

**2024 Greenhouse Gas Reporting Methodology**



# DFIN Greenhouse Gas Reporting Methodology

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# Introduction

In 2024 Donnelley Financial Solutions (“DFIN”) began to calculate and report its greenhouse gas (GHG) emissions inventory in accordance with the following guidance documents published by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD):

- The GHG Protocol: *A Corporate Accounting and Reporting Standard (Revised Edition)*<sup>1</sup>
- The GHG Protocol: *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*<sup>2</sup>
- The GHG Protocol: *GHG Protocol Scope 2 Guidance*<sup>3</sup>
- The GHG Protocol: *Technical Guidance for Calculating Scope 3 Emissions (version 1.0)*<sup>4</sup>

The GHG Protocol (“Protocol”) is the most widely used and globally recognized GHG emissions accounting standard for private and public sector organizations, providing generally accepted accounting practices for measuring and reporting corporate GHG emissions. The Protocol is used to quantify, manage, and understand GHG emissions and serves as the foundation for many other reputable GHG standards and programs, including the International Standards Organization (ISO), the Climate Registry and other climate standards.

The Protocol is based on the following overarching principles derived from generally accepted financial accounting and reporting principles. DFIN applies these five principles to provide the framework to support a true and fair account of its GHG emissions.

- **Relevance** — The GHG inventory should appropriately reflect the emissions of the

company and serve the decision-making needs of internal and external stakeholders.

- **Completeness** — The GHG inventory should account for and report on all GHG emissions sources and activities within the chosen boundary, and specific exclusions should be disclosed and justified.
- **Consistency** — The GHG inventory should use consistent methodologies to allow for meaningful comparisons of emissions over time; and changes to data, inventory boundary, methods or other relevant factors should be transparently documented.
- **Transparency** — The GHG inventory documentation should address relevant issues in a factual and coherent manner based on a clear audit trail, disclose assumptions, and appropriately reference the accounting and calculation methodologies as well as data sources utilized.
- **Accuracy** — The GHG emissions quantification should neither be systematically over nor under actual emissions (as far as can be judged), uncertainties should be reduced as far as possible, and sufficient accuracy should be achieved to enable users to make decisions with reasonable assurance as to the integrity of the reporting information.

DFIN selected calendar year 2023 for its GHG inventory base year. Prior to 2023, the company estimated its Scope 1 and Scope 2 emissions only from its manufacturing operations using the US EPA Simplified GHG Emissions Calculator, a tool that aids low- emitting organizations in estimating their annual GHG emissions.

A detailed methodology for the company’s GHG reporting across three scopes is presented in this document.

<sup>1</sup> GHG Protocol | Corporate Standard

<sup>2</sup> GHG Protocol | Corporate Value Chain (Scope 3 Standard)

<sup>3</sup> GHG Protocol | Scope 2 Guidance

<sup>4</sup> GHG Protocol | Scope 3 Calculation Guidance

# Organizational Boundary

An organizational boundary is defined by an organization’s chosen approach to consolidating its GHG emissions for accounting and reporting. DFIN has chosen the Operational Control approach, which includes operations for which DFIN has the full authority to introduce and implement its operating policies. This approach was chosen for the following key reasons:

- Operational control allows for a clear delineation of responsibility. Under this approach, DFIN accounts for 100% of emissions from operations over which it has operational control.
- This approach aligns with the needs of key stakeholders. Many climate-related inquiries and regulatory requirements are primarily directed at the operators of the facilities or units that produce GHG emissions.
- The operational control approach is adaptable. It accommodates changes in company operations.
- Accounting for all emission sources under DFIN’s operational control enables clear prioritization of emissions reduction opportunities.
- An inventory boundary based on operational control streamlines data collection by limiting the focus to GHG emissions data that DFIN controls and has ready access to or can readily be estimated with the appropriate assumptions.

# GHG Inventory Procedures

In line with the Protocol, DFIN’s GHG inventory accounts for applicable emissions of the following seven internationally recognized GHGs regulated under the Kyoto Protocol and subsequent international climate change agreements:

- Carbon Dioxide (CO<sub>2</sub>)

- Methane (CH<sub>4</sub>)
- Nitrous Oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF<sub>6</sub>)
- Nitrogen trifluoride (NF<sub>3</sub>)

Due to the nature of company operations, only four GHGs are applicable: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs. DFIN’s current operations do not create any biogenic emissions. Biogenic emissions are those that result from combusting materials of biogenic origin (meaning that it was recently contained in living organic matter) such as wood, crops, vegetable oils, or animal fats.

DFIN uses activity data and emission factors to quantitatively estimate GHG emissions associated with its operations. The conventional units for reporting GHG emissions are metric tons (MT) of CO<sub>2</sub> equivalent (MT CO<sub>2</sub>e), calculated by multiplying the mass of emissions by the appropriate global warming potentials (GWPs), as shown in the following equation:

$$CO_2e_{MT} = [CO_{2MT} \times GWP_{CO_2}] + [CH_{4MT} \times GWP_{CH_4}] + [N_2O_{MT} \times GWP_{N_2O}]$$

In accordance with the Protocol, it is best practice to “use GWP values from the most recent Intergovernmental Panel on Climate Change (IPCC) Assessment Report, but entities may choose to use other IPCC Assessment Reports.”<sup>5</sup> Table 1 summarizes the GWPs DFIN applies to estimate GHG emissions on a CO<sub>2</sub>e basis, sourced from the IPCC’s latest Sixth Assessment Report (AR6-100 year).

Table 1. Global Warming Potentials

Greenhouse Gas	GWP
CO <sub>2</sub>	1
CH <sub>4</sub>	29.8
N <sub>2</sub> O	273
HFCs	various

DFIN’s GHG emissions are calculated using company-specific activity data multiplied by published GHG emission factors. Emissions of each GHG (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs when released) are calculated separately and then converted to CO<sub>2</sub>e based on their respective GWPs. GHG emissions are estimated and reported in units of MT CO<sub>2</sub>e for a consistent comparative analysis.

The company’s annual emissions are calculated using a separate custom Excel GHG calculation workbook, which adheres to accounting standards and calculation methodology aligned with the GHG Protocol. Each year, the most recent emission factors for use in the GHG calculations are obtained from published reputable sources such as the following:

- Scope 1 and Scope 3: USEPA’s Center for Corporate Climate Leadership, GHG Emission Factors Hub, Emission Factors for Greenhouse Gas Inventories.
- Scope 2, location-based for United States locations: USEPA’s Emissions & Generation Resource Integrated Database (eGRID) Annual Subregion Total Output Emission Rates.
- Scope 2, market-based for United States locations: Green-e’s annual Residual Mix Emissions; and
- Scope 2, location-based for other countries: Carbon Footprint’s International Electricity Factors

## Scope 1 Sources

Scope 1 GHG emissions are direct emissions from sources controlled by DFIN. Table 2 lists the Scope 1 emission sources operationally controlled by DFIN.

The following sub-sections summarize inventory calculation procedures for Scope 1 sources.

### Stationary – Natural Gas Usage

#### Activity Data Compilation

DFIN natural gas emissions are calculated based on consumption of natural gas among all facilities over

<sup>6</sup> CBECS Data | EIA  
<sup>7</sup> GHG Emission Factors Hub | EPA

which DFIN has operational control. Where available, DFIN collects annual natural gas consumption data from vendor invoices. For facilities that do not have consumption data available, building square footage and estimated energy intensities per square foot are used to calculate an estimated annual natural gas consumption in British Thermal Units (Btu):

**Table 2. Summary of DFIN Scope 1 GHG Emission Sources**

Emission Source Type	Fuel or Substance	Activity Details	GHGs Emitted
Stationary	Natural Gas	Space Heating	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O
Stationary	Distillate Fuel Oil No. 2 (Diesel)	Generators and fire pumps	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O
Mobile (On-road)	Gasoline	Light-duty company cars	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O
Mobile (Off-road)	Liquefied Petroleum Gases (LPG)	Powered Industrial Vehicle (PIV)	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O
Stationary; fugitive emissions	Refrigerants	Chillers, air dryers, A/C units, water coolers and ice machines	Various HFCs

<sup>5</sup> GHG Protocol, Required Greenhouse Gases in Inventories. Accounting and Reporting Standard Amendment (February 2013)

$$Facility\ Square\ Footage * \frac{Btu}{square\ foot} = Estimated\ Btu\ of\ Electricity\ Consumption$$

Btu per square foot values for various facility types can be found using Table E7 of United States (US) Energy Information Administration’s (EIA) 2018 *Commercial Buildings Energy Consumption Survey* (CBECS).<sup>6</sup> Once estimated consumption has been calculated, the GHG calculation steps discussed below are taken.

### GHG Calculation Procedures and Methodologies

Emission factors by fuel type are sourced from USEPA’s *Emission Factors for Greenhouse Gas Inventories*.<sup>7</sup> The following equation is used to calculate kg of CO<sub>2</sub> emitted from DFIN’s natural gas consumption:

$$Natural\ Gas\ Usage\ (MMBtu) * \frac{kg\ CO_2}{MMBtu} = kg\ CO_2\ from\ Natural\ Gas\ Consumption$$

The following equation is used to calculate kg of CH<sub>4</sub> and N<sub>2</sub>O from natural gas consumption:

$$Natural\ Gas\ Usage\ (MMBtu) * \frac{g\ CH_4\ or\ N_2O}{MMBtu} = g\ CH_4\ or\ N_2O\ from\ Natural\ Gas\ Consumption$$

The results of these equations are converted to MT, then multiplied by their GWPs to calculate total MT CO<sub>2</sub>e.

Stationary Sources – Emergency Equipment

Activity Data Compilation

Distillate fuel oil No. 2, also known as diesel, is used in some DFIN stationary emergency equipment. Currently, the company’s manufacturing facility in Lancaster, PA is the only one with such equipment. The fuel consumption for DFIN-operated emergency equipment (e.g., generators and fire pumps) is calculated based on annual operating hours from equipment meters. Gallons per hour factors based on the power rating of the generator and an assumed 100% load are multiplied by annual operating hours to estimate fuel usage.

GHG Calculation Procedures and Methodologies

Emission factors by fuel type are sourced from USEPA’s *Emission Factors for Greenhouse Gas Inventories*.<sup>8</sup> The following equations are then used to calculate GHG emissions from fuel consumption in stationary sources:

Fuel Purchased (gallons) \*  $\frac{\text{kg CO}_2}{\text{gallon}}$  = kg CO<sub>2</sub> from Fuel Consumption

Fuel Purchased (gallons) \*  $\frac{\text{g CH}_4 \text{ or N}_2\text{O}}{\text{gallon}}$  = g CH<sub>4</sub> or N<sub>2</sub>O from Fuel Consumption

The results of these equations are converted from kg or g to MT, then multiplied by their GWPs to calculate CO<sub>2</sub>e.

Mobile (On-Road)

Activity Data Compilation

DFIN manually collects mileage data for on-road fleet vehicles from annual vehicle inspection documents. Fuel usage in gallons is calculated using an average miles per gallon (MPG) based on the year, manufacturer, make and model of the vehicle.

<sup>8</sup> GHG Emission Factors Hub | EPA

GHG Calculation Procedures and Methodologies

Emission factors from USEPA’s *Emission Factors for Greenhouse Gas Inventories* are used based on fuel type and on-road vehicle type.<sup>15</sup> Vehicle type is determined by the following guidance:

- Passenger Cars: Vehicles used primarily to transport 12 people or less.
- Light Duty Trucks/Vehicles: Vehicles used primarily to transport lightweight cargo or equipped with specific features such as four-wheel drive. In the U.S., this category also includes many vehicles that primarily transport passengers such as sport utility vehicles (SUVs) and minivans. The gross vehicle weight rating (GVWR) for light duty trucks/vehicles normally ranges around 8,500 pounds or less. GVWR is the maximum weight a vehicle is designed to carry, including passengers, fuel, cargo, and any other additions to the vehicle.
- Medium/Heavy Duty Trucks/Vehicles: Vehicles with GVWR of more than 8,500 pounds. For example, single unit trucks and combination trucks including tractor-trailers and box trucks used for freight transportation.

Based on the nature of the on-road vehicle currently operated at DFIN’s Lancaster, PA facility, it is categorized as a light duty vehicle that runs on gasoline. The following equations are used to calculate kg of GHG emissions from on-road vehicles:

Annual Fuel Usage (gallons) \*  $\frac{\text{kg CO}_2}{\text{gallon}}$  = kg CO<sub>2</sub> from Mobile Fuel Combustion

Annual Fuel Usage (gallons) \*  $\frac{\text{g CH}_4 \text{ or N}_2\text{O}}{\text{gallon}}$  = g CH<sub>4</sub> or N<sub>2</sub>O from Mobile Fuel Combustion

The results of these equations are converted to MT, then multiplied by their GWPs to calculate total MT CO<sub>2</sub>e.

## Mobile (Off-Road)

### Activity Data Compilation

DFIN also consumes fuel, currently liquid petroleum gas (LPG), for use in off-road vehicles and equipment. Currently, such equipment is only operated at DFIN's Lancaster, PA facility. Fuel consumption amounts for off-road vehicles are obtained from fuel invoices.

### GHG Calculation Procedures and Methodologies

Emission factors from USEPA's *Emission Factors for Greenhouse Gas Inventories* are used based on fuel type and off-road vehicle type.<sup>15</sup> Based on the nature of DFIN's currently operated off-road equipment, all of the vehicles are categorized as 'industrial/commercial vehicles'.

The following equations are used to calculate GHG emissions from on-road vehicles:

$$\text{Fuel Purchased (gallons)} * \frac{\text{kg CO}_2}{\text{gallon}} = \text{kg CO}_2 \text{ from Fuel Consumption}$$

$$\text{Fuel Purchased (gallons)} * \frac{\text{g CH}_4 \text{ or N}_2\text{O}}{\text{gallon}} = \text{g CH}_4 \text{ or N}_2\text{O from Fuel Consumption}$$

The results of these equations are converted from kg or g to MT, then multiplied by the respective GWPs to calculate MT CO<sub>2</sub>e.

## Refrigerants

DFIN operates equipment utilizing refrigerants (currently only at DFIN's Lancaster, PA facility), which have the potential for fugitive HFC emissions if a refrigerant leak occurs. There were no known refrigerant leaks from DFIN-controlled sources in 2023 or 2024. In the unlikely circumstance that a release occurs in the future, DFIN will obtain leak amount data and type of refrigerant from the incident or maintenance report. This mass can then be converted to MT CO<sub>2</sub>e using the appropriate unit conversions and respective GWPs found in USEPA's *Emission Factors for Greenhouse Gas Inventories* Table 11.<sup>15</sup>

<sup>9</sup> CBECS Data | EIA

<sup>10</sup> Utility-specific emissions factors can be found online in documents such as sustainability reports or by reaching out directly to utilities.

<sup>11</sup> Residual Mix Factors: emissions from unclaimed energy on the grid after energy certificate sales have been removed.

## Scope 2 Sources

### Purchased Electricity

#### Activity Data Compilation

Scope 2 emissions are from electricity that is purchased by the company and used at facilities owned or leased by DFIN. Where available, annual electricity consumption amounts are collected from vendor invoices. For facilities with no invoices available, annual consumption is estimated using square footage and average electricity intensity (kWh per square foot) values sourced from Table E6 of US EIA's 2018 CBECS, similarly to the approach taken for natural gas consumption estimations.<sup>9</sup> The following equation is used to estimate electricity consumption (kWh):

$$\text{Square Footage} * \frac{\text{kWh}}{\text{square foot}} = \text{Estimated kWh of Electricity Consumption}$$

### GHG Calculation Procedures and Methodologies

Electricity GHG emissions factors reflect the average GHG intensity per kWh of electricity for the given region or electricity provider. In line with the GHG Protocol, Scope 2 emissions from purchased electricity are reported two ways (also termed "dual reporting"), using both the location-based method and the market-based method.

- **Location-based:** GHG emissions are calculated using national or regional grid average emission factors, from sources such as from USEPA's Emissions & Generation Resource Integrated Database (eGRID).
- **Market-based:** GHG emissions are calculated using emission factors specific to the particular supplier and/or 'contractual instruments,' which include any type of contract between two parties for the sale and purchase of energy.<sup>10</sup> If electric utility-specific emission factors are not available, other options, such as residual mix factors,<sup>11</sup> are acceptable for market-based calculations.



Both methods use the total kWh of electricity consumed by DFIN in the reporting year and then apply location-based or market-based emission factors to this activity input to derive the respective GHG emissions totals.

- **Location-based:** Emission factors for DFIN facilities located within the US are sourced from eGRID.<sup>12</sup>
- **Market-based:** For facilities within the US, DFIN uses utility-specific emission factors where available and residual mix factors from Green-e’s Annual Residual Mix Emissions.<sup>13</sup> For facilities outside of the US, DFIN uses emission factors from various countries and sources that are aggregated by Carbon Footprint’s International Electricity Factors.<sup>14</sup> For countries where a residual fuel mix factor is not available, DFIN uses the national grid average emission factor for both location-based and market-based Scope 2 calculations, as

allowable by the GHG Protocol when no other market-based factors are available.

Using the appropriate emission factor for calculation methodology and region, the following equation is used to calculate emissions:

$$\text{Electricity Usage (MWh)} * \text{Emission Factor} \left( \frac{\text{lbs or kg}}{\text{MWh}} \right) = \text{lbs or kg CO}_2 \text{ from Electricity Consumption}$$

The results of these equations are converted from pounds (lb.) or kg to MT, then multiplied by their GWPs to calculate total MT CO<sub>2</sub>e.

Scope 3 Sources

DFIN has identified applicable Scope 3 emission categories and developed initial calculation methodologies for categories with available data. Table 3 summarizes all 15 Scope 3 categories, and DFIN’s associated activities. Scope 3 categories 8, 9, 10, 12, 13, 14, and 15 are not applicable to company operations.

Table 3. Summary of DFIN Scope 3 GHG Emission Sources

Scope 3 Emissions Category		Applicability to DFIN
Upstream Categories - related to goods and services that DFIN purchases		
1	Purchased goods and services	Applicable – goods and services purchased during the reporting year by DFIN.
2	Capital goods	Applicable – for any capital expenditures during the reporting year by DFIN.
3	Fuel and energy related activities (not included in scope 1 or 2)	Applicable – all fuels used in DFIN stationary or mobile sources (i.e., building natural gas consumption, fleet diesel or gasoline) as well as electricity purchased by DFIN.
4	Upstream transportation and distribution	Applicable – any transportation and distribution services that DFIN pays.
5	Waste generated in operations	Applicable – waste generated by DFIN operations.
6	Business travel	Applicable – business-related travel by DFIN personnel
7	Employee commuting	Applicable – DFIN employees commuting to offices.
8	Upstream leased assets	Not applicable – DFIN uses the operational control GHG inventory approach, energy usage from assets leased by DFIN is included in DFIN’s Scope 1 and 2 inventory.

<sup>12</sup> eGRID 2022 | EPA  
<sup>13</sup> Green-e® Residual Mix Emissions Rate Tables | Green-e  
<sup>14</sup> carbonfootprint.com - International Electricity Factors



#### Downstream Categories - related to goods and services that DFIN sells or distributes

9	Downstream transportation and distribution	Not applicable – DFIN customers do not directly pay for the transportation and distribution of services or products.
10	Processing of sold products	Not applicable – These activities can be captured in Scope 3 category 1 <i>Purchased goods and services</i> if DFIN products are physically produced / printed by third-party vendors, in facilities not owned or operated by the company.
11	Use of sold products	Applicable – energy consumption for use of DFIN software at customer locations, on customer servers.
12	End-of-life treatment of sold products	Not applicable. Most customers prefer the electronic versions of DFIN’s financial products, and this trend is expected to increase going forward.
13	Downstream leased assets	Not applicable – DFIN does not lease out any vehicles or facilities to other entities.
14	Franchises	Not applicable – DFIN does not operate from a franchise model.
15	Investments	Not applicable – DFIN does not have any of the types of investments that the GHG Protocol specifies for the minimum reporting boundary of this category.

### Category 1: Purchased Goods and Services

The purchased goods and services (“PG&S”) Scope 3 category accounts for emissions from upstream activities (extraction, production, and transportation) of goods and services purchased or acquired in the reporting year. Note that the transportation component of a PG&S commodity emission factor is for transportation of materials to *DFIN suppliers*, which is distinct from the transportation of goods *from suppliers to DFIN*. Transportation emissions from a supplier to a company’s facilities is typically accounted for in category 4. Where shipping expenditures for goods shipped to DFIN are included in the price of the good, these expenditures are included in category 1, which provides completeness and avoids double counting. Because DFIN uses the same spend-based emission factor source (USEPA) for categories 1 and 4, the Scope 3 emissions total is not affected by which category includes the transportation emissions.

DFIN currently calculates Scope 3 category 1 and 2 emissions using the spend-based method, other than for cloud services. The cloud-related Scope 3 emissions are provided directly from the vendor and included in DFIN’s inventory. The expenditure amounts for cloud services are then subtracted from the “IT - Data Center / Cloud Services” line

item of DFIN’s annual expenditure summary, so that the remainder can be calculated using the spend-based methodology and no double counting occurs.

The spend-based method utilizes DFIN expenditures, and an emission factor associated with specific spending categories. DFIN expenditure data summaries, divided into company specific categories, are reorganized to align with spend categories as outlined in the most recent available versions of *USEPA’s Supply Chain GHG Emission Factors for US Commodities and Industries*.<sup>15</sup> This reorganization simply means that each DFIN expenditure category is assigned to the most appropriate USEPA commodity category, and the associated emission factor is then used for that expenditure type. Those commodity emission factors from USEPA’s most recent publication (V1.1) are in units of kilograms CO<sub>2</sub>e per US dollar in 2018. These factors are therefore adjusted for inflation to the current reporting year before multiplying by DFIN spend amounts, to obtain total GHG emissions in MT CO<sub>2</sub>e.

### Category 2: Capital Goods

Category 2 accounts for emissions from upstream activities (extraction, production, and transportation) of capital goods purchased or

<sup>15</sup> Supply Chain GHG Emission Factors for US Commodities and Industries v1.1

acquired in the reporting year. Capital goods include one-off purchases of goods with an extended life. DFIN calculates these emissions using the spend-based method as detailed above for Category 1 (PG&S). To prevent double counting, each DFIN expenditure category is assigned to PG&S or Capital Goods, and each expenditure is only counted once in the Scope 3 calculations.

### **Category 3: Fuel- and Energy-Related Activities**

Category 3 emissions are those associated with the upstream production of energy purchased and consumed in the reporting year. These calculations do not include emissions from DFIN's consumption of electricity and combustion of fuels, as those emissions are accounted for in Scope 1 and 2. However, the consumption data collected for Scope 1 and 2 data are used as inputs for the Scope 3 calculations as well. Total amounts of electricity and fuels (i.e., natural gas, propane, LPG, and diesel) consumed by DFIN during the reporting year are multiplied by upstream emission factors sourced from United Kingdom's Greenhouse Gas Reporting Conversion Factors to represent emissions from production and extraction of fuels.

Category 3 also includes emissions associated with electricity lost during transmission and distribution (T&D). A US average grid loss factor from USEPA's eGRID is used to calculate total kWh of electricity lost during transmission and distribution. Those kWh of T&D loss are multiplied by both:

- An upstream emissions factor to account for production of electricity as detailed above, and
- An emission factor for consumption of that electricity (as detailed in Section 4.2 for DFIN's electricity use).

The reason that T&D loss calculations account for emissions associated with electricity consumption as well as production is that the T&D losses

represent kWh that are not consumed by DFIN. Therefore, those kWh lost to T&D are not included in DFIN's Scope 2 inventory. In contrast, the kWh of electricity used by DFIN are included in DFIN's Scope 2 inventory. Therefore, the Scope 3 calculations for that DFIN electricity consumption only accounts for the upstream emissions associated with production of that electricity.

### **Category 4: Upstream Transport and Distribution**

The upstream transportation and distribution Scope 3 category is intended to include all transportation and distribution services paid for by a company calculating its Scope 3 emissions (such as DFIN), whether for transportation of goods to DFIN facilities, or transportation of DFIN products to clients.

DFIN's upstream transportation and distribution Scope 3 calculations account for emissions resulting from shipments to clients, for example freight, shipping, and postage. DFIN calculates these emissions using the spend-based method as detailed in category 1 (PG&S). For shipments of goods to DFIN, shipping expenditures are included in the price of the good as noted earlier.

Transportation of DFIN personnel is not included in category 4, but rather in category 6 (Business Travel).

### **Category 5: Waste Generated in Operations**

This Scope 3 category accounts for emissions from third-party disposal and treatment of waste generated in DFIN-controlled operations in the reporting year. Emissions are calculated based on total amounts of waste sent to a given disposal route (landfill disposal, recycling, etc.). Total amounts in weight are multiplied by emission factors specific to waste disposal route (currently mixed municipal solid waste [MSW] for landfilled waste) from Table 9 of EPA's GHG Emission Factors Hub.

## Category 6: Business Travel

This Scope 3 category represents transportation of employees for business-related activities during the reporting year, including emissions from air travel and road travel in vehicles not owned or operated by DFIN. DFIN does not have any rail or water business travel-related activities. DFIN calculates these business travel emissions using the spend-based method as detailed in category 1 (PG&S).

## Category 7: Employee Commuting

This Scope 3 category represents DFIN employee commuting, accounting for emissions from transportation of employees between their homes and their worksites during the reporting year, in vehicles not owned or operated by DFIN. Emissions are calculated based on an estimated number of employees commuting to DFIN locations. These calculations are based on the following 2024 assumptions:

- China and Singapore locations: employees commute to the office 5 days per week.
- All other international sites: employees work from home full-time.
- Lancaster, PA, US: employees commute to the site 7 days per week.
- Chicago, IL, US: only one person commutes to the office 5 days per week, other employees mostly work from home but go in occasionally. This assumption will no longer be relevant beginning January 1, 2025, as that office will be closed.

- For all other North America locations: employees work from home full-time.

Commute distances are estimated specific to each country or city and are multiplied by emission factors for GHGs per mile traveled for passenger vehicles from Table 10 of EPA's GHG Emission Factors Hub.

## Category 11: Use of Sold Products

These emissions are a result of energy consumption associated with DFIN software products used at customer locations, on customer servers. Emissions are estimated using DFIN's annual software usage data. Total usage of software in minutes is based on number of user sessions and average duration of session by country. Associated energy consumption is then calculated with an assumed 70-watt power draw from customer computers and an estimated 50% central processing unit (CPU) utilization. These parameters have been chosen to calculate a conservative estimate. DFIN software products likely utilize less than 50% of a computer's CPU, as customer computers likely utilize many more programs, and because DFIN software is likely idle for a portion of the usage time.

Energy consumption amounts in units of kWh for each country and each software product are converted to MT CO<sub>2</sub>e using location-based electricity emission factors, similar to the procedures noted in section 4.2 of this IMP as used in Scope 2 emissions calculations for DFIN's own electricity consumption.