

Unlocking SmartWay Data for GHG Reporting



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December 6, 2023

Today's Discussion



- 🌿 Two quick polls
- 🌿 Drivers for GHG disclosure
- 🌿 Primer on GHG Scopes 1, 2 and 3
- 🌿 Overview of mandatory GHG reporting requirements
- 🌿 How Partners using SmartWay data in voluntary reporting
- 🌿 How to use SmartWay in future mandatory reporting
- 🌿 Questions and discussion



Caveats and Stipulations



- SmartWay is **voluntary**
- SmartWay is a **methodology and platform** to quantify and report *freight transport* emissions using **primary data** from freight carriers and logistics providers
- SmartWay is **NOT a platform for disclosing** total mass emissions
 - BUT Partners can and do use SmartWay results **in voluntary CSR, ESG reports**
 - AND SmartWay could be used to meet **future mandatory reporting requirements**
- EPA SmartWay **does not publish any Partner's scope 1, 2 or 3 GHG data**
 - Carrier performance data and **emissions ratings/factors are published**
- EPA SmartWay does not develop or broker carbon credits
- This discussion today is **not legal advice**
- EPA does not implement, nor endorse, nor enforce these other authorities' requirements
- **More guidance and clarification are forthcoming** from the agencies & authorities implementing mandatory GHG reporting requirements

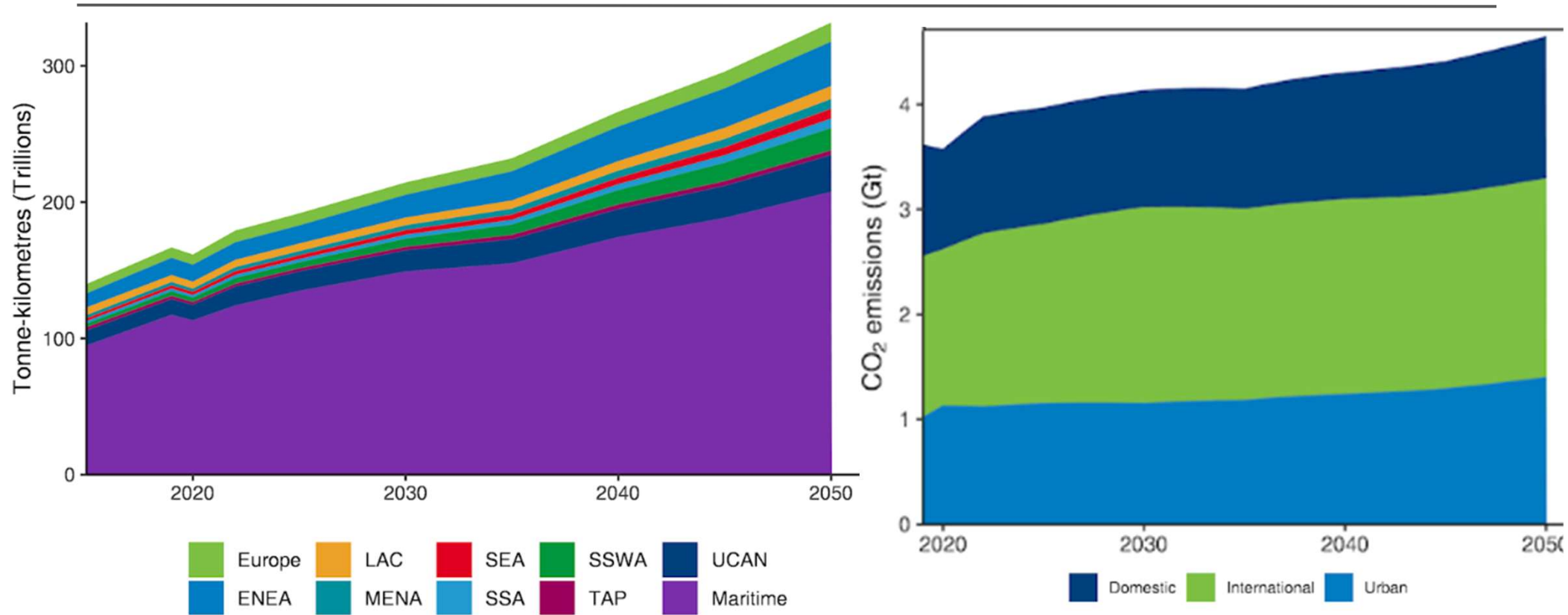
Polls



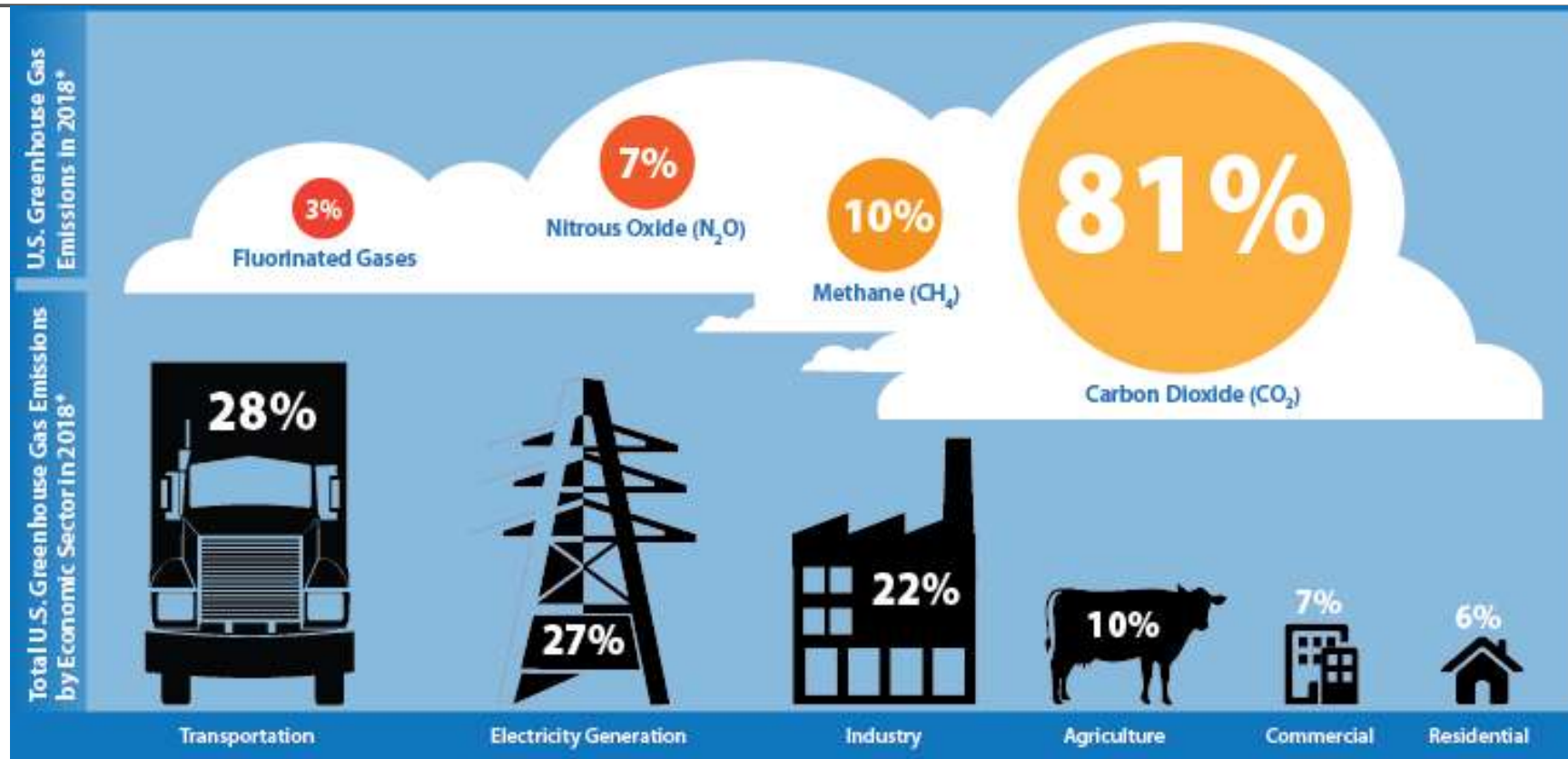
- **Poll #1 – My primary responsibilities in my organization are: (select any or all)**
 - Environmental management and compliance, GHG reporting, CSR, ESG
 - Logistics procurement and management
 - Fleet operations
 - Other

- **Poll # 2 – I would rate my level of knowledge on GHG benchmarking, reporting and disclosure as: (select only one)**
 - I'm a resident expert; my peers and organization depend on my depth of knowledge
 - I'm pretty well informed but know there's more I need to learn
 - I'm on a learning curve and still consider myself a novice
 - I'm just getting started on this topic and trying to get the basics (don't judge me!)

Global Freight Projections

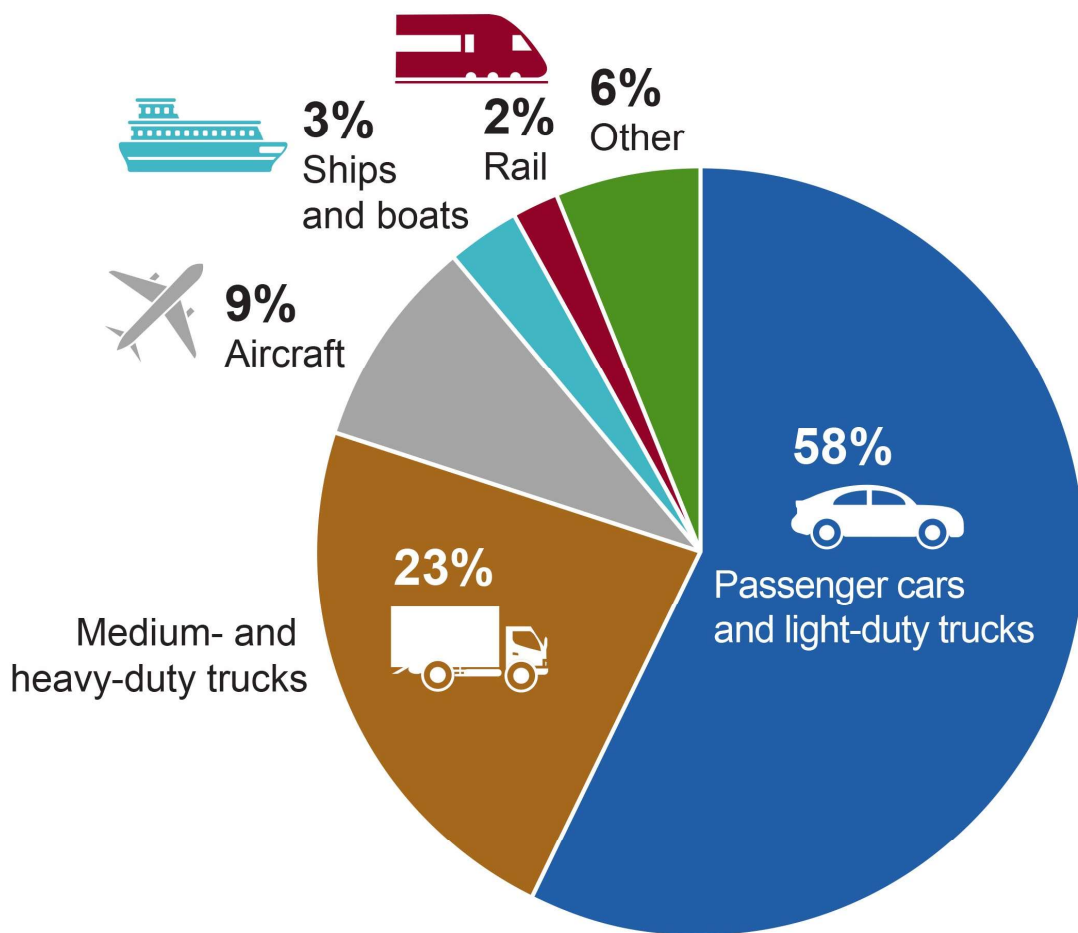


Sustainability Drivers: Environmental Impacts of Transportation



Inventory of U.S. Greenhouse Gas Emissions and Sinks (EPA 2021)

2021 Greenhouse Gas Emissions from US Domestic Transportation by Mode



Between 1990 and 2021, transportation greenhouse gas emissions rose by **about 19%**.

This rise is mainly attributed to an increase in vehicle miles traveled by passenger cars and all truck types.

Fifth National Climate Assessment 2023

Global freight trends

- ☁ Supply chain disruptions demanding greater resiliency and efficiency
- ☁ Energy price volatility
- ☁ Nearshoring
- ☁ Massive growth in ecommerce
- ☁ Digitization and data exchange
- ☁ Carbon disclosure *requirements...*

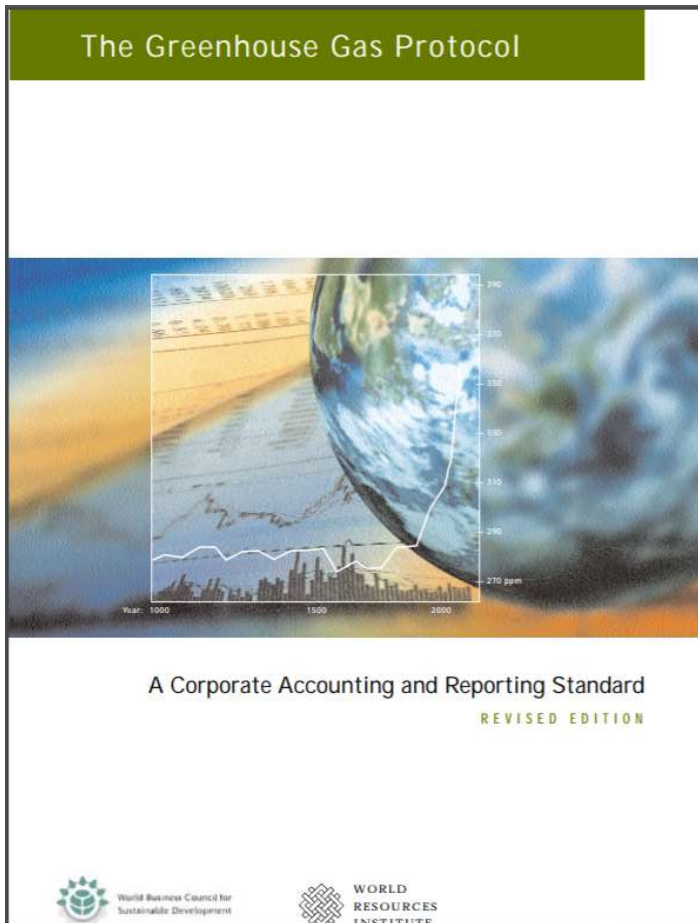


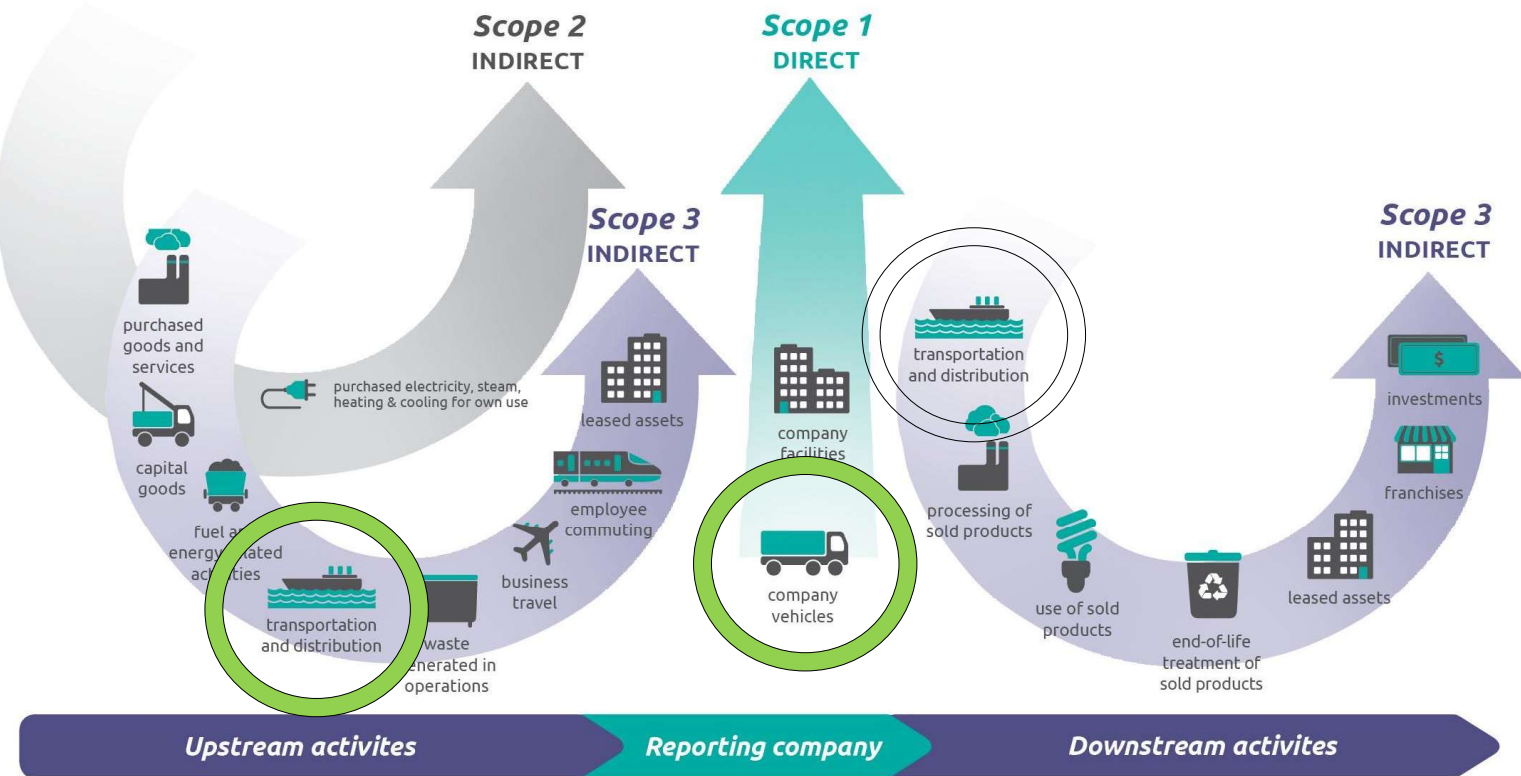
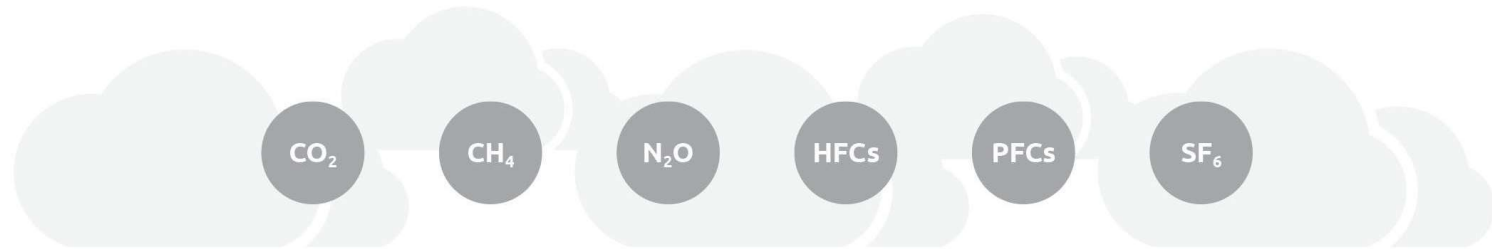
GHG Guidance & Standards



Technical Guidance for Calculating Scope 3 Emissions (version 1.0)

Supplement to the Corporate Value Chain (Scope 3)
Accounting & Reporting Standard





What are the Scopes of GHG emissions?

GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard

The 3 Scopes



SmartWay example

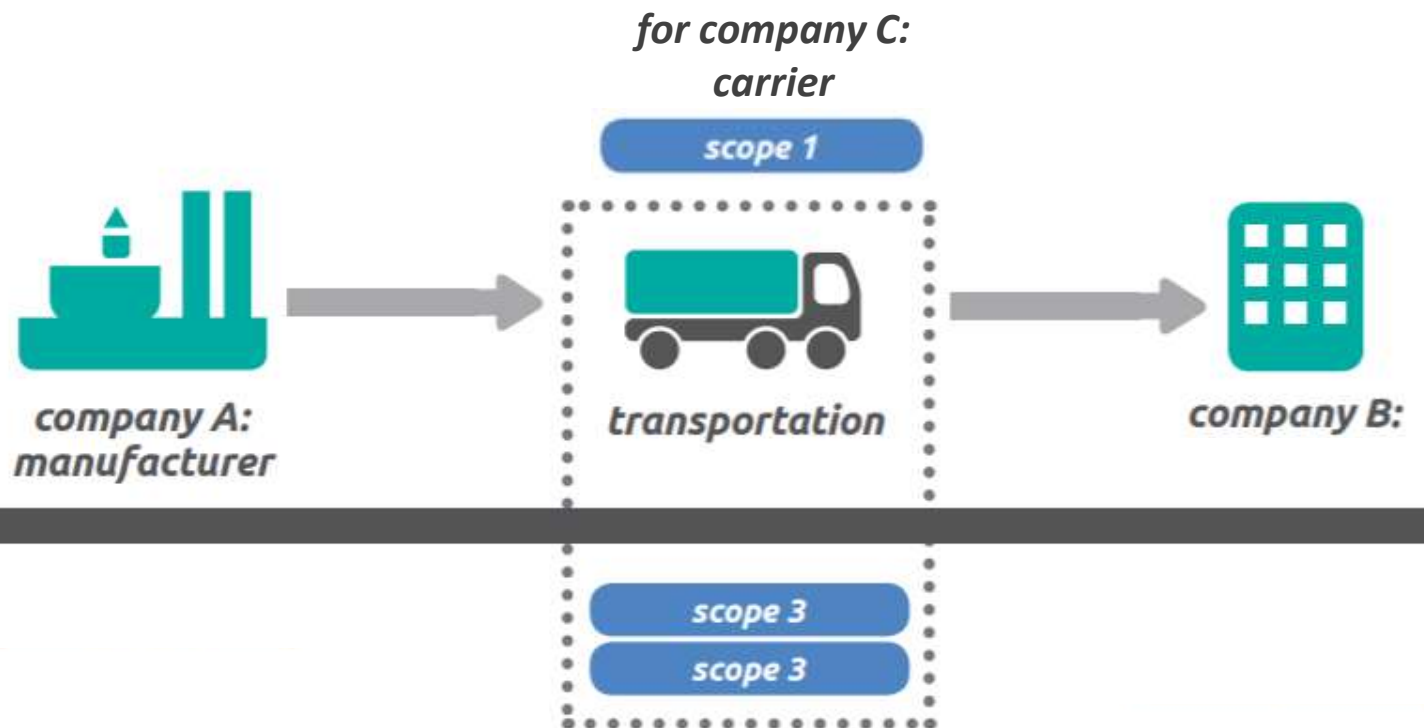
Truck carrier fleet
(for hire or private)

Charging EV trucks

Contracted freight
transport services

Emissions type	Scope	Definition	Examples
Direct emissions	Scope 1	Emissions from operations that are owned or controlled by the reporting company	Emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment
	Scope 2	Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company	Use of purchased electricity, steam, heating, or cooling
	Scope 3	All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions	Production of purchased products, transportation of purchased products, or use of sold products
Indirect emissions			

How SmartWay Partners' scopes fit together



Inbound/Outbound Activity



Upstream scope 3 emissions

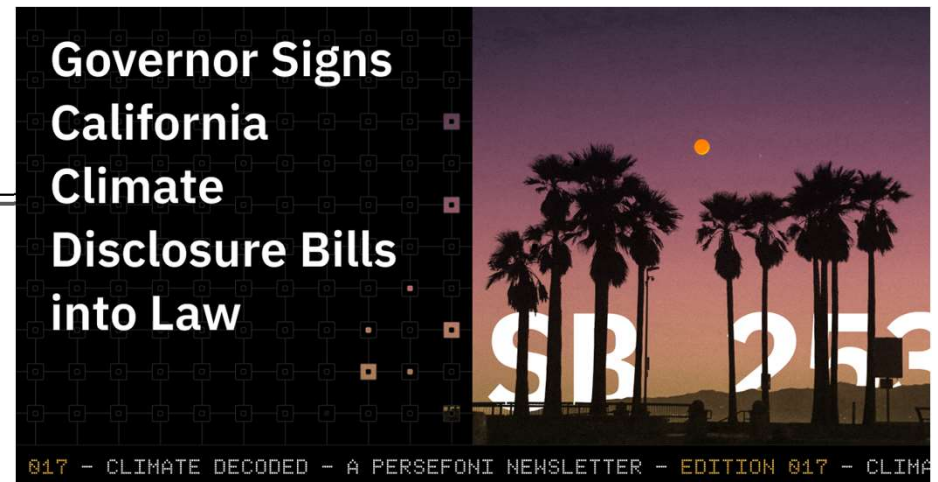
Category	Category description
<p>4. Upstream transportation and distribution</p>	<ul style="list-style-type: none"> • Transportation and distribution of products purchased by the reporting company in the reporting year between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company) • Transportation and distribution services purchased by the reporting company in the reporting year, including inbound logistics, outbound logistics (e.g., of sold products), and transportation and distribution between a company's own facilities (in vehicles and facilities not owned or controlled by the reporting company)

Downstream scope 3 emissions

Category	Category description
<p>9. Downstream transportation and distribution</p>	<ul style="list-style-type: none"> • Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company)

Sustainability Drivers: Mandatory Reporting

- CA SB253
- SEC Enhancement and Standardization of Climate-Related Disclosures
- EU Corporate Sustainability Reporting Directive



CA SB253



- Requires companies with **greater than \$1 billion annual revenue and which do business in CA** to file annual reports publicly disclosing their **Scope 1, 2 and 3 GHG emissions**.
- “Reporting entities” include not just publicly traded firms but also private firms
- Starting in **2026**, reporting entities must annually report **Scope 1 and Scope 2 GHG emissions** from the prior fiscal year.
- Starting in **2027**, they must report **Scope 3 GHG emissions** indirect upstream and downstream supply-chain emissions from the prior fiscal year.
- GHG reports must **conform to the GHG Protocol**
- Implementing regulations and reporting guidance will be forthcoming



EU Corporate Sustainability Reporting Directive



- Aligns with existing European Sustainability Reporting Standards (ESRS)
- Applies to EU companies that exceeds at least two of following criteria:
 - Balance sheet total: €20 million
 - Net turnover: €40 million
 - Average number of employees during the financial year: 250
- Broad spectrum of ESG topics to be reported (qualitative and quantitative information)
 - Climate change mitigation/adaption plans, GHG targets, Internal carbon pricing
 - Potential financial effects from material physical and transition risks, and potential climate related opportunities
 - **Scopes 1, 2, 3 and Total GHG emissions**
- GHG reports must **conform to the GHG Protocol**
- Phased in reporting timelines 2025-2029
 - Large companies **begin reporting 2025 (2024 data)**



SEC Climate-Related Disclosures



- SEC focused on GHG disclosure since 2010 “Interpretive Guidance” on existing financial disclosure rules, i.e., no mandates but guidance on climate concerns and disclosure
- New **RULE proposed March 2022:**
- Climate-related **risks and material impacts** on business, strategy, and outlook.
- **Scope 1 and Scope 2 GHGs**, which would require attestation reports for accelerated filers.
- **Scope 3 GHGs** if either of two conditions are present: 1) If Scope 3 emissions **are material** to the company or 2) if the company has **set a Scope 3 emissions target or goal**
- Certain climate-related financial statement metrics and related disclosures in a note to audited financial statements.
- Information about climate-related targets and goals, and transition plan
- **Proposes reporting based on TCFD and the GHG Protocol**



SEC Rule Uncertainty?...



THE WALL STREET JOURNAL.

RISK & COMPLIANCE JOURNAL

SEC's Climate-Disclosure Rule Isn't Here, but It May as Well Be, Many Businesses Say

Legal challenges to the regulator's proposed mandate for emissions tracking are all but certain, but many companies see value in assessing their suppliers even if so-called Scope 3 rules get watered down

*"...many companies, pushed by a variety of groups—including sustainability-focused shareholders, regulators in other jurisdictions and eco-conscious consumers—are proceeding as though the rule is in force. **About 70% of companies intend to comply with the SEC rule regardless of when it becomes final...**"*

*"Without Scope 3, investors do not have a true picture of a company's emissions,"... "If regulators do not step up to require mandatory disclosures on Scope 3 emissions, **investors will certainly continue to work with companies to ensure voluntary disclosures improve.**"*

*"The **horse has already left the barn** on climate risk disclosure,"*

Established *Voluntary* GHG Reporting



- 🌿 Global Reporting Initiative: GRI
- 🌿 Carbon Disclosure Project: CDP
- 🌿 United Nations Sustainable Development Goals: SDGs





- C0. Introduction ▼
- C1. Governance ▼
- C2. Risks and opportunities ▼
- C3. Business Strategy ▼
- C4. Targets and performance ▼
- C5. Emissions methodology ▼
- C6. Emissions data ▼
- C7. Emissions breakdowns ▼
- C8. Energy ▼
- C9. Additional metrics ▼
- C10. Verification ▼
- C11. Carbon pricing ▼
- C12. Engagement ▼
- C15. Biodiversity ▼
- C16. Signoff ▼

sions were calculated using the electrical supply and distribution emission loss form the EIA.

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

2741620

Emissions calculation methodology

Spend-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

44

Please explain

Upstream transportation and distribution are not relevant as they are less than the combined Scope 1 and 2 emissions. Based on the GHG Protocol Guidelines a hybrid of distance-based method and the spend-based method was used to estimate the emissions from upstream transportation and distribution. USEPA SmartWay provides data from carriers using fuel use and from shipments for distances travelled and load weights for truck and rail. For ocean and air, a spend-based approach was used to estimate the amount of fuel used and the associated emissions based on that fuel usage. Data from USEPA SmartWay was provided by logistics business partners. Note, emissions' data from USEPA SmartWay were from 2021 and to calculate the 2022 emissions the 2021 value was normalized to production.

Partners use SmartWay in CDP reporting

SmartWay Online Shipper Tool



Public Disclosure Report

Report created on: September 19, 2023

Inventory Year: 2022

[Print Report](#)



Scope 3 Emissions	CO2 Emissions (metric tons)	Percent of emissions calculated using data from SmartWay carriers (%)
	139	63.38%

Emissions of biogenic CO2 (metric tons):

Emissions of non-GHGs:

Pollutant	Amount (metric tons)
NOx	0.39
PM10	0.0032
PM2.5	0.0032
Black Carbon	0.0010886

Unlock your SmartWay Public Disclosure Report



SmartWay Online Truck Tool for All Carriers

Public Disclosure Report



Report created on: January 6, 2023

The information in this report has been reviewed by [The World Resources Institute](#) for conformance with the [GHG Protocol Corporate Standard](#)

Inventory Year: 2022



Source		CO2 Emissions (metric tons)	CO2e Emissions (metric tons)
Scope 1	USA	5420.6	5543.7
	Canada	602.3	616.0
	Total:	6022.8	6159.6
Scope 2	USA	0.0	0.0
	Canada	0.0	0.0
	Total:	0.0	0.0

Unlock your SmartWay Public Disclosure Report

Emissions of biogenic CO2 (metric tons): 0.0

Emissions of non-GHGs:	
Pollutant	Amount (metric tons)
NOx	11.0091
PM 10	0.0186
PM 2.5	0.0171



Mining SmartWay Data Reports



- 🌿 Identify hotspots in your operations
 - Business units and modes with biggest footprint
 - Carriers with whom you ship the most ton-miles
 - Actual ratings/performance of your biggest carriers (1-5 for carriers, 1-10 for logistics)
- 🌿 Don't forget to look at NOx, PM and Black Carbon results
 - Localized air quality impacts
 - Public health concerns, especially for disadvantaged communities
- 🌿 Dig deeper into the metrics
 - g/mile for lighter loads that cube out
 - g/ton-mile for heavy loads that weigh-out
- 🌿 Compare year-over-year performance to identify trends, develop strategies
- 🌿 Way 4 Shippers can do projections and scenario planning



Preparing for Compliance



- 🌿 Make sure you understand your SmartWay results
 - Shippers should strive for Way 3 or Way 4 to get accurate results
 - Establish baseline GHG footprint and track annual reductions
- 🌿 Study your SmartWay Public Disclosure report
- 🌿 Build carbon fluency in your company; Study GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard
- 🌿 Connect the logistics procurement and environmental management silos in your firm to coordinate on data sources, reporting, efficiency strategies
- 🌿 Work with in-house teams to assess data sources, assess materiality, explore potential assurance providers
- 🌿 Track forthcoming implementation and reporting guidance (EPA is too!)
- 🌿 Set GHG reduction goals and targets (and disclose for your stakeholders)



It's not just about the reporting!



Benchmarking provides insights and data to:

- Understand performance compared to peers
- Baseline and track performance over time
- Identify hotspots in freight supply chain
- Scope cost savings opportunities
- Optimize carrier and mode selection
- Inform continuous improvement processes
- Support project analyses, e.g., biofuel, EV use
- Complete more accurate GHG reporting

Move beyond reporting to:

- Enhance Corporate Social Responsibility culture
- Demonstrate leadership for customers, employees
- Position firm with shareholders and financial stakeholders





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SmartWay Helpline

734-214-4767