Closing the Logistics Emissions Disclosure Gap

An analysis of emissions disclosure to CDP by corporations worldwide

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About Smart Freight Centre
Smart Freight Centre (SFC) is a global non-profit organization dedicated to an efficient and zero emissions freight sector. We cover all freight and only freight. SFC works with the Global Logistics Emissions Council (GLEC) and other stakeholders to drive transparency and industry action – contributing to Paris Climate Agreement targets and Sustainable Development Goals.

Our role is to guide companies on their journey to zero emissions logistics, advocate for supportive policy and programs, and raise awareness. Our goal is that 100+ multinations reduce at least 30% of their logistics emissions by 2030 compared to 2015 and reach net-zero emissions by 2050.

Visit www.smartfreightcentre.org
Or follow us on LinkedIn to find out more.

About CDP
CDP is an international non-profit that drives companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests. Voted number one climate research provider by investors and working with institutional investors with assets of US$106 trillion, and 150+ purchasers with over US$4 trillion in procurement spend, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts. Over 8,400 companies with over 50% of global market capitalization disclosed environmental data through CDP in 2019. This is in addition to the over 920 cities, states and regions who disclosed, making CDP’s platform one of the richest sources of information globally on how companies and governments are driving environmental change. CDP is a founding member of the We Mean Business Coalition.

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Summary

Progress to decarbonize our freight transportation networks needs to accelerate if we are to meet our global climate goals. Smart Freight Centre and CDP believe that transparency on carbon emissions is key to achieving these goals. CDP disclosure can be used to inform corporate climate goals, investment ratings, procurement programs, and strategies to transition to a low-carbon, net zero economy. The Global Logistics Emissions Council (GLEC) Framework, developed by Smart Freight Centre with input from the GLEC partnership, is the global method to help companies to calculate and disclose freight transport emissions, including to CDP and the Science-Based Targets initiative.

This report presents the state of carbon emissions disclosure by corporations to CDP today, using 2019 CDP disclosures of 2,604 companies – including 110 transport operators and logistics service providers, and over 500 companies disclose supply chain transportation emissions. The key conclusion is that there is a lack of transparency due to under-disclosure of transport and logistics emissions by companies to CDP, with stark differences between modes and between industrial sectors that rely on freight transport. Less than 20% of global freight emissions are disclosed, and the majority of that comes from aviation, while the high-emitting road freight sector is barely represented.

To support companies, additional guidance is provided for disclosing freight transport emissions to CDP for scope 1, 2, and key categories of scope 3 for transportation. Finally, five recommendations are provided to close the logistics emissions disclosure gap:

1. Invest in disclosure by road freight companies
2. Ask companies to disclose carbon intensities
3. Improve capturing of well-to-tank emissions from transportation fuels
4. Give guidance on how to provide meaningful comments in CDP disclosures
5. Encourage companies to look beyond disclosure

Smart Freight Centre and CDP will continue to support companies on their journey to zero emissions freight through increased transparency and climate action.
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4. Closing the disclosure gap
Ships, planes, trains and trucks are a key component of global operations and supply chains. Freight transport links goods to customers across the globe, moving raw materials to manufacturers, and finished goods to our homes. When we are finished with products, we use transport to bring waste to landfills and recyclers, making transport a key component of the circular economy.

Freight transportation is almost exclusively powered by fossil fuels, making up roughly 8% of global greenhouse gas (GHG) emissions, and as much as 11% if logistics sites like warehouses or ports are considered. Demand for freight is expected to triple by 2050 compared to 2015 according to the International Transport Forum (ITF), fueled by global supply chains, burgeoning economies in the developing world, and a rise in e-commerce activities. Over the same period, the world will see a doubling in freight transport GHG emissions if we proceed with business as usual.

Progress to decarbonize our freight transportation networks needs to accelerate if we are to meet our global climate goals. Smart Freight Centre and CDP believe that reporting data on GHG emissions is key to achieving these goals. CDP disclosures can be used to inform corporate climate goals, investment ratings, procurement programs, and the low-carbon economy. It can also inform government policy to reach targets, such as those set for the EU and international shipping and aviation.

While freight transportation is often out of sight for many consumers, the COVID-19 crisis has drawn new attention to the risks within the supply chain, be they environmental or otherwise. Proper risk management can enable corporations to plan for the future through developing resilience and transitioning away from areas most exposed. For many companies, tracking GHG emissions from supply chain transportation is a challenge – little information is directly available from carriers, and industry average data is lacking. To improve the transparency and reduction of freight transport emissions, Smart Freight Centre formed the Global Logistics Emissions Council (GLEC), a voluntary partnership of leading companies, industry associations, green freight programs, experts and other organizations. Together, we developed a globally harmonized framework to calculate and disclose freight transport emissions based on the Greenhouse Gas Protocol and building on existing methodologies: the GLEC Framework for Logistics Emissions Accounting and Reporting.

The GLEC Framework helps companies to calculate emissions from different modes and logistics sites, providing up-to-date emission intensity factors for transport activities where carrier data are not available. The GLEC Framework offers a standard format, the ‘GLEC Declaration’, to streamline data sharing between transport providers (‘carriers’) and transport buyers (‘shippers’) as well as disclosure to external stakeholders. The GLEC Framework is the basis of the Science-Based Target initiative’s guidelines for transport, helping companies set and track progress towards climate goals.

Disclosing to CDP covers direct emissions from the disclosing company’s own transport (scope 1), indirect emissions from electricity use (scope 2), and supply chain emissions from upstream and downstream transport, fuel production, waste disposal, and other life cycle emissions. CDP published the 2018 technical note, Measuring Emissions Intensity of Transport Movements, to provide additional guidance on disclosing emissions using the GLEC Framework.

This report is intended as a follow up, providing the state of disclosure by companies to CDP today, using 2019 CDP disclosures of 2,604 companies – 110 transport and logistics service providers and over 500 companies disclosing upstream and/or downstream supply chain transportation. By looking at industry experiences, the report also provides guidance for disclosing freight transport emissions to CDP for scope 1, 2, 3 and key categories of scope 3. Finally, recommendations are provided to close the logistics emissions disclosure gap.

1 GHG emissions are used here to represent the greenhouse gases identified as contributors to climate change in the Kyoto Protocol. These emissions are often expressed in the units CO₂-equivalents (CO₂e).
2. State of GHG disclosure for freight transportation

There is a lack of transparency on freight’s climate impact due to under-disclosure of transport and logistics emissions by companies to CDP, with stark differences between transport modes and between industrial sectors that rely on freight transport. This is amplified by the high fragmentation of the transport sector, especially for road freight, which is dominated in practice by small, owner-operated trucking companies.

This section provides an overview of the current state of disclosure of freight transportation emissions, which is followed by an assessment of disclosure by transport suppliers and buyers.

2.1 Lack of transparency: under-disclosure

About 110 freight transport and logistics service providers from around the world disclose to CDP their direct emissions (scope 1) resulting from their services. This includes transport companies dedicated to sea, rail, road, logistics sites and multimodal freight, logistics service providers, as well as transport operators that carry both passengers and freight, most significantly, airlines.

If all freight transport providers in the world would disclose their scope 1 emissions to CDP, you would expect to see somewhere close to the 2.9 billion tonnes of freight CO₂ emissions being disclosed that the ITF estimated for 2015. Yet, as Figure 1 shows, the disclosing transport companies account for barely 18%, or 525 million tonnes, of global emissions, and this includes some emissions from passenger transport by companies who offer both freight and passenger transport. Adding emissions from electricity generation related to transport services (scope 2) and supply chain transport emissions (scope 3) increases these disclosed emissions to about one-third of ITF’s global estimate, but does not close the gap.

Figure 1. Disclosure of freight and logistics emissions to CDP in 2019 compared to 2019 global transportation emissions estimated by ITF

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2019 global freight emissions
2,922 million tonnes CO₂

CDP Scope 1
526 million tonnes CO₂
18% of global emissions

CDP Scope 2+3
286 million tonnes CO₂
10% of global emissions

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Road 61%
Rail 6%
Air 6%
Sea 27%
Inland Waterways 2%
Logistics Services 10%
Transport Services 2%
Upstream and Downstream Transport 98%

Considering the emissions related to electricity, about half the transport companies reported scope 2 emissions. This amounts to less than 2% of all scope 2 emissions reported in 2019, as shown in Figure 5. Logistics services companies contributed the majority of freight transport scope 2 emissions, stemming from heat and power for logistics sites like warehouses. Electrified rail transport was the second largest contributor. Interestingly, no company mentioned electrified vehicles or vessels in their scope 2 disclosures – something we expect to change over time.

Relying on companies that purchase transportation as a service (‘shippers’) to disclose these as indirect emissions (scope 3) is not going to get us closer to transparency. The total emissions for the primary categories for transportation in scope 3, upstream and downstream transportation and distribution, totals only 279 million tonnes of GHGs, less than 10% of the global total (and also includes some passenger transport emissions).

While transparency exists for several of the companies individually, it becomes harder for transport buyers and investors that may want to make a comparison between companies, or understand the sources of emissions by mode or region. It is impossible to draw conclusions about freight transport as a whole: under-disclosure means there is a systemic lack of transparency.

There are vast differences in disclosure for different modes and between different industry sectors of transport buyers. This is explained next.
2.2 Transport suppliers: high variation between modes

The GLEC Framework provides guidance for five modes of transport (air, sea, rail, road, and inland waterways) and logistics sites that connect transport legs (e.g. terminals, ports, airports, warehouses, cross-docking sites, distribution centers). The status of emission reporting by transport and logistics service providers for air, sea, rail and road is presented below, recognizing that some emissions are included in the intermodal and multimodal categories.

Air
Disclosure of air transport emissions seems to be the most complete of all modes, although it was not possible to distinguish the share of emissions related to passengers vs freight within the CDP reports. There are two likely reasons for the high disclosure rate. First, there are only about 400 airlines worldwide; virtually all operate internationally, and CDP requests companies to disclose on behalf of investors and/or supply chain members. Second, the aviation sector is closely watched by investors. Aviation makes up about 7% of global freight transport emissions, but has a relatively high GHG intensity; aviation emissions per tonne-km are several times that of road freight and exponentially higher than sea freight.

Rail
CDP rail emissions include a mix of passenger and freight transportation. Disclosed rail transport emissions are about half of ITF estimates, and include some passenger transport. Only eight companies disclose emissions, all located in the US, Canada and Germany. The main reason for under-disclosure may be that many rail companies are often (partly) publicly-owned, where disclosure is less common.

Road
The gap in disclosure is especially vivid for road transport. While some of the logistics service providers own and operate trucks that would be reflected in scope 1, there is little to no representation from the millions of small businesses that make up the majority of the trucking sector. As a result, not even 1% of global road freight emissions is captured under scope 1 emissions. For small businesses, the ability to calculate and disclose emissions can be both a burden and a challenge. What does this mean for the countless logistics service providers and shippers who contract with these carriers and require their data to make accurate scope 3 calculations? CDP has a questionnaire specifically designed for SMEs; efforts by transport buyers to empower climate disclosures from road transport companies must be widespread and intentional. The US Environmental Protection Agency’s SmartWay program provides a template for success here.

Sea
Sea freight includes marine container and bulk shipping, and to a lesser extent roll-on/roll-off ships and short sea shipping. Disclosed sea freight emissions are 13% of the total estimated by ITF. Maritime container shipping is dominated by relatively few big players; however, the remainder of the shipping sector is more fragmented with many smaller players. Sea freight transport providers may be less inclined to disclose to CDP because the pressure from investors is lower. At the same time the quality of data from disclosing companies seems better by comparison. Most of the large container shipping lines are members of the Clean Cargo initiative that has developed and delivered a comprehensive emission disclosure program since 2004, and now captures 85% of emissions from sea container shipping.
2.3 Transport buyers: differences in sector representation

Transport buyers disclose their supply chain emissions from transport and logistics under scope 3, as these are generated by carriers and logistics service providers in their supply chains. As Figure 3 shows, transportation can fall into all 15 subcategories under scope 3, which makes disclosure more complex. However, the bulk of emissions typically fall into purchased goods and services and the two transportation and distribution categories: upstream (paid for by the disclosing company), and downstream (paid for by the company or customer receiving the goods).

Focusing on the dedicated transportation categories, upstream and downstream, a total of 496 multinationals disclosed some freight transportation emissions, roughly one-fifth of the 2,604 companies reporting through CDP’s platform - a vast under-representation of the thousands of multinationals that buy transport and logistics services. More emissions were disclosed for upstream transport, 57% of total upstream and downstream transport emissions, likely because these values are easier to track due to fact that the disclosing company is paying the bill.

Disclosed emissions were spread across 13 industry sectors. Half of all upstream and downstream transportation emissions were disclosed by the manufacturing industry – 259 companies disclosed – followed by materials, transportation services, food and beverage and agriculture. Only a handful of companies disclosed transportation emissions from the apparel, retail, hospitality, or fossil fuel industries.

Transport emissions were at relatively uniform level for manufacturing companies, but for other sectors, for example, materials and transport services, a handful of companies disclosed the majority of emissions. It is especially the latter type of sectors, where individual company emissions are high but disclosure is low, where disclosure should be promoted.
Figure 3. Greenhouse Gas Protocol scope 1, 2 and 3 explained for freight transport and logistics
3. CDP disclosure guidance and practices

Freight transport is interwoven within all activities of many company’s operations and supply chains. In this way, it’s not surprising that many companies struggled to parse emissions from freight between the scopes and categories under the Greenhouse Gas Protocol. Different scopes apply to freight transport providers and buyers, and different levels of information are available depending on where you sit in the supply chain.

Based on our analysis of CDP disclosure questionnaires, this section provides guidance on disclosing by highlighting common pitfalls and offering advice on what to include in calculations and comment fields for CDP’s disclosure surveys. More detailed information on disclosure is available in the GLEC Framework, including a template for sharing transportation emissions data: the GLEC Declaration.

3.1 Scope 1: Transport & logistics suppliers

Scope 1 is for the freight transportation companies themselves; those that own and operate trucks, trains, planes, ships, or logistics sites. For transportation companies, scope 1 emissions should be relatively easy to calculate as they are based on primary data from the company, i.e. direct fuel use. This is where the emissions from the combustion of diesel, marine diesel, methanol, liquified natural gas, or other fuels are tallied up and disclosed. This is also where fuel used to power equipment like cranes or forklifts used to transfer goods within ports, terminals and warehouses. Emissions resulting from purchased electricity, however, are not tallied here, but in scope 2.

To consider scope 1 from transportation, we must also consider a related but under-disclosed category of scope 3, fuel and energy-related emissions. As we continue with the low carbon energy transition, it will become increasingly vital that these emissions are properly captured and disclosed. See section 3.3 for more information.

What to include in scope 1

- Include tank-to-wheel emissions based on the fuel and energy purchased and used by the reporting company
- Use recent fuel emissions factors to convert fuel to CO₂e
- Preferred:
  - % of CO₂e by transport mode.
  - Emissions intensity metric, like CO₂e/tonne-kilometer

What not to include in scope 1

- Don’t calculate emissions using lab measurements or sensors
- Don’t estimate fuel burn from industry average data - scope 1 calculations should be based on actual fuel data only
- Don’t include emissions from fuel purchased by franchisees
3.2 Scope 2: Electricity for transport & logistics suppliers

Similar to scope 1, scope 2 is particularly relevant for this study for transportation companies that operate electrified transportation, namely rail, as well as logistics sites. That said, scope 2 from transport currently makes up a small part of disclosed scope 2 emissions, making clear the limited use of electricity for transport at this stage of the energy transition. In 2019 CDP disclosures, there was no mention of electrified vehicles other than locomotives. However, as freight becomes more sustainable, electrified transport is expected to be adopted more broadly, meaning accurate scope 2 emission disclosure will increase in importance over time.

Figure 5. Guidance for disclosing scope 2

<table>
<thead>
<tr>
<th>What to include in scope 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Include emissions from electricity used for mobile and stationary power</td>
</tr>
<tr>
<td>• Mention the source of the electric grid factor</td>
</tr>
<tr>
<td>• Comment on goals to avoid, reduce or offset scope 2 emissions, such as percent renewable energy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What not to include in scope 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Don’t include emissions from the production and distribution of fuels - this category covers electricity emissions only</td>
</tr>
<tr>
<td>• Don’t include electricity emissions from supply chain activities</td>
</tr>
</tbody>
</table>
3.3 Scope 3: Transportation in the supply chain

Transportation can make up a significant part of supply chain emissions, often falling into many of the 15 categories of scope 3. We observed that it’s not always clear where one category begins and ends, particularly for companies with franchise operations, retail services, and e-commerce operations, where ownership of emissions begins to blur.

Figure 6 shows the three most important, and commonly confused, categories in transportation emissions disclosure. Not always aligned with a company’s definition of up- or downstream, the difference between Purchased goods & services, Upstream Transportation & Distribution, and Downstream Transportation & Distribution in GHG accounting boils down to who paid for the transportation. Upstream Transportation & Distribution is paid for by the company, the others are not.

Many companies indicated challenges to finding adequate data to estimate emissions, especially beyond tier 1 suppliers. Understandably, emissions from Upstream transportation & distribution are the easiest to track because the reporting company is paying the bill; information on weights and distance are often easy to find, and the supplier is known – opening up an opportunity for more detailed data collection. Downstream transportation & distribution covers transportation of the disclosing company’s products that they do not organize – a challenging, but significant, source of GHG emissions for some companies.

Our analysis found that calculating emissions for the remaining categories of scope 3 are a major challenge. It may be possible to find emissions data for waste, if directly contracting with a waste removal company, but how to source and allocate data for other transportation categories remains a mystery for many. Companies do variable jobs accounting for these emissions, many relying on industry average data and life cycle assessment (LCA) to make estimates.

The following sections provide additional insights on disclosure for the key categories of scope 3 related to transportation, as shown in Figure 6. Other categories are certainly relevant for transportation in scope 3, but these four categories are highlighted due to their significance in terms of emissions as well as our analysis of frequently confused categories.

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**3.1 Purchased goods & services**
- Transport of purchased goods from tier 1 suppliers to the reporting company that was not paid for by the disclosing company
- Transport of purchased goods in the life cycle prior to the tier 1 supplier

**3.3 Fuel & energy-related emissions**
- Emissions related to the production and distribution of fuels used in scope 1 activities (well-to-tank)
- Any other energy-related emissions not reported elsewhere.

**3.4 Upstream transport & distribution**
- Transport of purchased goods from tier 1 suppliers paid for by the disclosing company
- Transport of the reporting company’s products to buyers paid for by the reporting company

**3.9 Downstream transport & distribution**
- Transport of the reporting company’s products to tier 1 customers not paid for by the disclosing company
- Transport of the disclosing company’s products from tier 1 customers to downstream customers
Category 3.1 – Purchased Goods & Services

The Purchased goods & services category reflects the “embodied carbon” within the products or services the disclosing company buys. These are emissions that occurred before the disclosing company took control of a product or raw material, often disclosed within a product carbon footprint. This information can be gathered from the supplier directly, such as through CDP’s supply chain program or by using tools like LCA. In either case, the disclosing company should inquire how transportation was considered in the assessment and confirm that the best emissions factors were used to capture the transportation emissions. Most notably, these emissions factors should represent well-to-wheel and GHG emissions, expressed in CO₂e.

A note regarding the use of LCA: we observed that companies using this technique often struggled to differentiate Upstream Transportation & Distribution from embodied transport emissions represented by Purchased Goods & Services. Further, while many companies suggest that they are beginning to collect primary data, one company suggested that it can be difficult to reconcile collected supplier data with generalized LCA results.

What to include in scope 3.1

- Include transportation emissions embedded in the products and services that were purchased by the disclosing company.
- The latest WTW & CO₂e carbon intensity factors from the GLEC Framework

What not to include in scope 3.1

- Don’t include transportation and logistics services that the disclosing company paid for - place those in category 3.4 - Upstream Transportation.

Figure 7. Guidance for disclosing emissions under scope 3.1 Purchased Goods & Services
Category 3.3 – Fuel- & Energy-Related Emissions

Fuel- and Energy-Related Emissions are meant to cover emissions not already covered in other fuel and energy related categories. For many companies, this category is primarily used to disclose emissions related to the transmission of purchased heat and electricity.

When it comes to transport emissions, this category is most significant for companies that operate freight transport equipment. This category is where well-to-tank (WTT) emissions, the GHG emissions that result from the production and distribution of the fuel burned in scope 1. While about half of the 110 transport companies disclosed emissions in scope 3.3, only two referred to emissions from transport fuels.

This category becomes almost as important as scope 2 when we consider a transition to alternative fuels; whereas scope 2 captures emissions from electric cars or trains, scope 3 category 3 will include the emissions related to the production of biofuels, hydrogen, methanol, and all other transport fuels. For fossil fuels, WTT emissions represent a smaller share of the fuel’s life cycle emissions, but for alternative fuels, WTT is often more significant. Where the combustion, or tank-to-wheel (TTW), emissions are often considered zero for these fuels, it’s imperative to capture the WTT to confirm that emissions are truly and systematically being avoided, not simply shifted to another category.

A handful of companies mentioned the challenge to influence their fuel supply chains. However, given that nearly all freight is moved by fossil fuels, global companies are ultimately major consumers of oil and gas, albeit indirectly. There is value in working with oil companies to reduce WTT emissions, and transparency is a meaningful first step.

Figure 8. The fuel life cycle. Source: GLEC Framework 2.0 (2019)

Figure 9. Guidance for disclosing emissions under scope 3.3 Fuel - and - Energy- Related Emissions

The Fuel Life Cycle

What to include in scope 3.3

- WTT, or upstream, emissions for all transportation fuels burned in scope 1
- Other fuel and energy related emissions not reported elsewhere, like transportation & distribution losses from electricity
- Use the WTT fuel emissions factors in the most recent version of the GLEC Framework

What not to include in scope 3.3

- TTW, or combustion, emissions from fuel or electricity
- Emissions calculated with old or out-of-date emissions factors
Category 3.4 – 
Upstream Transportation & Distribution

About one-third of companies disclosing upstream transportation emissions. Our analysis found that upstream transportation emissions were frequently miscategorized, often as Purchased goods and services, but also under other scope 3 categories, Downstream Transportation & Distribution; Use of Sold Products, Fuel & Energy-Related Emissions, Waste Treatment, and Business Travel. There is a huge potential to improve disclosure of upstream transport emissions, which has the potential to close the gap in emission accounting by reflecting emissions from the countless small transport businesses that do not disclose to CDP, namely trucking companies. Companies can start to calculate and disclose upstream transportation emissions today using common shipment data and average emission intensity factors. Over time, companies can refine these numbers by collecting primary data from suppliers.

What to include in scope 3.4

- Well-to-wheel and CO₂e emissions from purchased freight logistics activities
- Optional:
  - % of CO₂e by transport mode
  - Emissions intensity metric, like CO₂e/ tonne-kilometer

What not to include in scope 3.4

- Transport paid by the manufacturer or customer
- Transport paid by franchisees
- Transport of people
- Emissions from the production of vehicles

Figure 10. Guidance for disclosing emissions under scope 3.4 Upstream Transportation & Distribution
Category 3.9 – Downstream Transportation & Distribution

Downstream Transportation & Distribution covers transport from the disclosing company to the buyer that was paid by the company receiving the product. Only one-quarter of companies disclose emissions in this category, and our analysis uncovered similar problems to upstream transport here – confusion between categories, under-disclosure, or leaving it out altogether.

It is especially hard to find data for emissions calculations under this category, as companies have less control over transport of goods leaving their control when it is organized and paid for by the company receiving the goods. This category is difficult to align with emission reduction goals as it is not something the disclosing company can easily influence. However, last mile transport is often part of downstream – this is particularly interesting for emission reduction because of the lower carbon options that exist for last mile that are less prevalent for long distance transport.

What to include in scope 3.9

- Emissions from transporting the disclosing company’s goods after it leaves the company’s control, e.g., paid by the customer or downstream supply chain partner
- Include well-to-wheel and CO₂ emissions

What not to include in scope 3.9

- Transport paid by the disclosing company
- Transport paid by franchisees
- Transport within the waste or recycling life cycle phases of the reporting company’s products

Figure 11. Guidance for disclosing emissions under scope 3.9 Downstream Transportation & Distribution
4. Closing the disclosure gap

CDP is a vital mechanism for enabling transparency in GHG emissions, yet global estimates for freight transport emissions suggest that companies are massively under-reporting these emissions to CDP. Our study found gaps in reporting in all scopes of emissions accounting, but the disparity is most vivid for road transportation – the biggest contributor to global freight emissions. We identified four key recommendations to close these gaps.

1. Invest in disclosure by road freight companies

The road sector is a very fragmented market consisting of many companies most of them small and medium-sized. However, it is the most common form of freight transport and therefore must be prioritized for disclosure. The GLEC Framework’s GLEC Declaration is the key to clear disclosure and communication between supply chain partners. Road freight companies will especially benefit from the GLEC Declaration in order to simplify disclosure to their shippers and LSP customers, who can then include this in their scope 3 figures submitted to CDP. Collaboration with national green freight programs that cover road freight in more than 20 countries, through the GLEC partnership and UN-backed Global Green Freight Action Plan, can help to penetrate standardized disclosure to more carriers.

2. Encourage companies to disclose carbon intensities

While absolute emissions values are necessary, for many companies, carbon intensity values, e.g. CO₂e per tonne-kilometer, may also be useful for tracking transport emissions. These values are often leveraged by transport buyers to convert their shipment data to GHG emissions and to identify opportunities to transition to lower carbon intensity transport options. Carriers could include this information within the comment field, or make annual emissions intensity factors available online. Similarly, they can ask Buyers to request the Carrier information through CDP’s supply chain program or disclose to programs like US Environmental Protection Agency’s SmartWay.

3. Improve capturing of well-to-tank emissions from transportation fuels

Disclosure of well-to-tank emissions from transportation fuels was inconsistent and unclear. This will become more problematic as companies turn to alternative fuels like biofuels or hydrogen, where emissions shift from combustion to supply chain emissions (category 3.3). Companies must consider these upstream emissions, and SFC encourages further exploration that would lead to a more effective route to capture these emissions through CDP’s platform.

4. Give guidance on how to provide meaningful comments in CDP’s questionnaire

The comment field within the CDP questionnaire could be used more strategically to include more structured comments in order to make disclosures more useful. Companies could use this field to highlight emissions by transport mode, data on carbon intensities, or transport emissions by region. Also, while companies may include emissions reduction activities elsewhere in their CDP disclosure, such as in the strategy module, tying these strategies to their emissions disclosure via the comment field would add a meaningful layer of information. For example, companies could mention their investments in low-carbon transport equipment or efficiency practices, or their commitment to a Science-Based Target.
5. Encourage companies to look beyond disclosure

Disclosure is only a first step of a company’s roadmap to decarbonize their logistics supply chains. When companies disclose on their climate strategies to CDP or submit targets to the Science-Based Targets initiative, freight transportation is often left out. The main reason is the same as for under-disclosure of emissions: most companies outsource their freight transport and logistics to third parties. By encouraging companies to develop a sustainable logistics roadmap or strategy, they can tackle all steps: calculate & disclose; set targets; implement solutions to reduce emissions; and collaborate with suppliers and other stakeholders. Companies in their value chain that aren’t taking necessary steps forward (in disclosure and quantifiable action) could be replaced by competitors that are taking those steps.

We are confident that improved transparency in freight transportation emissions, from both transport providers and buyers, is the key to reducing global freight emissions. Smart Freight Centre and CDP will continue to support companies on their journey to zero emissions freight through increased transparency and climate action.
Join our journey towards efficient and zero emissions global freight and logistics