing nine Mi'kmaq communities in New Brunswick, has been a vocal proponent against the project. Upon the project's approval, MTI joined forces with Ecojustice to condemn the federal government in failing in its duty to meaningfully consult with Indigenous communities. Dean Vicaire, Executive Director at MTI, told Ecojustice: "An appeal is necessary. We will do whatever we can to protect the waters and the species that are culturally significant to our communities."³¹

Global opposition and Canadian appeal

Directly following the government's approval for the project, 118 environmental and citizens' groups from across Canada signed a letter to Ottawa calling for a stop to the project. A second letter was signed and delivered by 81 international organisations, underlining that approval of Bay du Nord would significantly set back international efforts to solve the climate crisis, and threaten Canada's credibility as a so-called climate leader.³²

28 Cherwick, Zoryana. "Groups Launch Appeal in Case Challenging Fed's Approval of Bay Du Nord." Ecojustice, September 18, 2023. <https://ecojustice.ca/news/groups-launch-appeal-in-case-challenging-feds-approval-of-bay-du-nord/>.

29 CTV News Atlantic. "New Brunswick Mi'kmaq Chiefs Join Court Challenge to N.L.'s Bay Du Nord Oil Project." July 12, 2022. <https://atlantic.ctvnews.ca/new-brunswick-mi-kmaq-chiefs-join-court-challenge-to-n-l-s-bay-du-nord-oil-project-1.5984341>.

30 Mi'gmawe'l Tplu'taqnn Inc. "Promoting, Protecting, & Implementing Our Rights." n.d. <https://migmawel.org/>.

31 Cherwick, Zoryana. "Groups Launch Appeal in Case Challenging Fed's Approval of Bay Du Nord." Ecojustice, September 18, 2023. <https://ecojustice.ca/news/groups-launch-appeal-in-case-challenging-feds-approval-of-bay-du-nord/>.

32 Moore, Mike. "Climate Groups Call on Ottawa to Reject Bay Du Nord Project." CBC News, March 3, 2022. <https://www.cbc.ca/news/>

Further, environmental law firm Ecojustice brought the federal government to court in an effort to appeal the approval of Bay du Nord, representing groups such as MTI, the Sierra Club Canada Foundation, and Quebec-based non-profit Équiterre. Ecojustice sought an appeal on the basis that the project failed to consider downstream greenhouse gas emissions and that the government failed to properly consult with MTI during the assessment process.³³ Despite these efforts, the appeal was dismissed in court in June of 2023.

Climate Impacts

According to Ecojustice,³⁴ the project will generate about 400 million tonnes of greenhouse gas emissions. Beyond this, Bay du Nord will lock Newfoundland and Labrador into fossil fuel production, furthering economic dependence on these carbon-intensive projects and ensuring continued climate destruction over the next decades.

The federal government's approval of Bay du Nord included a condition that the project produce net-zero GHG emission by 2050. However, this requirement does not account for the massive downstream emissions Bay du Nord will generate. Ecojustice notes that these downstream emissions account for 90% or more of total emissions generated by oil and gas projects.

Financing and Investments

While this project local ecosystems and further entrenches the regional economy in fossil fuel production and related long-term risks, FIs from Bay St are central to this type of project moving forward. enabling this while potentially profiting from the project. According to our data, various banks and asset managers hold shares in Equinor, totalling \$860,494,353 invested in the company. Most notably, RBC holds over \$650 million, TD holds \$82 million, and BMO and Manulife Financial hold \$27 million each. This does not also account for loans issued to Equinor in recent years. Through such investments, these FIs are not only enabling transgressions of environmental law and Indigenous sovereignty, but are potentially profiting from it.

[canada/newfoundland-labrador/climate-groups-against-bay-du-nord-1.6371103](https://www.cbc.ca/news/canada/newfoundland-labrador/climate-groups-against-bay-du-nord-1.6371103).

33 Kennedy, Alex. "Federal Court Dismisses Environmental Groups' Appeal to Overturn Bay Du Nord Approval." CBC News, June 21, 2023. <https://www.cbc.ca/news/canada/newfoundland-labrador/bay-du-nord-environmental-groups-appeal-1.6882553>.

34 Cherwick, Zoryana. "Groups Launch Appeal in Case Challenging Fed's Approval of Bay Du Nord." Ecojustice, September 18, 2023. <https://ecojustice.ca/news/groups-launch-appeal-in-case-challenging-feds-approval-of-bay-du-nord/>.

3. FINDINGS

It is important to note that given the lack of transparency surrounding financed emissions in the finance sector, this study was not fully exhaustive, and these figures should be viewed as indicative, but minimums. Only 128 energy companies (based on substantial investments and financing by the selected FIs) had their emissions considered for the final calculation, with many others remaining unaccounted for. Given that our calculations also covered a substantial but incomplete portion of each FIs' investments or lending activity, the actual amount of financed emissions is certainly higher than our approximation.

It is also important to note that, despite third-party development of extensive carbon accounting methodologies, many FIs exclude key sources of financed emissions in their self-reported data. This often means a lack in emissions reporting associated with insurance underwriting, securities underwriting and advisory services of banks, and certain asset management asset classes. As a result, there is a significant gap in assessing the financial sector's full carbon footprint, especially in industries which are dominated by Scope 3 emissions like the energy industry. These gaps in carbon accounting by FIs contribute to a minimum assessment of Toronto's overall financed emissions, where the true numbers are undoubtedly larger.

3.1. Results

Scope 1 emissions are direct GHG emissions from sources owned or controlled by an organization, such as fuel combustion and industrial processes. Scope 2 emissions are indirect emissions from the consumption of purchased electricity, steam, heat, or cooling. Scope 3 emissions encompass all other indirect emissions in the value chain, including those from the production and transportation of purchased goods and services, employee travel, and the use of sold products.

**The apparent negative % change for some FIs was due to the fact that many of their top-financed energy companies were privately owned, meaning that they did not have to disclose emissions data as comprehensively or at all.³⁵ Due to the nature of this project there was no data extrapolation to attempt to correct for this. Additionally, the self-reported numbers from pension funds include a combination of public equity, private equity, corporate bonds, etc. Our calculations only include public equity.*

^ For TD and Scotiabank the emissions data for 2022 was not available. Therefore, we have considered the financed emissions figures for 2021.

For Sun Life Financial the emissions data of 2023 was available but 2022 was not. Therefore, we have considered the financed emissions for 2023.

35 U.S. Securities and Exchange Commission. "SEC Proposes Rules to Enhance Companies' Cybersecurity and Climate Risk Disclosures." Press Release, February 12, 2024. <https://www.sec.gov/newsroom/press-releases/2024-31>.

Table 1: Financed Emissions by FI

	Financial Institution	Scope 1 & 2 Financed Emissions (tCO2e)			Scope 1, 2, & 3 Financed Emissions (tCO2e)		
	Name	Self-Reported	Team-Evaluated	% Change	Self-Reported	Team-Evaluated	% Change
Banks	RBC	2,340,000	21,911,352	836.38%	38,070,000	233,263,899	512.72%
	BMO	506,000	17,913,638	3440.24%	7,358,000	169,596,045	2204.92%
	TD ^	5,900,000	9,612,061	62.92%	69,900,000	92,453,877	32.27%
	Scotiabank ^	3,100,000	9,860,985	218.10%	N/A	75,800,999	N/A
	CIBC	1,437,000	16,458,642	1045.35%	82,796,000	158,550,226	91.50%
	National Bank of Canada	487,000	6,759,876	1288.06%	4,387,000	125,288,405	2755.90%
Asset Management	Sun Life Financial #	2,328,990	6,363,619	173.24%	8,905,680	125,490,204	1309.10%
	Power Corporation of Canada	9,407,126	15,973,442	69.80%	N/A	233,846,976	N/A
	Manulife Financial	N/A	14,931,948	N/A	29,921,449	205,030,198	585.23%
	Brookfield Asset Management	122,699	2,294,276	1769.84%	N/A	3,530,662	N/A
	Fairfax Financial	N/A	23,545	N/A	N/A	264,190	N/A
	Intact Financial*	665,727	230,999	-65.30%	N/A	983,839	N/A
Pension Funds	OMERS*	N/A	157,673	N/A	2,024,869	932,619	-53.94%
	CPPIB*	21,100,000	1,799,844	-91.47%	N/A	6,295,398	N/A
	HOOPP*	N/A	373,734	N/A	2,418,169	1,876,617	-22.40%
	OTPP*	790,000	53,036	-93.29%	N/A	550,896	N/A
	OPSEU*	N/A	0	N/A	N/A	0	N/A
	IMCO*	2,070,359	9,402	-99.55%	13,213,488	77,649	-99.41%

Table 2: Comprehensiveness in Reporting Financed Emissions by FI

	Financial Institution	Comprehensiveness in Reporting Financed Emissions				
	Name	Reported a breakdown on all sectors of energy financing.	Reported on lending towards energy companies.	Reported aggregate value of equity in energy companies.	Reported on scope 1 & 2 emissions.	Reported on scope 3 emissions.
Banks	RBC	✗	✓	✗	✓	✓
	BMO	✗	✓	✗	✓	✓
	TD	✗	✗	✗	✓	✓
	Scotiabank	✗	✗	✗	✓	✗
	CIBC	✗	✓	✗	✓	✓
	National Bank of Canada	✗	✓	✗	✓	✓
Asset Management	Sun Life Financial	✗	N/A	✗	✓	✓
	Power Corporation of Canada	✗	N/A	✓	✓	✗
	Manulife Financial	✗	N/A	✗	✓	✓
	Brookfield Asset Management	✗	N/A	✓	✓	✗
	Fairfax Financial	✗	N/A	✗	✗	✗
	Intact Financial	✗	N/A	✗	✓	✗
Pension Funds	OMERS	✗	N/A	✓	✓	✗
	CPPIB	✗	N/A	✓	✓	✗
	HOOPP	✗	N/A	✓	✓	✗
	OTPP	✓	N/A	✗	✓	✗
	OPSEU	✗	N/A	✗	✗	✗
	IMCO	✓	N/A	✓	✓	✓

This table summarizes the comprehensiveness of financed emissions reporting across the 18 FIs we looked at. Notably, some institutions, like IMCO and CIBC, provided detailed reports on multiple categories, while others, such as Fairfax Financial and OPSEU, reported less comprehensively. Even more notably OPSEU reported no data regarding investments in the energy sector in their year-end 13F filing.

Our results indicate that, in 2022, Toronto’s top emitting FIs were the RBC (with 233,263,899 tCO₂e), Power Corporation of Canada (with 233,846,976 tCO₂e), and Manulife Financial (with 205,030,198 tCO₂e). Other

FIs, such as Sun Life Financial, the Canadian Imperial Bank of Commerce, the National Bank of Canada, and the Bank of Montreal, were also significant enablers, which financed emissions in the hundreds of millions of tCO₂e.

Further, in comparing self-reported emissions and emissions from our calculations, the under-reporting of emissions proved extremely high for the National Bank of Canada (our calculations being 2756% greater than the bank’s self-reported numbers), BMO (2205%), and Sun Life Financial (1309%). While comparisons detailed in the table above are not entirely conclusive,

they are still useful in understanding the magnitude of carbon emissions that Toronto FIs enable through their investing and lending activity.

As is clear from the data above, Toronto's FIs are still greatly tied to the fossil fuel industry, putting the financial sector's own health at risk, slowing the energy transition and further contributing to the conditions that worsen the impacts of climate change for Canadians and others. However, much of the environmental messaging from these FIs runs contrary to their actions evidenced above, making clear the need to ensure these institutions are accountable to their commitments and to their responsibilities as Canadian organizations.

The following sections provide additional insights regarding climate reporting and the accuracy thereof as it relates to Toronto's FIs.

3.2. Widespread Under-reporting of Financed Emissions

There are notable discrepancies between the self-reported financed emissions and our calculated values. For instance, RBC only reported 38,070,000 tCO₂e (Scope 1, 2, & 3) for 2022, while our study shows that their financed emissions from lending alone was almost that much (25,356,142 tCO₂e), and their financed emissions from equity in fossil fuel companies was several times higher than the bank's reported value at 207,907,757 tCO₂e.

Such discrepancies were common across banks and asset managers included in this assessment, with non-pension fund FIs consistently underreporting

their emissions. This trend worsens with Manulife Financial, who did not even report a metric for 2022. Because pension funds are not publicly held—and thus are not held to the same standard of transparency—we were not able to confidently conclude if they too were underreporting emissions. Regardless, these findings corroborate prior studies done by groups such as Oxfam Quebec³⁶ and Investors for Paris Compliance,³⁷ further demonstrating the inadequacy of FIs' current emissions reporting.

3.3. Inconsistencies in Reporting across Asset Classes

Comprehensive guidelines on how to report financed emissions are readily available to all the FIs in this report. Initiatives such as PCAF and the Greenhouse Gas Protocol have detailed how to report financed emissions across sectors and asset classes (PCAF identifies seven classes, including listed equity from investments, lending/project finance, and sovereign debt).³⁸ Despite having access to these guidelines, banks such as RBC, BMO, CIBC, and National Bank of Canada only reported lending activity. However, the vast majority of their financed emissions comes from their investments in energy companies. The Power Corporation of Canada and Brookfield Asset Management conversely only accounted for emissions that could be traced back to their stock investments in energy companies and did not even disclose Scope 3 emissions for 2022. Major reporting standards tend to include a variety of asset classes in their carbon accounting standards, such as loans/bonds and equity, every FI except TD failed to mention both of these asset classes in their self-reported assessments.

36 Rioux, X Hubert. "A Closer Look at the Carbon Footprint of Canadian Bank Portfolios." Montréal: Oxfam Québec, 2022. <https://oxfam.qc.ca/wp-content/uploads/2022-canada-banks-carbon-footprint-report.pdf>.

37 Kaynar, Ender. "Insuring the Climate Crisis: Sun Life and Manulife's Financed Emissions." Investors 4 Paris Compliance, August 2022. <https://www.investorsforparis.com/wp-content/uploads/2022/09/sun-life-manulife-v2.pdf>.

38 Partnership for Carbon Accounting Financials. "The Global GHG Accounting and Reporting Standard Part A: Financed Emissions," 2022. <https://carbonaccountingfinancials.com/en/standard>.

Banks



Asset Management



Pension Funds



For example, while our estimates for financed emissions from lending is comparable to BMO’s self-reported number, BMO’s report did not include any information for bonds, listed and unlisted equity, or project financing. This means that while BMO reported 7,358,000 tCO₂e (Scope 1, 2 and 3) in financed emissions from lending, we found 7,558,457 tCO₂e from lending and an additional 162,037,587.94 tCO₂e from listed equity. In contrast, TD reported 69,900,000 tCO₂e (Scope 1, 2 and 3) from both lending and equity. While this number is still significantly lower than our calculated emissions (27,285,583 tCO₂e for lending and 65,168,293 tCO₂e for listed equity), these types of inconsistencies make comparisons between TD and BMO difficult. The difference in magnitude between financed emissions from lending and financed emissions from investments demonstrates a clear need to begin accounting for financed emissions across all relevant asset classes in order to truly capture FIs’ effects on the climate.

3.4. Varied Methodologies and Incomplete Data

As mentioned in the previous paragraph, carbon accounting methodologies used by FIs vary widely, leading to inconsistencies in financed emissions reporting. This issue is heightened when FIs report incomplete data on their climate performance. Some institutions, like TD, have reported both lending and investments, but with data quality concerns. Others, like BMO, RBC and CIBC, solely included financed emissions from lending. Scotiabank included financed emissions from their investments but did not provide comprehensive data for Scope 3 emissions.

Such patchwork reporting shows how often companies report on only certain categories of emissions while leaving others unacknowledged. This obfuscates data and effectively makes any mode of comparing progress by FIs difficult, if not impossible.

This is evident in the self-reported emissions listed above, as none of the evaluated FIs were able to offer a clear and complete picture of their climate performance during the 2022 financial year.

3.5. Broken Emissions-Accounting Data Stream

It is important to consider that the self-reported data published by FIs is often based on data sourced from energy companies, who can themselves exclude significant categories of emissions. The GHG Protocol identifies 15 sub-categories of Scope 3 emissions,³⁹ but most energy companies tend to disclose information on only one or two sub-categories (such as business travel or sale of purchased goods), rather than reporting numbers across all sub-categories recommended by the GHG protocol.

While this specific aspect of reporting is under the purview of coal, oil, and gas companies, it is necessary for FIs to demand complete reporting in order to then accurately account for their own financed emissions. These gaps in data demonstrate that while superficially FIs appear to be engaging in transparency regarding the emissions financed by their activities, inconsistent reporting practices result in significant under-disclosure.

3.6. Other Third-Party Assessments Highlight Greater Emissions

Our study is not alone in identifying these patterns of inconsistency and under-reporting. Indeed, multiple other third-party assessments, such as those by Oxfam Québec and Investors for Paris Compliance, often report much higher financed emissions

compared to self-reported figures. For instance, the Canadian Imperial Bank of Commerce (CIBC) reported 82,796,000 tCO₂e (Scope 1, 2, & 3) for 2022, while our research showed CIBC financed 146,726,477 tCO₂e (Scope 1, 2, & 3) for 2022. However, Oxfam Québec's analysis suggested emissions could have been as high as 231,000,000 tCO₂e in 2020.

When third-party assessments are significantly higher than self-reporting, it should be taken as an indication of issues with companies' approaches to carbon accounting. Third-party institutes, such as Oxfam Québec or our own research team, are working with limited information on banks' financing and are nonetheless arriving at numbers significantly higher than the companies themselves. This adds weight to existing concerns regarding the credibility of self-reported numbers and additional evidence of the need for third-party auditing and other measures to improve transparency.

Rigorous third-party assessments and comprehensive third-party data collection can help ensure that reported emissions accurately reflect each FI's contribution to global greenhouse gas emissions. The discrepancies and variations in reported financed emissions highlight the need for standardised reporting methodologies and greater transparency from FIs, as accurate reporting is crucial for understanding the full climate impact of financial activities and for making informed decisions to meet global climate goals. With this need for accurate and standardised reporting in mind, the next section will speak to the role that proactive regulation will play in mitigating climate impacts.

39 Bhatia, Pankaj, Cynthia Cummis, Andrea Brown, David Rich, Laura Draucker, and Holly Lahd. "Corporate Value Chain (Scope 3) Accounting and Reporting Standard." Greenhouse Gas Protocol, 2011. <https://ghgprotocol.org/corporate-value-chain-scope-3-standard>.

4. IMPROVING CLIMATE FINANCE REPORTING

This report’s analysis of financed emissions underscores the critical role that regulation will need to play in aligning the activities of the financial sector with the Paris Agreement’s climate goals. Given the substantial discrepancies between self-reported emissions and independent assessments, it seems increasingly clear that voluntary measures alone are insufficient to ensure transparency, accountability, and action. Here, we outline several regulatory measures as recommendations that can help address the discrepancies observed between self-reported data and independent assessments and foster a more robust regulatory environment for climate-related financial disclosures, ultimately resulting in improved alignment of FI practices with the Paris Agreement targets.

4.1. Establishing Credible Climate Transition Plans

It is not enough for FIs to simply report the amount of emissions they are funding. The federal government must mandate all FIs to produce a roadmap outlining how they will stop directing funds towards activities that exacerbate the climate crisis and instead play a role in creating a sustainable future. FIs will often release

voluntary sustainability reports that champion the idea of divestment, while letters to their shareholders feature contradicting language, and make clear there are no real plans for such action in the near future.^{40,41} In response, Canadian regulators should demand complete transparency on current financing commitments, targets for alignment with climate goals, and a plan for how those targets will be achieved.⁴²

Details on how to establish credible climate disclosures and transition plans have been clearly laid out by multiple third-party organizations, including the Glasgow Financial Alliance for Net-Zero,⁴³ Investors for Paris Compliance,⁴⁴ and United Nations’ High-Level Expert Group on Net-Zero Commitments of Non-State Entities. In their 2022 report, the Expert Group established a number of recommendations for high-impact corporate emitters, notably calling for increased accountability with regards to transition plans and a standardized reporting system to ensure consistent and comparable information. City governments are called upon to set incentives in support of corporate entities delivering on their net-zero commitments, and to participate in national advocacy towards accountability on these commitments.⁴⁵ Additionally,

40 Toronto-Dominion Bank. “Annual and Special Meeting of Common Shareholders,” April 18, 2024. <https://www.td.com/content/dam/tdcom/canada/about-td/pdf/td-ams-2024-agenda-en.pdf>.

41 Royal Bank of Canada. “Notice of Annual Meeting of Common Shareholders,” April 11, 2024. https://www.rbc.com/investor-relations/_assets-custom/pdf/2024englishproxy.pdf.

42 Andrews, Alan, Andhra Azevedo, Tanya Jemec, Julie Segal, and Adam Scott. “Roadmap to a Sustainable Financial System in Canada: Achieving Alignment Through Credible Climate Plans.” Environmental Defence Canada, November 2, 2022. <https://environmentaldefence.ca/report/roadmap-to-a-sustainable-financial-system-in-canada/>.

43 “Towards a Global Baseline for Net-Zero Transition Planning.” Glasgow Financial Alliance for Net-Zero, November 1, 2022. https://assets.bbhub.io/company/sites/63/2022/10/GFANZ_Towards-a-Global-Baseline-for-Net-Zero-Transition-Planning_November2022.pdf.

44 “Best Practices for Canadian Banks’ Net Zero Implementation.” Investors 4 Paris Compliance, December 14, 2021. <https://www.investorsforparis.com/report-release-best-practices-for-canadian-banks-net-zero-implementation/>.

45 The High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities. “Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions.” United Nations, November 2022. <https://www.un.org/sites/un2.un.org/files/high-levelexpertgroupupdate7.pdf>.

a collaborative report by Ecojustice, Environmental Defence, and Shift Action identifies the need for credible climate plans in Canada specifically, and calls on OSFI to make these transition plans mandatory.⁴⁶

4.2. Enhanced Transparency and Disclosure Requirements

4.2.1. Public Disclosure Mandates

FIs should be mandated to disclose financed emissions data. This should include detailed breakdowns by asset class and sector to provide a clearer picture of the financial sector's climate impact. Environmental advocacy groups such as Environmental Defence have made clear that required emissions reporting is overdue, and called on the Canadian Securities Administrators (CSA) to mandate climate disclosures.⁴⁷ Currently, the Canadian Sustainability Standards Board is developing the Canadian Sustainability Disclosure Standards (CSDS), but these standards will remain voluntary. The federal government and the CSA need to take leadership on this issue and mandate financed emissions disclosures, covering both public and private companies. The upcoming release of the CSDS provides a pivotal opportunity to ensure emissions accountability across Canada's financial industry.

4.2.2. Verification and Assurance

Alongside mandatory reporting, third-party verification of reported emissions should be required to ensure accuracy and reliability. Independent audits can help

identify discrepancies and ensure that self-reported data aligns with actual financed emissions.

4.3. Improvements to Reporting Frameworks

4.3.1. Adopt Uniform and Improved Reporting Standards

In addition to mandating transparency, Canadian Securities Administrators should insist on the adoption of a universal reporting framework for the climate impact of financial institutions. Currently, standards such as the soon to be published Canadian Sustainability Disclosure Standards (CSDS)⁴⁸ and international initiatives such as the PCAF or the Greenhouse Gas Protocol would be steps in the right direction. However, in their current state, these standards still lack sufficient comprehensiveness (such as lack of methodology for attributing financed emissions from M&A advisory or derivatives) or direction (such as not explicitly requiring credible climate transition plans). Using these frameworks as a starting point, leadership in Toronto should work with provincial and federal leadership to implement a new, consistent methodology for calculating and reporting financed emissions across different asset classes and financial activities, reducing variability and enhancing comparability. This is essential to ensuring the transparency of FIs' contributions to climate change.

46 Azevedo, Andhra, Adam Scott, and Dale Marshall. "OSFI Consultation: Climate-Related Risks in the Financial Sector," 2021. <https://environmentaldefence.ca/report/climate-finance-risks/>.

47 Segal, Julie. "Statement on New Climate-Related Disclosure Guidance from the Canadian Sustainability Standards Board." Environmental Defence Canada, March 14, 2024. <https://environmentaldefence.ca/2024/03/14/statement-on-new-climate-related-disclosure-guidance-from-the-canadian-sustainability-standards-board/>.

48 Accounting Standards Board (AcSB). "CSSB Exposure Draft on Canadian Sustainability Disclosure Standard 1." Financial Reporting & Assurance Standards Canada, <https://www.frascanada.ca/en/sustainability/documents/cssb-ed-csds-1>.

4.3.2. Mandatory Scope 3 Emissions Reporting

Within a standardized reporting framework, FIs should be required to report comprehensive Scope 3 emissions, covering all relevant indirect emissions, including those from investments and loans. While reporting on Scope 1 and 2 emissions is necessary, it is insufficient, as they do not capture the emissions which FIs enable through their actions. The Canadian Climate Law Institute has made the recommendation to include Scope 3 emissions reporting to Quebec’s Autorité des marchés financiers (AMF), whose guidelines recognize the complexity of climate risk, and include mandatory disclosure of Scope 3 greenhouse gas (GHG) emissions. This is necessary given that Scope 3 emissions often make up a the most substantial portion of FIs’ climate impact.⁴⁹ Such a step would address the current gaps where institutions selectively report Scope 3 categories, as observed with several FIs in our analysis. As observed also, Scope 3 emissions can be left out of emissions reporting altogether. Laws in other jurisdictions such as The Climate Corporate Data Accountability Act (SB-253) in California⁵⁰ could be used as scaffolding for drafting comparable localized legislation.

4.4. Integration of Climate Risks and Impacts into Financial Planning and Regulation

4.4.1. Climate Risk Assessments

In 2023, the Office of the Superintendent of Financial Institutions (OSFI) published Guideline B-15: Climate Risk Management, which sets expectations for the management of climate related risks for Canadian FIs.^{51,52} However, this Guideline does not acknowledge shifting capital into climate solutions as a way to reduce risk, a necessary aspect to FIs’ actions. OSFI should advance its guidelines to explicitly require this shifting of capital, and should mandate climate transition plans as a mode to regulate these actions. Although these regulations are defined at the federal level, the City of Toronto should also consider advancing climate transition plans and defining similar benchmarks, in which firms are required to disclose the local climate implications of their activity.

4.4.2. Stress Testing and Scenario Analysis

Regulators should implement stress testing and scenario analysis requirements that account for climate risks and impacts. These tests can help institutions understand the potential impacts of different climate scenarios on their financial stability and align their strategies with long-term

49 Canadian Climate Law Initiative (CCLI). “Conversation with Quebec’s AMF on its Climate Risk Management Guideline.” Canadian Climate Law Initiative, <https://ccli.ubc.ca/conversation-with-quebecs-amf-on-its-climate-risk-management-guideline/>.

50 Huckins, Sarah. “California’s Climate Corporate Data Accountability Act Requires Companies to Disclose Greenhouse Gas Emissions by 2026.” Greenhouse Gas Protocol, October 10, 2023. <https://ghgprotocol.org/blog/statement-californias-climate-corporate-data-accountability-act-requires-companies-disclose>.

51 Office of the Superintendent of Financial Institutions. “Climate Risk Management.” Guideline, 2023. <https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/climate-risk-management>.

52 Balu, Nivedita. “Canada Issues Final Guidelines for Banks to Manage Climate-Change Risks.” Reuters, March 7, 2023. <https://www.reuters.com/business/finance/canada-issues-final-guidelines-banks-manage-climate-change-risks-2023-03-07/>.

climate goals. Currently, OSFI has guideline E-18, which outlines stress testing with respect to various market scenarios. A similar set of guidelines could be developed to help facilitate more responsible financial decisions on the part of Canadian FIs. A 2022 report by Environmental Defence, Ecojustice, and Shift Action analyzes OSFI's role in climate change policy, concluding that stress testing, climate risks, and emissions targets should all be made public information.⁵³

4.5. Incentivizing Sustainable and Low-Carbon Investments

4.5.1. Green Taxonomy and Labels

To facilitate incentive programs that support a transition away from carbon-heavy sectors, it is necessary that the federal government develop a system for recognizing financial activities that align with sustainability goals. Such a system has been successfully developed by other governments, most notably the European Union, who launched its “Taxonomy for Sustainable Activities” in 2020. With this robust taxonomy already modeled, and with Canada's own expert groups calling for better guidance on sustainable development,⁵⁴ it is both feasible and necessary that Canada develop its own green taxonomy that aligns with the Paris Agreement. This would mean excluding oil, gas, or the related carbon capture and storage from eligibility. Currently, the Canadian Department of Finance has published a “Taxonomy

Roadmap Report”⁵⁵ to develop a taxonomy, but has previously proposed the inclusion of oil sands and gas investments and has delayed the release of an actual green taxonomy.⁵⁶ The development and publication of a finalized taxonomy, which does not include further financing of fossil fuels, is necessary in order to transition Canada's economy towards a sustainable future.

4.5.2. Regulatory Incentives for Sustainable Investments

Beyond creating a green taxonomy, the federal government should implement further regulatory incentives to facilitate investments from FIs in areas such as renewable energy, energy efficiency, and other low-carbon technologies. The Sustainable Finance Action Council, who publishes the annual “Taxonomy Roadmap Report” through the Department of Finance, has cited that Canada's climate investment gap is as high as \$115 billion CAD annually.⁵⁷ While some incentives do exist, such as Canada's Investment Tax Credits, a policy brief by the Canadian Climate Institute identifies the need to take incentives further in order to coordinate private investment and lessen reliance on public funding.⁵⁸ Considering the extent to which banks are leading financing of fossil fuel companies in Canada, the federal government should consider specific policies which encourage Canadian banks to finance transition technologies and other climate adaptation projects.

53 Azevedo, Andhra, Adam Scott, and Dale Marshall. “OSFI Consultation: Climate-Related Risks in the Financial Sector,” 2021. <https://environmentaldefence.ca/report/climate-finance-risks/>.

54 Department of Finance Canada. “Sustainable Finance Action Council.” Government of Canada, August 18, 2023. <https://www.canada.ca/en/department-finance/programs/financial-sector-policy/sustainable-finance/sustainable-finance-action-council.html>.

55 Sustainable Finance Action Council. “Taxonomy Roadmap Report.” Government of Canada, September 2022. <https://www.canada.ca/en/department-finance/programs/financial-sector-policy/sustainable-finance/sustainable-finance-action-council/taxonomy-roadmap-report.html>.

56 Walker, Alex. “Media Backgrounder: A Green Label That Sticks.” Environmental Defence Canada, April 2024. https://environmentaldefence.ca/wp-content/uploads/2024/04/FINAL_-_Taxonomy-media-backgrounder-1.pdf.

57 Sustainable Finance Action Council, 2022.

58 Beck, Marisa, Dale Beugin, and Calvin Trottier-Chi. “Seven Recommendations to Leverage Public Investment to Help Canada Compete in the Global Energy Transition: A Made-in-Canada Approach to Drive Clean Growth.” Canadian Climate Institute, March 2023. <https://climateinstitute.ca/reports/mobilizing-private-capital-to-support-canadas-clean-growth/>.



4.6 Effectively Supporting the proposed *Climate-Aligned Finance Act*

The City of Toronto should actively support the *Climate-Aligned Finance Act*, and expressly seek ways in which to support this Act as it is debated in Cabinet. Proposed in 2022 by independent Senator Rosa Galvez, the *Climate-Aligned Finance Act* is a comprehensive legislative proposal seeking to align the financial system with climate action. Legislating this Act would address many of the recommendations stated in this report, including mandatory emissions disclosures, mandatory credible climate plans, and oversight from OSFI on climate commitments.⁵⁹ This Act recognizes that because FIs and high-emitting companies are not party to the Paris Agreement, there exists a significant gap in the governance of

the financial system, and that this gap needs to be addressed immediately.

In 2023, *Motion-84: Alignment with the Paris Agreement* was proposed to the House by Member of Parliament Ryan Turnbull (Whitby).⁶⁰ This Motion states that the government should use all legislative and regulatory tools at its disposal to align Canada's financial system with the Paris Agreement. Members of Parliament from the Greater Toronto Area, including Nathaniel Erskine-Smith (Beaches-East York), Julie Dzerowicz (Davenport), and Yvan Baker (Etobicoke Centre), seconded the Motion. These declarations of support show a growing push for Paris-aligned financial regulation in Toronto. It is critical that this support be furthered by Toronto-based leadership through the explicit and public support of the *Climate Aligned Finance Act*.

59 Péloffy, Karine, Nick Zrinyi, and Stéphane Laviolette. "Legislative Overview: Bill S-243, Climate-Aligned Finance Act (CAFA)." Office of Senator Rosa Galvez, May 2022. <https://rosagalvez.ca/media/gvdlse55/2022-05-cafa-legislative-overview-v11-en.pdf>.

60 House of Commons Canada. "M-84 Alignment with the Paris Agreement," May 5, 2023. <https://www.ourcommons.ca/members/en/105480/motions/12396258>.

5. THE CITY OF TORONTO'S UNIQUE OPPORTUNITY FOR CLIMATE LEADERSHIP

For Toronto and its residents, addressing the impacts of our financial sector on global climate change is necessary to ensure a sustainable future. As the host of Canada's largest financial institutions and a major beneficiary of this financial centre, Toronto has the responsibility to take an active role in advancing climate-aligned finance policy at every level of government. To lead by example, Toronto should integrate financed emissions into its carbon budget by calculating and disclosing emissions from investments and loans made by local FIs. The city should incorporate such actions into the TransformTO Net Zero Strategy, ensuring that FIs align their practices with the city's climate goals and set specific targets for reducing financed emissions. Toronto should also take an active role in brokering and advocating for climate aligned policies at the federal and provincial levels, ensuring that financed emissions from Toronto-based FIs are transparently reported and that transition plans are developed and carried out.

The City of Toronto actively works to attract and retain financial institutions, thus demonstrating the ability to commit resources to transforming the city's financial sector. For example, in 2001, Toronto launched Toronto Finance International (TFI),⁶¹ which was successful in bringing an influx of international FIs to Bay Street. TFI facilitated this influx primarily through lobbying efforts on select financial policies

and networking between international companies, leading experts, and government officials. Government records show that between 2013 and 2020, TFI received \$550,000 in funding directly from the City of Toronto, with \$3.7 million coming from various federal departments and \$7.2 million funded by the Province of Ontario.⁶² It is time that similar resources are committed to incentivize positive climate action and emissions reductions by our financial sector.

Promoting green investment is another critical step. The city can incentivize green investment by offering tax benefits, grants, or other financial incentives for projects and financial products that contribute to sustainability and reduce carbon footprints. This should include an analysis of the City of Toronto's own assets and investments. As an important investor itself, with significant resources managed by Toronto-based FIs,⁶³ the City government can ensure that the FIs it chooses to partner with comply with existing programs or incoming carbon accountability initiatives.

As a leading center for global finance, Toronto can also use its influence to improve the accountability of FIs on both a national and global scale. For example, Toronto's leadership should use their influence in federal political landscapes, along with international spaces like the G7, the COPs and C40, to advocate for government regulation and more immediate action

61 Toronto Finance International. "Financial Services." City of Toronto, n.d. <https://www.toronto.ca/business-economy/industry-sector-support/financial-services/>.

62 Officer of the Commissioner of Lobbying of Canada. "Registry of Lobbyists: Toronto Financial Services Alliance/Toronto Finance International / Jennifer Reynolds, President & CEO." Lobby Canada, April 4, 2024. <https://lobbycanada.gc.ca/app/secure/ocl/lrs/do/vwRg?cno=327306®Id=914431#regStart>.

63 Chief Financial Officer and Treasurer. "City of Toronto Investment Report for the Year 2022." City of Toronto, May 23, 2023. <https://www.toronto.ca/legdocs/mmis/2023/ex/bgrd/backgroundfile-236790.pdf>.

by FIs themselves. This coming November 2024, COP29 presents an important opportunity for Toronto to accelerate the adoption of financial practices that support the shift towards net zero and address globally financed emissions. Prior to the summit, we recommend that leadership in Toronto work with provincial and federal regulators to produce mandates that all regulated FIs adopt and implement a transition plan aligned with the 1.5°C goal of the Paris Agreement. Regulators at both the federal and provincial levels of government should define clear frameworks for Paris alignment and consequences for non-compliance, ensuring commitments are ambitious and robust. As a significant component of Toronto's economy, and as contributors to the character of the city and the livelihoods of its residents, it is imperative that FIs be considered in Toronto's climate strategy.

There is precedent for this level of climate action at a city level. Other cities have taken proactive steps to address financed emissions, and can serve as models for Toronto. London's 2023 Green Finance Strategy⁶⁴ mandates better reporting on Scope 3 emissions, government oversight on corporations' climate transition plans, and capital mobilization towards climate innovation. In addition, the Strategy emphasized the success of the Green Finance Institute, created in partnership between the national government and the City of London Corporation. Since the first edition of the Strategy was published, London has become known as the world's leading green finance center, ranking number one on the Global Green Finance Index for three years in a row. Similarly, Paris has committed to becoming carbon neutral by 2050

and encourages its financial sector to support this goal through initiatives like the AMF's Climate and Sustainable Finance Commission⁶⁵ and policies that foster green bonds and sustainable finance. Both of these cities are currently also steering committee members of C40,⁶⁶ situating them at the forefront of global climate action and setting high standards for sustainability and accountability. Additionally both Paris and London along with eighteen other cities are leading members of the C40 Divest / Invest Accelerator, committing their city investments and funds to be free of fossil fuel investments and to take help climate finance advocacy positions. Given its unique and important position, Toronto should join this group.⁶⁷

Toronto is uniquely positioned to lead in this area, given its already strong climate commitments and its concentration of financial firms — many of which have significant investments in fossil fuel companies. This creates both a challenge and an opportunity for the city: a challenge in transitioning away from carbon-intensive investments, and an opportunity to leverage its influence within the financial sector to drive meaningful change. The city's history of close ties and mutual support between both the provincial government of Ontario and the federal government enhances its capacity to act as a leader in sustainable climate finance. In partnering with other cities and exerting its influence on the international stage, Toronto can set a new benchmark for climate action, and ensure that its financial sector aligns itself with increasingly urgent efforts to mitigate the effects of climate change.

64 His Majesty's Government. "Mobilising Green Investment: 2023 Green Finance Strategy." Government of the United Kingdom, March 2023. <https://assets.publishing.service.gov.uk/media/643583fb877741001368d815/mobilising-green-investment-2023-green-finance-strategy.pdf>.

65 AMF France. "Climate and Sustainable Finance Commission," April 5, 2024. <https://www.amf-france.org/en/amf/our-organisation/climate-and-sustainable-finance-commission>.

66 C40 Cities. "Our Cities," n.d. <https://www.c40.org/cities/>.

67 C40 Cities. "Divesting from Fossil Fuels, Investing in a Sustainable Future Accelerator," n.d. <https://www.c40.org/accelerators/divest-invest/>.

Toronto must take action now. Toronto leadership should explicitly support the adoption of the *Climate Aligned Finance Act*, and do everything in their power to move this Act into legislation. The City of Toronto should push the federal government to mandate credible climate transition plans from all financial institutions, and in so doing, advance regulation on comprehensive reporting, targets for climate goals, and plans for how those goals will be achieved. Toronto leadership should also work to advance the

release of a green taxonomy, and actively ensure that this taxonomy does not include fossil fuels. Finally, the City of Toronto needs to use its own leverage and relationship with Bay Street FI's to drive a shift of their financing away from climate pollution and towards more sustainable energy solutions. In advancing these goals, the City of Toronto has the opportunity to curb financed emissions, an act which would directly benefit Toronto, along with Canada and the rest of the world.

The City of Toronto should take action now to:

- Include the emissions sponsored by Bay Street financial institutions in the City's climate mitigation strategies
- Use its own leverage as a long-time partner and investor in these institutions to shift investments towards sustainable energy sources
- Advocate at provincial and federal level for improved regulations, transparency and accountability, including supporting the adoption of the Climate Aligned Finance Act and mandatory climate transition plans
- Play a leadership role in international efforts to ensure the finance sector is an ally, rather than an obstacle, to achieving global climate targets

APPENDIX

A.1. APPROACH

Carbon accounting plays a crucial role in measuring, tracking, and reporting greenhouse gas (GHG) emissions over time. This report follows the Global GHG Accounting and Reporting Standard established by PCAF, which offers methodological guidelines for effective carbon accounting. In estimating emissions from lending and investment activities of selected entities in Toronto, we also adhered to the methodological principles outlined in the GHG Protocol's technical guidance for calculating emissions.⁶⁸

Financial data, including portfolio positions, loan transactions, and balance sheets, was sourced from public disclosures such as annual reports and regulatory disclosures. The team responsible for this effort specifically evaluated disclosure levels of six major asset managers to identify information related to listed equity or fixed income. Reported emissions data was drawn from company disclosures in sustainability reports and through mechanisms such as CDP and TCFD. The assessment covered financing across the energy sector, including coal, oil, and gas. The analysis, conducted using year-end disclosures from 2022, ensured relevance by conducting a high-level sample check to compare against more recent publications.

It is important to note that the holistic nature of this analysis, covering multiple asset classes and geog-

raphies across the globe, provides a more comprehensive analysis of the implications of Toronto-based FIs on the global climate crisis.

A.1.1. Emissions

To assess Toronto's finance sector's emissions, we had to delineate which FIs and which emissions within the energy industry's complex operations would be considered in the analysis. Drawing from the GHG protocol's definitions, Scope 1 refers to direct GHG emissions from sources owned or controlled by an organization, such as fuel combustion and industrial processes; Scope 2 emissions are indirect emissions from the consumption of purchased electricity, steam, heat, or cooling; and Scope 3 emissions encompass all other indirect emissions in the value chain, including those from the production and transportation of purchased goods and services, employee travel, and the use of sold products.

For this analysis, 'financed emissions' refer to GHG emissions financed by the aggregated bonds and loans and the investments of FIs.

A.2 METHODOLOGY

The methodology for this report was modeled off PCAF's Global GHG Reporting and Accounting Standard for financed emissions. We are specifi-

68 Greenhouse Gas Protocol. Technical Guidance for Calculating Scope 3 Emissions (Chapter 15: Category 15 – Investments). World Resources Institute and World Business Council for Sustainable Development, 2022. <https://ghgprotocol.org/sites/default/files/2022-12/Chapter15.pdf>.

cally looking at corporate finance (and not project or consumer finance), which is finance provided to companies by FIs. For each bank included, financed emissions take into account listed equity, as well as business loans and bonds. For each asset manager and pension fund included, financed emissions only account for listed equity.

In addition to listed equity and business lending, PCAF includes three more categories in calculating financed emissions: equity in private companies, commercial real estate and sovereign debt. Due to data availability, these categories have not been included in our methodology.

A.2.1. Criteria for Financial Institutions

The three types of FIs included in this report are banks, asset managers, and pension funds. The big six Canadian banks were included, as each has a strong presence in the Toronto financial district. Asset management companies were chosen based on three criteria: publicly traded companies with a market cap of over \$10 billion USD and a strong presence in Toronto. Pension funds were also chosen based on three criteria: the fund has over \$10 billion in assets under management, is headquartered in Toronto, and has public information on listed equity. As a result, six banks, six asset managers, and six pension funds are included in this analysis.

Banks:

- Asset Management Firms:
- Royal Bank of Canada
- Bank of Montreal
- Toronto-Dominion (TD)
- Bank of Nova Scotia (Scotiabank)
- Canadian Imperial Bank of Commerce (CIBC)
- National Bank of Canada

Asset Management Firms:

- Sun Life Financial
- Power Corporation of Canada
- Manulife Financial
- Brookfield Asset Management
- Fairfax Financial
- Intact Financial

Pension Funds:

- Ontario Municipal Employees' Retirement System (OMERS)
- Canada Pension Plan Investment Board (CPPIB)
- Healthcare of Ontario Pension Plan (HOOPP)
- Ontario Teachers' Pension Plan (OTPP)
- Ontario Public Service Employees Union Pension Trust (OPSEU)
- Investment Management Corporation of Ontario (IMCO)

A.2.2. Criteria for Companies (Fossil Fuel Companies)

In calculating financed emissions through business lending, fossil fuel companies were taken from *Banking on Climate Chaos 2023* (BOCC 2023). The top 25 companies based on loan amount in 2022 were selected vis a vis the Big 5 banks (from the Big 5 excluding the National Bank of Canada due to BOCC 2023 not reporting on them), leading to 82 different entities being considered.

In calculating financed emissions through public equity, fossil fuel companies were taken from *Investing in Climate Chaos 2023*. For each bank and asset manager, the top 20 financed fossil fuel companies were taken for analysis. While each of these sections took only the top 20 financed companies for each institution, financed emissions were calculated across all

companies. This means that vis a vis each FI, there were 64 fossil fuel companies up for consideration.

Because some companies showed up in both pools of lending/investments, the final pool of fossil fuel companies consisted of 128 total entities. For the final calculations, each bank's attribution was based on the top 25 as described above, but for investments the available ownership information across all 128 companies was considered to calculate each FI's amount of financed emissions.

Financed emissions for pension funds were based on ownership information across these same 128 companies.

A.2.3 Financing through Listed Investment Equity:

› Asset managers, banks, and pension funds

As per PCAF's methodology, a FI's financed emissions are understood as a portion of the annual emissions of the financed company. This portion is determined by the numbers of shares the FI holds in the financed company. The full formula can be found below, adapted from PCAF's methodology. All of these numbers were based on Bloomberg data based on company filings released for the December 31, 2022 end-of-year performance reports.

$$F = ((P * S) / E) * T$$

F = **F**inanced emissions (tCO₂e)

P = market closing **P**rice on December 31, 2022 (\$)

S = number of **S**hares held by the FI (unitless)

E = **E**nterprise value including cash of the financed company (\$)

T = **T**otal emissions of financed company (tCO₂e)

We accessed the financial data for banks and asset managers and the corresponding fossil fuel companies through the Bloomberg Terminal. This data included the fossil fuel companies' market price, enterprise value including cash (EVIC) of each fossil fuel company, and the number of company shares held by each bank or asset manager in each of those fossil fuel companies. We also obtained emissions data for each fossil fuel company through the Bloomberg Terminal. In almost every case, this included Scope 1 and Scope 2 emissions, and in most cases, included Scope 3 emissions. Further discussion on emissions data availability across Scope 1, 2, and 3 categories will be found in our analysis.

Data on the number of shares held by the pension plans was obtained from each pension plan's form 13F-HR filing in the U.S. Security and Exchange Commission's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system. This data was pulled from the 13F-HR forms reported in December, 2022, by searching for the 128 fossil fuel companies' names within each filing.

A.2.4 Financing through Business Loans/Bonds:

› Banks

As per PCAF's methodology, this section investigates the amount of loans and bond deals issued by five of Canada's biggest banks. The National Bank of Canada was not included in this section due to a lack of data availability. The full formula can be found below, adapted from PCAF's methodology.

Data on loan and bond amounts is taken from BOCC 2023 by Urgewald et al. Data on emissions and EVICs of each fossil fuel company were gathered from the Bloomberg Terminal.

$$F = (L / E) * T$$

F = **F**inanced emissions (tCO₂e)

L = adjusted **L**oan amount from the bank referenced from BOCC 2023 (\$)

E = **E**nterprise value including cash of the financed company (\$)

T = **T**otal emissions of financed company (tCO₂e)

A.3. LIMITATIONS AND BARRIERS

A.3.1. Limitations from Data Availability

Given the scope of the assessment and constraints on accessing transaction-level or counterparty data in Toronto, several limitations emerged in the analysis presented in this report.

A.3.2. Publicly Available Data

The analysis relied entirely on publicly available data, as detailed throughout this report. This resulted in notable limitations in estimating the FIs' revenue from services such as underwriting and mergers and acquisitions (M&A), as well as in obtaining granular data at the individual investee level for credit exposure. Consequently, sector-level data was utilized, limiting the accuracy of assessing each FI. Transaction-level assessment or attribution was not feasible, hindering the evaluation of syndicated loans. Additionally, the scarcity of detailed data increased the risk of double counting, complicating the identification of intercompany transactions.

A.3.3. Double Counting Concerns and Scope 3 Inclusion

Incorporating Scope 3 emissions data into our assessment initially raised concerns regarding potential double counting. For instance, what may be considered Scope 1 or Scope 2 emissions for one company could be classified as Scope 3 emissions for another, thus leading to the possibility of the same “x amount of CO₂” being counted multiple times over. However, according to the Environmental Defense Fund⁶⁹, double counting accounts for only up to 30% of Scope 3 emissions within nations that are parities with the Paris Agreement. This indicates that the vast majority of emissions are still being properly counted and that the messaging of this report is not affected in a meaningful way when double counting is considered.

A.3.4. Emissions Removals And Carbon Credits

The PCAF methodology also provides for attribution of companies' reported emissions removals, carbon credits retired or generated. However, the lack of publicly reported data on the emissions removals activities of the 128 fossil fuel companies resulted in the inability to calculate what percentage of those removals could be attributable to the FIs. Similarly, the BOCC data that was relied upon by this report for the adjusted loan amounts as of 2022, removes “green instruments” from their dataset to remain as accurate as possible. However, sustainability-linked instruments or social bonds are not excluded as these instruments do not prohibit expansion of fossil fuels.

69 Environmental Defense Fund (EDF). (n.d.). NDC Emissions Coverage Analysis. June 15, 2018. https://www.edf.org/sites/default/files/documents/EDF_NDC%20Emissions%20Coverage%20Analysis_0.pdf.

A.3.5. Methodological Limitations

This analysis adhered to the guidelines set by PCAF to the utmost extent possible, but encountered limitations in scope, coverage, and overall quality of results in certain areas, particularly for banks and insurers. PCAF's guidelines do not account for emissions generated by service providers like underwriting and M&A advisory, which are significant activities for banks and insurers. Moreover, methodologies fail to capture emissions associated with other asset classes for asset managers, such as cash, currency, guarantees, and derivatives. Additionally, the use of Bloomberg throughout the assessment for economic activity-based emissions factors faced challenges due to discrepancies in emission factors across companies.

Moreover, reliance on datasets provided by Urgewald e.V., while comprehensive and highly corroborated, required us to accept their data at face value. In addition to this only the reported 2022 loan amounts from the BOCC 2023 dataset alone were considered in our evaluation. This was because there was no comprehensive measure to determine the cumulative amount owed by an energy company to the respective FI; leading us to avoid potential over-counting by basing our study on a “snapshot” reporting as of December 31, 2022. Considering that many energy companies may have received financing in the years leading up to 2022, but not in 2022 itself, said companies would have been overlooked in this study. These caveats further underscore the importance of transparency and robust validation processes in ensuring the accuracy and reliability of emissions data used in such assessments.

With respect to the methodology adopted by this report to calculate the financed emissions attributable to the Canadian pension funds, only the emissions associated with the 128 companies considered for the banks and asset managers were accounted



for, to maintain consistency. However, this process may have resulted in undercounting of the emissions for pension funds as there might be other fossil fuel companies mentioned in the For 13F filings for each of the funds which have not been included in the calculations for the purposes of this report.

A.4. SUPPLEMENTARY TABLES

Table A: Calculated Financed Emissions from Toronto FIs

Financial Institution		Our Calculated Financial Emissions (tCO ₂ e) [Listed Equity]		Our Calculated Financed Emissions (tCO ₂ e) [Loans]	
Name	Ticker	2022 (Scope 1 & 2)	2022 (Scope 1, 2 & 3)	2022 (Scope 1 & 2)	2022 (Scope 1, 2 & 3)
Royal Bank of Canada (RBC)	RY	18,243,786.91	207,907,757.06	3,667,564.75	25,356,142.08
Bank of Montreal (BMO)	BMO	13,847,748.13	162,037,587.94	4,065,890.08	7,558,457.09
Toronto-Dominion (TD)	TD	6,338,813.38	65,168,293.83	3,273,247.47	27,285,583.27
Bank of Nova Scotia (Scotiabank)	BNS	5,252,766.99	57,048,853.42	4,608,217.70	18,752,145.74
Canadian Imperial Bank of Commerce (CIBC)	CM	12,324,098.29	146,637,417.51	4,134,543.49	11,912,808.81
National Bank of Canada (NBC)	NA	6,759,876.24	125,288,405.49	N/A	N/A
Sun Life Financial	SLF	6,363,619.44	125,490,203.71	N/A	N/A
Power Corporation of Canada	POW	15,973,441.54	233,846,975.75	N/A	N/A
Manulife Financial	MFC	14,931,948.09	205,030,198.17	N/A	N/A
Brookfield Asset Management	BN	2,294,275.98	3,530,662.08	N/A	N/A
Fairfax Financial	FFH	23,545.08	264,189.92	N/A	N/A
Intact Financial	IFC	230,999.46	983,839.45	N/A	N/A
Ontario Municipal Employees' Retirement System (OMERS)	N/A	157,672.72	932,619.33	N/A	N/A
Canada Pension Plan Investment Board (CPPIB)	N/A	1,799,844.07	6,295,397.57	N/A	N/A
Healthcare of Ontario Pension Plan (HOOPP)	N/A	373,734.27	1,876,616.56	N/A	N/A
Ontario Teachers' Pension Plan (OTPP)	N/A	53,036.33	550,896.46	N/A	N/A
Ontario Public Service Employees Union Pension Trust (OPSEU)	N/A	0.00	0.00	N/A	N/A
Investment Management Corporation of Ontario (IMCO)	N/A	9,401.77	77,648.87	N/A	N/A

The values in columns with the red header represent the financed emissions based on the investment activities of Toronto-based FIs in energy companies worldwide. These attributable emissions were calculated using the equation in section A.2.3 reflecting the environmental impact associated with investments in fossil fuels. The values in the columns with the orange header indicate the amount of financed emissions attributed to BOCC 2023 adjusted bank loans and bond deals with energy companies on a global scale using the equation in section A.2.4.

Table B: Self-Reported Financed Emissions from Toronto FIs (continues on page 34)

Financial Institution		Latest Available Data, from Self-Reported Financed Emissions (tCO2e) [As of March 2024]		
Name	Ticker	Scope 1 & 2	Scope 1, 2, & 3	Caveats
Royal Bank of Canada (RBC) ⁷⁰	RY	2,340,000	38,070,000	Numbers are for oil & gas. Only report lending activity (what we calculated in orange).
Bank of Montreal (BMO) ⁷¹	BMO	506,000	7,358,000	Numbers are for oil & gas. Only report lending activity (what we calculated in orange).
Toronto-Dominion (TD) ⁷²	TD	5,900,000	69,900,000	Numbers are for oil & gas. Reported both lending and investments, but data quality score rating is ~3 for energy.
Scotiabank ⁷³	BNS	3,100,000	N/A	Numbers are for oil & gas. Reported lending and unlisted equity.
Canadian Imperial Bank of Commerce (CIBC) ⁷⁴	CM	1,437,000	82,796,000	Numbers are for oil & gas. Only report lending activity (what we calculated in orange).
National Bank of Canada (NBC) ⁷⁵	NA	487,000	4,387,000	Numbers are for oil & gas. Only report lending activity (what we calculated in orange).
Sun Life Financial ⁷⁶	SLF	2,328,990	8,905,680	Includes listed equity and corporate bonds, but only factored in a segment of operational financing.
Power Corporation of Canada ⁷⁷	POW	9,407,126	N/A	Includes equity.
Manulife Financial ⁷⁸	MFC	N/A	29,921,449	Includes public equity and public bonds.
Brookfield Asset Management ⁷⁹	BN	122,699	N/A	Includes public equity only.
Fairfax Financial	FFH	N/A	N/A	N/A

70 Royal Bank of Canada. "Climate Report," 2022. https://carbonaccountingfinancials.com/files/institutions_downloads/RBC-Climate-Report-2022.pdf.

71 BMO Financial Group. "Climate Report," 2023. https://our-impact.bmo.com/wp-content/uploads/2024/03/BMO_2023_CR_EN.pdf.

72 TD Bank Group. "TD's Climate Action Plan: 2023 Progress Update," 2023. <https://www.td.com/content/dam/tdcom/canada/about-td/pdf/esg/td-climate-action-plan-2023-progress-update-en.pdf>.

73 Scotiabank. "Climate Report," 2023. https://www.scotiabank.com/content/dam/scotiabank/corporate/Documents/Scotiabank_2023_Climate_Report_Final.pdf

74 Canadian Imperial Bank of Commerce. "2023 Climate Report: Update on TCFD and Progress towards Our Net-Zero Ambition," 2023. https://carbonaccountingfinancials.com/files/institutions_downloads/climate-report-2023-en-1.pdf.

75 National Bank of Canada. "Climate Report," 2023. <https://www.nbc.ca/content/dam/bnc/a-propos-de-nous/esg/pdf/report-tcf-2023.pdf>.

76 Sun Life. "Sustainability Report: 2023 Performance," 2023. <https://www.sunlife.com/content/dam/sunlife/regional/global-marketing/documents/com/sustainability-report-2023-e.pdf#page=54>.

77 Power Corporation of Canada. "CDP Climate Change Questionnaire 2023," July 31, 2023. https://www.powercorporation.com/media/uploads/esg_hub/bpcc_cdp_climate_change_questionnaire_2023_-_web_VkDHW29.pdf.

78 Manulife Financial Corp. "CDP Climate Change Questionnaire 2023," 2023. https://www.manulife.com/content/dam/corporate/global/en/documents/pas/2023/MFC_CDP_2023_EN.pdf.

79 Brookfield Renewable. "Accelerating the Net-Zero Transition: Brookfield Renewable Partners L.P. 2022 ESG Report," 2022. <https://bep.brookfield.com/sites/bep-brookfield-ir/files/Brookfield-BEP-IR-V2/2023/bep-esg-2022.pdf>.

Table B: Self-Reported Financed Emissions from Toronto FIs (continued from page 33)

Financial Institution		Latest Available Data, from Self-Reported Financed Emissions (tCO ₂ e) [As of March 2024]		
Name	Ticker	Scope 1 & 2	Scope 1, 2, & 3	Caveats
Intact Financial ⁸⁰	IFC	665,727	N/A	Includes common shares, preferred shares, and corporate bonds.
Ontario Municipal Employees' Retirement System (OMERS) ⁸¹	N/A	2,024,869	N/A	Includes public and private equity holdings.
Canada Pension Plan Investment Board (CPPIB) ⁸²	N/A	21,100,000	N/A	Includes all non-government holdings.
Healthcare of Ontario Pension Plan (HOOPP) ⁸³	N/A	N/A	2,418,169	Includes public equities, real estate, private equity, and infrastructure
Ontario Teachers' Pension Plan (OTPP) ⁸⁴	N/A	790,000	N/A	Includes public equities only.
Ontario Public Service Employees Union Pension Trust (OPSEU)	N/A	N/A	N/A	N/A
Investment Management Corporation of Ontario (IMCO) ⁸⁵	N/A	2,070,359	13,213,488	Includes public equities, fixed income/government bonds, real estate, infrastructure, global credit and private equity,"

80 Intact Financial Corporation. "Social Impact and ESG Report," 2023. https://cdn.intactfc.com/presentations/IFC-2023-Social-Impact-and-ESG-Report_EN.pdf.

81 OMERS. "2023 Annual Report: Building Tomorrow Together," 2023. https://assets.ctfassets.net/iifcbkds7nke/61nAzhRFwfyAlyRN-LZY63p/88b260a1d339173cfd66b58da62d85/OMERS-2023-Annual-Report_FINAL-ua.pdf.

82 CPP Investments. "2023 Report on Sustainable Investing," 2023. <https://www.cppinvestments.com/wp-content/uploads/2023/12/SI-Report-2023-EN.pdf>.

83 Healthcare of Ontario Pension Plan. "Climate Disclosure," 2023. <https://hoopp.com/investments/sustainable-investing/climate-disclosure>.

84 Ontario Teachers' Pension Plan. "Investing to Make a Mark: 2023 Annual Report," 2023. <https://www.otpp.com/content/dam/otpp/documents/reports/2023-ar/otpp-2023-annual-report-eng.pdf>.

85 Investment Management Corporation of Ontario. "2022 ESG Report: Focused on the Future," 2022. <https://www.imcoinvest.com/pdf/imco-esg-report-2022.pdf>.

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<http://climateobservatory.ca/baystreetclimatemonitor>