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## Independent Accountants' Review Report

The Board of Directors and Management  
Northern Trust Corporation:

We have reviewed the accompanying Statement of Greenhouse Gas (GHG) Emissions and notes (GHG Statement) of Northern Trust Corporation (the Corporation) for the year ended December 31, 2021. The Corporation's management is responsible for presenting the GHG Statement in accordance with the criteria of the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition, the WRI/WBCSD Greenhouse Gas Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard, and the WRI/WBCSD Greenhouse Gas Protocol: Corporate Value Chain (Scope 3), Accounting and Reporting Standard (collectively, the GHG Protocol). Our responsibility is to express a conclusion on the GHG Statement based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the review to obtain limited assurance about whether any material modifications should be made to the GHG Statement in order for it to be in accordance with the criteria. 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 GHG Statement is in accordance with the criteria, in all material respects, in order to express an opinion. Accordingly, we do not express such 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. We believe that the review evidence obtained is sufficient and appropriate to provide a reasonable basis for our conclusion.

We are required to be independent and to meet our other ethical responsibilities in accordance with relevant ethical requirements related to the engagement.

The procedures we performed were based on our professional judgment and consisted primarily of inquiries of management to obtain an understanding of the methodology applied, evaluation of the entity's application of the stated methodology for deriving the greenhouse gas emissions, recalculations of the greenhouse gas emissions for a selection of locations, and analytical procedures comparing changes in greenhouse gas emissions trends.

As described in Note 1, environmental and energy use data are subject to measurement uncertainties resulting from limitations inherent in the nature and methods of determining such data. Obtaining sufficient appropriate review evidence to support our conclusion does not reduce the inherent uncertainty in the data. The selection by management of different but acceptable measurement techniques could have resulted in materially different measurements. The precision of different measurement techniques may also vary.



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, 2021 in order for it to be in accordance with the GHG Protocol.

KPMG LLP

July 15, 2022

# Statement of Greenhouse Gas Emissions

For the year ended December 31, 2021



## CO<sub>2</sub>e Emissions Metric Tonnes [MT]

	2015	2018	2019	2020	2021
Scope 1 Direct	3,071	2,637	1,909	1,610	1,797
Scope 2 Indirect (Market-Based)	46,036	35,045	35,149	24,151	23,622
Gross Scope 1 and 2	49,107	37,682	37,058	25,761	25,419

## Notes to the Statement of Greenhouse Gas 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 23 U.S. states and Washington, D.C., and across 23 locations in Canada, Europe, the Middle East and the Asia Pacific region.

#### Basis of Presentation

The Statement of Greenhouse Gas (GHG) Emissions has been prepared based on a calendar reporting year that is the same as Northern Trust's financial reporting period. The Company elected to present Gross Scope 1 and 2 emissions, market based emissions per FTE and Scope 3 emissions for the base year of 2015 and other years including from 2018 - 2020 as additional information within this GHG Statement.

Scope 1 GHG emissions information has been prepared in accordance with the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition. Scope 1 represents direct GHG emissions that occur from sources that are owned or controlled by the Corporation.

Scope 2 GHG emissions information has been prepared in accordance with the WRI/WBCSD GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard. Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the Corporation.

# Notes to the Statement of Greenhouse Gas Emissions

For the year ended December 31, 2021



Scope 3 GHG emissions information has been prepared in accordance with the WRI/WBCSD Greenhouse Gas Protocol: Corporate Value Chain (Scope 3), Accounting and Reporting Standard. Scope 3 includes 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.

Collectively, the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition, the GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard and the GHG Protocol: Corporate Value Chain (Scope 3), Accounting and Reporting Standard are referred to as the “GHG Protocol” in this document.

## **Estimation Uncertainties**

Environmental and energy use 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.

Consumption is based on raw data when available. When raw data is unavailable, the Corporation estimates consumption based on a square foot extrapolation of the average consumption from the most comparable facilities.

## **NOTE 2: GHG REPORTING**

### **Organizational Boundaries**

The organizational boundary of this report includes leased and owned offices under operational control in all domestic and global regions within which the Corporation operates.

### **Base year**

The GHG base year applies to Scope 1, Scope 2, and Scope 3 emissions as set out above and has been prepared in accordance with the GHG reporting policies set out here. The Corporation has established 2015 as its base year.

Northern Trust set a 5% cumulative Scope 1, Scope 2, and Scope 3 significance threshold for determining whether to adjust and/or recalculate its base year based on error, omission, and change in boundary.

# Notes to the Statement of Greenhouse Gas Emissions

For the year ended December 31, 2021



## Greenhouse Gases

All GHG emissions figures are in metric tonnes of carbon dioxide equivalents (CO<sub>2</sub>e). In accordance with the GHG Protocol, the Corporation has included in its reporting carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>) emissions have been omitted as they are not material sources of greenhouse gases for the Corporation.

## GHG Emissions Factors

Emissions Scope	Emissions Source	Emissions Factor Employed
Scope 1	Natural gas Diesel fuel	Intergovernmental Panel on Climate Change – IPCC: Guidelines for National Greenhouse Gas Inventories (2006)
Scope 2	Purchased electricity	<p><b>United States</b> – EPA eGRID 2020 State File released, 2022-01-27</p> <p><b>International</b> – International Energy Agency (IEA) 2020 released 2020</p> <p><b>United Kingdom</b> – Department for Environment, Food &amp; Rural Affairs (DEFRA) Greenhouse Gas Reporting: Conversion Factors 2021</p> <p><b>Residual Mix</b> - Association of Issuing Bodies (AIB) European Residual Mixes 2020 - Version 1.1, 2021-05-31</p>
Scope 3	Business travel Employee commuting Fuel-and-energy-related activities not included in Scope 1 or 2 (T&D losses)	<p><b>Hotels</b> The Climate Registry's General Reporting Protocol, v1.1, May 2008, Table 12.1 Source: EPA CHP Partnership. "CHP in the Hotel and Casino Market Sectors." December 2005. Prepared by Energy and Environmental Analysis, Inc. Table 16. The Climate Registry's General Reporting Protocol, v1.1, May 2008, Table 12.3 Source: EPA CHP Partnership. "CHP in the Hotel and Casino Market Sectors." December 2005. Prepared by Energy and Environmental Analysis, Inc. Table ES-2. (note that kBtu of natural gas have been converted to therms by dividing by 100) Assumed 10 therms = 1 MMBtu and 1 MMBTU = 293 kWh Source: GHG Protocol Emissions Factors from Cross-Sector Tools (March 2017) Table 9. US average converted to lb CO<sub>2</sub>/kWh.</p> <p><b>Flights</b> GHG Protocol Emissions Factors from Cross-Sector Tools (March 2017) IPCC 2006 Guidelines for National Greenhouse Gas Inventories, <a href="http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol2.html">http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol2.html</a> (Tables 1-3 of the WRI GHG inventories) DEFRA conversion factors 2016</p> <p><b>Rental Cars</b> Table 14 from GHG Protocol Emissions Factors from Cross-Sector Tools (March 2017) U.S. vehicles: U.S. EPA Climate Leaders (updated May 2008)</p> <p><b>Shuttle vehicles</b> GHG Protocol Emissions Factors from Cross-Sector Tools (March 2017)</p> <p><b>Transmission and Distribution (T&amp;D) losses</b> IEA 2019 released 2021, T&amp;D losses adjustment file</p>

# Notes to the Statement of Greenhouse Gas Emissions

For the year ended December 31, 2021



## Market-Based Approach

Adjusted emissions factors due to residual mix for facilities in North America (excluding Illinois) and Asia Pacific are not available, which may result in double-counting between electricity consumers. Location-based factors were applied to these facilities.

Utility specific factors or residual mix factors were applied as available to facilities in Europe Middle East.

## Global Warming Potentials

GHG emissions were calculated using the Global Warming Potentials (GWP) from the International Panel on Climate Change (IPCC) Fifth Assessment Report for CO<sub>2</sub>, the IPCC Fourth Assessment Report for CH<sub>4</sub> and IPCC Third Assessment report for N<sub>2</sub>O.

## NOTE 3 - GHG EMISSIONS BY REGION (MT CO<sub>2</sub>e)

	North America	Europe Middle East	Asia Pacific	Total
Scope 1	1,334	392	71	1,797
Scope 2 Location – Based Approach	14,185	1,642	4,477	20,304
Scope 2 Market – Based Approach	18,937	208	4,477	23,622
Scope 3	2,230	263	707	3,200

# Notes to the Statement of Greenhouse Gas Emissions

For the year ended December 31, 2021



## NOTE 4 – CO<sub>2</sub>e INTENSITY

The Corporation has selected global full-time employees (FTE) as the basis for its intensity calculation. One FTE represents an employee working a forty-hour work week.

In 2017, the Corporation reset a goal to reduce total Scope 1, Scope 2 (using the Market-Based Approach), and Scope 3 carbon emissions by 25% by 2020 compared to the 2015 base year. In 2020, the Corporation exceeded that goal, reducing emissions by 64% per FTE compared to the base year. In 2021, carbon emissions were reduced by 69% per FTE compared to the base year.

### MARKET BASED: MT CO<sub>2</sub>e PER FTE

	2015	2018	2019	2020	2021
Scope 1 – per FTE	0.190	0.141	0.096	0.077	0.085
Scope 2 – per FTE	2.850	1.873	1.775	1.158	1.112
Scope 3 – per FTE	1.242	1.030	1.025	0.286	0.151
Total – per FTE	4.282	3.044	2.897	1.521	1.348
Total Full Time Employees	16,152	18,716	19,800	20,864	21,243

# Notes to the Statement of Greenhouse Gas Emissions

For the year ended December 31, 2021



## NOTE 5 - GHG EMISSIONS BY TYPE

	Carbon Dioxide (CO <sub>2</sub> )	Methane (CH <sub>4</sub> )	Nitrous Oxide (N <sub>2</sub> O)	Total
<b>Scope 1</b>	1,792	4	1	1,797
<b>Scope 2 Location-Based Approach</b>	20,180	43	80	20,303
<b>Scope 2 Market-Based Approach</b>	23,498	43	80	23,621
<b>Scope 3</b>	3,182	7	11	3,200



# Notes to the Statement of Greenhouse Gas Emissions

For the year ended December 31, 2021



## Note 6 – Scope 3 Reporting

Scope 3 Category		2015	2018	2019	2020	2021	Note
Upstream Scope 3 Emissions	1 Purchased Goods & Services	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Northern Trust is working with a number of suppliers to calculate this data, but has not made significant enough progress to report figures.
	2 Capital Goods	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Northern Trust is working with a number of suppliers to calculate this data, but has not made significant enough progress to report figures.
	3 Fuel- and Energy-Related Activities (not included in Scope 1 or 2)	4,390	3,211	3,397	2,419	1,963	The fuel-and-energy-related activities that are tracked for Scope 3 are the transmission and distribution line losses. T&D losses are calculated using the T&D emissions factors from IEA.
	4 Transportation & Distribution	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Northern Trust does not produce physical products.
	5 Waste Generated in Operations	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Northern Trust does not have manufacturing facilities. The waste generated in operations consists mainly of municipal solid waste generated in its offices.
	6 Business Travel - Total	11,097	11,904	12,798	2,595	859	Business Travel emissions are based on vendor-reported travel type and distance.
	Business travel - Air	9,292	10,206	11,056	2,198	642	
	Business travel - Car Rental	968	545	472	168	122	
	Business travel – Hotel Stays	837	1,153	1,270	229	95	
	Business travel – Rail	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Data for rail travel is not available at this time. Northern Trust continues to work with the vendor to address the availability of this information.
	7 Employee Commuting	4,567	4,166	4,099	946	378	Shuttle bus services are provided in Chicago and Bangalore offices. Fuel and mileage provided by third party vendor.
	8 Leased Assets	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Scope 3 emissions from the operation of leased assets are already accounted for in scope 2 emissions as they are under Northern Trust's operational control.

# Notes to the Statement of Greenhouse Gas Emissions

For the year ended December 31, 2021



## Note 6 – Scope 3 Reporting (continued)

Scope 3 Category		2015	2018	2019	2020	2021	Note
Downstream Scope 3 Emissions	<b>9</b> Transportation & Distribution	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Northern Trust does not produce physical products.
	<b>10</b> Processing of Sold Products	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Northern Trust does not produce physical products.
	<b>11</b> Use of Sold Products	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Northern Trust does not produce physical products.
	<b>12</b> End-of-Life Treatment of Sold Products	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Northern Trust does not produce physical products.
	<b>13</b> Leased Assets	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Northern Trust does not lease physical assets to third parties.
	<b>14</b> Franchises	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Northern Trust does not have franchises.
	<b>15</b> Investments	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Relevant, not yet calculated	Northern Trust is in the process of calculating this data, but has not made significant enough progress to report figures.
Total Calculated Scope 3 Emissions		20,054	19,281	20,294	5,960	3,200	