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Independent Accountants' Review Report

To the Board of Directors and Management of Northern Trust Corporation:

Report on the Statement of Greenhouse Gas Emissions for the Year Ended December 31, 2024

Conclusion

We have reviewed whether the Statement of Greenhouse Gas Emissions and the related notes (Statement of Greenhouse Gas Emissions) of Northern Trust Corporation's (the Corporation) for the year ended December 31, 2024 has been prepared in accordance with criteria set forth in the basis of presentation in Note 1 (the Criteria).

Based on our review, we are not aware of any material modifications that should be made to the Statement of Greenhouse Gas Emissions for the year ended December 31, 2024 in order for it to be prepared in accordance with the Criteria.

Our conclusion on the Statement of Greenhouse Gas Emissions does not extend to any other information that accompanies or contains the Statement of Greenhouse Gas Emissions and our report.

Basis for Conclusion

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants, in the versions of AT-C section 105, *Concepts Common to All Attestation Engagements*, and AT-C section 210, *Review Engagements*, that are applicable as of the date of our review. We are required to be independent and to meet our other ethical requirements in accordance with relevant ethical requirements related to the engagement. We believe that the evidence we have obtained is sufficient and appropriate to provide a reasonable basis for our conclusion.

Responsibilities for the Statement of Greenhouse Gas Emissions

Management of the Corporation is responsible for:

- designing, implementing and maintaining internal control relevant to the preparation of the Statement of Greenhouse Gas Emissions such that it is free from material misstatement, whether due to fraud or error;
- selecting or developing suitable criteria for preparing the Statement of Greenhouse Gas Emissions and appropriately referring to or describing the criteria used; and
- preparing the Statement of Greenhouse Gas Emissions in accordance with the Criteria.

Inherent Limitations in Preparing the Statement of Greenhouse Gas Emissions

As described in Note 2: Estimation Uncertainties, emissions data included in this Statement of Greenhouse Gas Emissions are subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.



Our Responsibilities

The attestation standards established by the American Institute of Certified Public Accountants require us to:

- plan and perform the review to obtain limited assurance about whether any material modifications should be made to the Statement of Greenhouse Gas Emissions in order for it to be prepared in accordance with the Criteria; and
- express a conclusion on the Statement of Greenhouse Gas Emissions based on our review.

Summary of the Work We Performed as the Basis for Our Conclusion

We exercised professional judgment and maintained professional skepticism throughout the engagement. We designed and performed our procedures to obtain evidence that is sufficient and appropriate to provide a basis for our conclusion. Our procedures selected depended on our understanding of the Statement of Greenhouse Gas Emissions and other engagement circumstances, and our consideration of areas where material misstatements are likely to arise. In carrying out our engagement, the procedures we performed primarily consisted of:

- inquiring of management to obtain an understanding of the methodologies applied to measure and evaluate the greenhouse gas emissions;
- evaluating management's application of the methodologies;
- inspecting supporting documentation for a selection of activity data;
- considering the appropriateness of emissions factors used and estimates;
- recalculating a selection of the greenhouse gas emissions;
- performing analytical procedures; and
- evaluating the disclosures included in the Statement of Greenhouse Gas Emissions for consistency with our evidence obtained

The procedures performed in a review vary in nature and timing from, and are substantially less in extent than, an examination, the objective of which is to obtain reasonable assurance about whether the subject matter information is prepared in accordance with the criteria, in all material respects, in order to express an opinion. Because of the limited nature of the engagement, the level of assurance obtained in a review is substantially lower than the assurance that would have been obtained had an examination been performed.

KPMG LLP

Chicago, Illinois
July 29, 2025



Northern Trust

2024 Statement of Greenhouse Gas (GHG) Emissions

Statement of GHG Emissions

In metric tons (MT) of carbon dioxide equivalent (CO₂e)

TABLE 1

FOR THE YEAR ENDED DECEMBER 31						
	2019	2020	2021	2022	2023	2024
Scope 1 Direct	7,774	7,423	7,272	7,350	4,391	4,719
Scope 2 Indirect (Market-Based)	35,149	24,151	23,622	28,068	29,982	27,841
Scope 2 Indirect (Location-Based)	37,380	26,374	20,303	26,657	27,822	25,586
Gross Scope 1 and 2 (Market-Based)	42,923	31,574	30,894	35,418	34,373	32,560

The accompanying notes form an integral part of this GHG emissions statement.

Notes to the Statement of GHG Emissions

NOTE 1: THE COMPANY

ORGANIZATION

Northern Trust Corporation (the Corporation or Northern Trust) is a leading provider of wealth management, asset servicing, asset management and banking solutions to corporations, institutions, families and individuals. The Corporation is a financial holding company conducting business through various U.S. and non-U.S. subsidiaries, including The Northern Trust Company (the Bank). The Corporation was originally formed as a holding company for the Bank in 1971. The Corporation has a global presence with offices in 24 U.S. states and Washington, D.C. and across 22 locations in Canada, Europe, the Middle East and the Asia Pacific region.

BASIS OF PRESENTATION

The Statement of GHG Emissions has been prepared based on a calendar reporting year that is the same as Northern Trust's fiscal reporting period. The Corporation presents gross Scope 1, gross Scope 2 (location-based and market-based), and certain* Scope 3 emissions including: Category 1: Purchased Goods & Services (partial); Category 3: Fuel-and Energy-Related Activities (partial); Category 5: Waste Generated in Operations; Category 6: Business Travel (partial), Category 7: Employee Commuting. Emissions are reported on an absolute basis.

GHG emissions have been presented in accordance with the following (collectively referred to as the "GHG Protocol"):

- World Resources Institute (WRI), World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition.
- WRI/WBCSD GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard.

*Please refer to Table 6.

Scope 1 represents direct GHG emissions that occur from sources that are owned or controlled by the Corporation. Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the Corporation. Scope 3 includes certain indirect GHG emissions (not included in Scope 2) that occur in the value chain of the Corporation, including both upstream and downstream emissions. Upstream emissions are indirect GHG emissions related to purchased or acquired goods and services while downstream emissions are indirect GHG emissions related to sold goods and services.

NOTE 2: ESTIMATION UNCERTAINTIES

Emissions data included in the Statement of GHG Emissions are subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

NOTE 3: GHG REPORTING ORGANIZATIONAL BOUNDARIES

The Corporation presents its emissions under the operational control approach, accounting for emissions from operations over which it, or one of its subsidiaries, has the full authority to introduce and implement its operating policies.

OPERATIONAL BOUNDARIES

The operational boundary of this report includes leased and owned offices and data centers under operational control in all global regions within which the Corporation operates. This also includes employee activities such as business travel and employee commuting. For further detailed description of operational boundaries, refer to Table 2.

TABLE 2

Emissions Scope	Source Description	Emissions Source	Boundary Description
Scope 1	Scope 1 emissions are direct emissions from the combustion of fuel from sources inside the organizational boundary.	Natural gas (stationary combustion)	Boilers
		Diesel fuel (stationary combustion)	Generators
		Fleet vehicles (mobile combustion)	Company-leased vehicles
		Fugitive emissions (refrigerants)	Leaks from air conditioning and chillers
Scope 2	Scope 2 emissions are indirect emissions from the generation of acquired and consumed electricity occurring at sources outside of the organizational boundary as a consequence of activities from sources inside the organizational boundary.	Purchased electricity	Data centers, owned and leased office spaces
Scope 3	Scope 3 emissions are indirect emissions from the generation of fuel from sources outside the organizational boundary as a consequence of activities of the Corporation.	Category 1: Purchased goods & services	Production, transportation and distribution of water usage Exclusions: all other purchased goods, all purchased services, capital goods, any supply chain emissions beyond water procurement
		Category 3: Fuel-and-energy- related activities not included in Scope 1 or 2	Transmission and distribution losses from the generation of electricity Exclusions: upstream emissions from purchased electricity, upstream emissions from purchased fuels
		Category 5: Waste in operations	Disposal and treatment of municipal solid waste and recycling generated in offices
		Category 6: Business travel	Air, hotels, car rentals, rail and shuttle transportation of employees for business-related activities (Business travel in employee-owned vehicles is excluded)
		Category 7: Employee commuting	Motorcycle, car, bus, rail and ferry when employees commute between home and work sites. Emissions from employee teleworking (i.e., employees working remotely) is included

BASE YEAR

The GHG emissions base year applies to Scope 1, Scope 2 (location- and market-based) and reported Scope 3 emissions as set out above. In 2022, the Corporation reset its base year to 2019.

Per the GHG Protocol, the emissions base year is subject to recalculation should a significant change in total base year emissions be identified due to factors including, but not limited to, inorganic growth or a change in methodology. Northern Trust set a 5% cumulative Scope 1, Scope 2 (location- and market-based), and reported Scope 3 significance threshold for determining whether to adjust and/or recalculate its base year.

EMISSIONS BY GREENHOUSE GASES

GHG emissions in the Statement of GHG Emissions are presented in metric tons of CO₂e. The Corporation presents a breakdown of GHG emissions by carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and hydrofluorocarbons (HFCs), which are the relevant greenhouse gases for the Corporation. Perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃) emissions have been omitted as they are not relevant sources of greenhouse gases for the Corporation.

In 2022, the Corporation began reporting on fugitive (F-gas) emissions from refrigerant gases updating its baseline and subsequent years to include HFCs in MT of CO₂e. Fugitive emissions (refrigerants) is a required Scope 1 source of emissions; the Corporation previously did not disclose fugitive emissions from refrigerants as it was estimated to be immaterial.

In 2023, the Corporation updated its source of data for calculating fugitive emissions from refrigerants as follows:

- Offices: The refrigerant charge is estimated using intensity factors from the 2016 BRE Client Report for the Department of Energy and Climate Change.
- Data Centers: The actual installed refrigerant gas charge per square foot is used for calculations.

Prior periods were not revised as the change in estimated CO₂e per square foot under the updated methodology did not result in a material change in total emissions as per the significance threshold for recalculating the prior periods.

SCOPE 2 MARKET-BASED METHOD

Scope 2 market-based method is based on emission factors derived from contractual instruments, which meet the 'Scope 2 Quality Criteria'. These include supplier-specific emission factors and factors denoted through renewable energy certificates (RECs) and Power Purchase Agreements (PPAs) for sourcing of 100% renewable energy. When these factors are not available, residual mix factors from the 2024 Green E-Residual Mix Emission Rates and Association of Issuing Bodies (AIB) are applied to U.S. sites and European sites, respectively. This is with the exception of the U.S. state of Illinois which utilizes the 2024 average of the PJM Interconnection Residual Mix Rate.

Locations outside of the U.S. and Europe that do not have contractual instruments reflect the average emissions intensity of the grids on which energy consumption occurs.

SCOPE 2 LOCATION-BASED METHOD

Scope 2 location-based method uses the average carbon emissions intensity (kgCO₂e/kWh) of electricity grids on which electricity consumption physically occurs.

GLOBAL WARMING POTENTIALS

GHG emissions were calculated using the Global Warming Potentials (GWP) from the International Panel on Climate Change (IPCC) Sixth Assessment Report.

NOTE 4: GHG EMISSIONS BY REGION (MT CO₂E)

TABLE 3

FOR THE YEAR ENDED DECEMBER 31, 2024

	North America	Europe & Middle East	Asia Pacific	Total
Scope 1 Direct	2,954	924	841	4,719
Scope 2 Indirect (Market-Based)	22,617	194	5,030	27,841
Scope 2 Indirect (Location-Based)	13,775	1,525	10,286	25,586
Reported Scope 3	14,993	5,585	20,514	41,092
Total Scope 1, Scope 2 (Market-Based) and Reported Scope 3	40,564	6,703	26,385	73,652

NOTE 5: CO₂E INTENSITY

The Corporation has selected global employees as the basis for its GHG emissions intensity calculation. One employee represents an employee working a forty-hour work week as of December 31 for each year presented.

MT CO₂E PER EMPLOYEE

TABLE 4

FOR THE YEAR ENDED DECEMBER 31

	2019	2020	2021	2022	2023	2024
Scope 1 – per Employee	0.391	0.356	0.342	0.311	0.190	0.199
Scope 2 (Market-Based) - per Employee	1.775	1.158	1.112	1.189	1.298	1.172
Reported Scope 3 – per Employee	1.843	1.536	1.614	1.830	1.686	1.729
Total – per Employee	4.009	3.050	3.068	3.330	3.174	3.099
Total Employees	19,800	20,864	21,243	23,600	23,095	23,763

NOTE 6: GREENHOUSE GASES BY TYPE

TABLE 5

FOR THE YEAR ENDED DECEMBER 31, 2024					
	Carbon Dioxide (CO ₂)	Methane (CH ₄)	Nitrous Oxide (N ₂ O)	Hydrofluorocarbons (HFCs)	Total
Scope 1 Direct	2,096	3	7	2,613	4,719
Scope 2 Indirect (Market-Based)	27,721	37	83	0	27,841
Scope 2 Indirect (Location-Based)	25,430	44	112	0	25,586
Reported Scope 3	40,827	47	218	0	41,092
Total Scope 1, Scope 2 (Market-Based) and Reported Scope 3	70,644	87	308	2,613	73,652

NOTE 7: SCOPE 3 REPORTING (MT CO₂E)

TABLE 6

FOR THE YEAR ENDED DECEMBER 31, 2024						
Category	2019	2020	2021	2022	2023	2024
1 Purchased Goods & Services	258	138	121	46	45	44
2 Capital Goods						Relevant, not yet calculated
3 Fuel-and Energy-Related Activities (Not included in Scope 1 or 2)	3,381	2,416	1,936	2,061	2,574	2,288
4 Transportation & Distribution						Not relevant
5 Waste Generated in Operations	751	720	2,409	553	699	614
6 Business Travel	16,874	3,541	1,238	7,848	11,385	14,351
Business Travel – Air	11,056	2,198	642	5,408	5,715	8,228
Business Travel – Car Rental	484	168	122	162	201	326
Business Travel – Hotel Stays	1,235	229	96	437	605	706
Business Travel – Rail	– Relevant, not yet calculated –			6	4	5
Business Travel – Shuttle	4,099	946	378	1,835	4,860	5,086
7 Employee Commuting	15,232	25,242	28,574	32,677	24,239	23,795
8 Leased Assets						Not relevant
9 Transportation & Distribution						Not relevant
10 Processing of Sold Products						Not relevant
11 Use of Sold Products						Not relevant
12 End of Life						Not relevant
13 Leased Assets						Not relevant
14 Franchises						Not relevant
15 Investments						Relevant, not yet calculated
Total Reported Scope 3	36,496	32,057	34,278	43,185	38,942	41,092

NOTE 8: METHODOLOGY

TABLE 7

Emissions Scope	Methodology	Methodology Notes
1	Fuel-based and distance-based	<p>Fuel-based and distance-based Scope 1 encompasses stationary combustion emissions including natural gas and diesel, as well as mobile emissions from fleet vehicles, where the kilowatt of energy consumed is multiplied by a relevant emissions factor.</p> <p>Fugitive emissions from refrigeration and air conditioning are calculated utilizing the intensity factors from the 2016 BRE Client Report for the Department of Energy & Climate Change and the actual installed refrigerant gas per square foot for our offices and data centers, respectively. We have estimated CO2e per square foot based on average leakage rate from UK Government Streamlined Energy and Carbon Reporting (SECR) Environmental Reporting Guidance and multiplied it by total square feet of the Corporation's space. Refer to Note 3: GHG Reporting.</p>
2	N/A	<p>Location-based method based on actual and estimated purchased electricity consumption for all offices and data centers in the reporting boundary, where the kilowatt of energy consumed is multiplied by regional (state, province, or country-level) electricity grid emissions factor. When actual electricity data is unavailable, the Corporation estimates consumption based on the Real Estate Environmental Benchmark (REEB 2023) and Energy Star benchmark*.</p> <p>Market-based method based on estimated purchased electricity consumption (per location-based method) and grid emission factor associated renewable energy contracts in place for the offices and data centers in the reporting boundary, where the kilowatt of energy consumed is multiplied by a relevant emissions factor. Residual electrical energy that does not have the contractual agreement applied uses the residual mix emission factors where available (U.S. and Europe). 2019 – 2022 U.S. market-based electricity utilized Emissions & Generation Resource Integrated Database (eGRID), with the exception of the state of Illinois which utilized PJM. From 2023, U.S. market-based electricity utilizes Green-e Residual Mix Emissions Rates, except for Illinois. Locations outside of the U.S. and Europe use location-based emissions factors. Refer to Note 3: GHG Reporting, Scope 2 Market-Based Method.</p>

*This methodology was introduced in 2022 as a more precise way to estimate energy consumption in the absence of actual consumption data; previously energy consumption was estimated using a location-based square footage method. The change was not significant and GHG emissions for 2019 - 2021 were not recalculated.

Scope 3 Category		Methodology	Methodology Notes
Upstream Scope 3 Emissions	1	Purchased Goods & Services	Hybrid method
	3	Fuel- and Energy-Related Activities (Not included in Scope 1 or 2)	Average-data method
	5	Waste Generated in Operations	Average-data method
			Currently, this figure only reflects water purchased. Emission factors are applied to supplier specific activity data.
			The applicable category 3 activities are transmission and distribution losses. This involves the generation of electricity that is consumed (i.e., lost) in a transmission and distribution system.
			Every site in the portfolio has trash and recycling values associated with it and is included in the emissions calculation for waste, which means that even if no 'actual' waste data exists for the site, an estimate will be generated. Estimates are based on actual data which is extrapolated on a regional basis to create an average kg of waste/recycling per square foot per year.
			Actual data gathered from Facility Managers is uploaded to our data recording platforms.
			For municipal waste, a landfill emissions factor is assumed, unless notified otherwise.
			For recycling and food waste, the respective emissions factors are applied.
	6	Business Travel – Air	Distance-based method
		Business Travel – Car Rental	Distance-based method
		Business Travel – Hotel Stays	Average-data method
		Business Travel – Rail	Distance-based method
		Business Travel – Shuttle	Fuel-based method
	7	Employee Commuting	Hybrid method
			A third-party travel vendor supplies flight mileage data, along with an array of additional details such as origin and destination locations, haul length and fare class. In accordance with the GHG Protocol Transport Tool methodology, the variables are used to assign the applicable carbon factors from the Department for Environment, Food & Rural Affairs (DEFRA) - UK & International and the Environmental Protection Agency (EPA) - U.S., resulting in a breakdown of greenhouse gases (CO ₂ , CH ₄ , N ₂ O).
			Emission factors are applied to two third-party travel vendors who supply car rental mileage data.
			Methodology is based on number of hotel nights, multiplied by average gas consumption and electricity consumption. The number of hotel nights is provided by the Corporation's travel-vendor, however all other inputs to the calculation are based on assumptions. Hotel specific data, such as room size or how the room is heated or cooled is assumed from a U.S. EPA CHP hotel analysis paper from 2005 - EPA CHP (Environmental Protection Agency Combined Heat and Power) Partnership, "CHP in the Hotel and Casino Market Sectors." December 2005. Prepared by Energy and Environmental Analysis, Inc. Table 16.
			Emissions are calculated by applying emissions factors to distance or are provided by the Corporation's travel vendor.
			Shuttle bus services are provided in Chicago, Pune and Bangalore offices for commuting and inter-office travel for Northern Trust's employees. Fuel and mileage provided by third-party vendors.
			Employee commuting constitutes employee travelling from their home location to their office. Commuting mode of transport is provided by employee surveys, with commuting distances estimated. The number of days and employees commuting to their office location is provided through employee badge swipes.
			Employee teleworking constitutes Northern Trust partners working from home. The number of employees working from home is provided through total number of employees assigned to the office minus partner badge swipes. We have based workstation energy, lighting, percentage of occupied homes, heating and cooling from the Homeworking Emissions Whitepaper – Ecoact 2020. Number of working hours is based off U.S. holidays, Northern Trust annual leave and assumption of two sick days. The number of months a year that home heating or cooling is required is based off city specific climate data.
			Employee commuting and teleworking have been calculated at an office level and may include contractors on site.

NOTE 9: GHG EMISSION FACTORS

TABLE 8

Emissions Scope	Emissions Source	Emissions Factor
Scope 1	Natural gas	<ul style="list-style-type: none">• UK - DEFRA Conversion Factors 2024
	Diesel fuel	<ul style="list-style-type: none">• DEFRA Conversion Factors 2024• UK – Average Biofuel Blend• Non-UK – 100% Mineral Fuel (Due to lack of clarity around biofuel content)
	Fleet Vehicles	<ul style="list-style-type: none">• UK - DEFRA Conversion Factors 2024
	Fugitive emissions (refrigerants)	<ul style="list-style-type: none">• IPCC GWP 6th Assessment
Scope 2	Purchased electricity (market-based)	<ul style="list-style-type: none">• U.S. – Green-e Residual Mix Emissions Rates (2022 Data) released, 2024-12-20• Illinois, U.S. – PJM Interconnection Residual Mix Rate, 2024 Average• International – International Energy Agency (IEA) 2022 released 2024• United Kingdom & Guernsey – DEFRA Conversion Factors 2024• Residual Mix – Association of Issuing Bodies (AIB) European Residual Mixes 2024 - Version 1.0, 2025-05-30• IPCC GWP 6th Assessment (AR6) applied to eGRID CH4 and N2O• Renewable Electricity – Supplier Specific Carbon Factors

Emissions Scope	Emissions Source	Emissions Factor
Scope 2	Purchased electricity (location-based)	<ul style="list-style-type: none"> • U.S. – eGRID, 2023 State File released, 2025-01-17 • International – IEA 2022 released 2024 • United Kingdom & Guernsey – DEFRA Conversion Factors 2024 • IPCC GWP AR6 applied to eGRID CH4 and N2O
Reported Scope 3	Water (purchased)	<ul style="list-style-type: none"> • DEFRA Conversion Factors 2024
	Fuel-and-energy-related activities not included in Scope 1 or 2 (Transmission and Distribution (T&D) losses)	<ul style="list-style-type: none"> • International Energy Agency (IEA) 2022 released 2024 • eGRID, 2023 State File released, 2025-01-17 • DEFRA Conversion Factors 2024
	Waste	<ul style="list-style-type: none"> • DEFRA Conversion Factors 2024
	Business travel	Air
		<ul style="list-style-type: none"> • GHG Protocol Emissions Factors from Cross-Sector Tools (March 2017) • IPCC 2006 Guidelines for National Greenhouse Gas Inventories, (Tables 1-3 of the WRI GHG inventories) • UK & International - DEFRA Conversion Factors 2024 • U.S. – EPA 2024
		Car Rental
		<ul style="list-style-type: none"> • Table 14 from GHG Protocol Emissions Factors from Cross-Sector Tools (March 2017) • U.S. vehicles: U.S. EPA Emission Factors for Greenhouse Gas Inventories 2024 • IPCC GWP AR6 • GWP from AR6 applied to eGRID CH4 and N2O
		Hotels Stays
		<ul style="list-style-type: none"> • The Climate Registry's General Reporting Protocol, v1.1, May 2008, Table 12.1 • The Climate Registry's General Reporting Protocol, v1.1, May 2008, Table 12.3 • Source: GHG Protocol Emissions Factors from Cross-Sector Tools (March 2017) Table 9. US average converted to lb CO2/kWh
		Rail
		<ul style="list-style-type: none"> • UK – DEFRA Conversion Factors 2024 • U.S. – EPA 2024
		Shuttle
		<ul style="list-style-type: none"> • GHG Protocol Emissions Factors from Cross-Sector Tools (March 2017)
	Employee commuting	Teleworking
		<ul style="list-style-type: none"> • DEFRA Conversion Factors 2024
		Commuting
		<ul style="list-style-type: none"> • UK Government Travel Statistics • DEFRA Conversion Factors 2024