

PRODUCT TRANSPORTATION REPORT

ACE COMPUTERS
FISCAL YEAR 2024

PRESENTED BY:



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1. Executive Summary

1.1 Company Overview

For over four decades, **Ace Computers**¹ has been at the forefront of technology solutions, earning the trust of federal, state, and local governments, academic institutions, and Fortune 500 companies. Our unwavering dedication to excellence ensures we deliver top-tier, American-made computer products, supplies, and services. This report marks the second GLEC Product Transportation Report from **Ace Computers**, setting a new benchmark for our future endeavors.

Our Mission

At **Ace Computers**, our mission is to help clients **stay connected** and achieve **mission success** through industry-leading technology solutions. We understand the critical role that efficient and sustainable product transportation plays in achieving these goals.

GLEC and Sustainability

The **Global Logistics Emissions Council (GLEC)**² framework provides a standardized approach to measuring and reporting greenhouse gas emissions in the logistics sector. As a forward-thinking company, we recognize the importance of minimizing our environmental impact. By aligning with GLEC principles, we aim to contribute to a more sustainable supply chain.

Key Focus Areas

In this report, track the following key product areas related to product transportation:

1. **Forensic Computing:** Our secure workstations facilitate the acquisition and examination of digital evidence from various devices, supporting law enforcement and government investigations.
2. **High-Performance Computing (HPC):** Our HPC solutions leverage cutting-edge architecture and technologies to deliver optimal performance at an affordable price.
3. **Customized Desktops, Workstations & Servers:** We empower our clients to tailor their systems to their unique needs, regardless of order size.

1.2 Business Goals

When it comes to **Scope 3 emissions**, which encompass indirect greenhouse gas emissions from a company's value chain (including suppliers, customers, and other stakeholders), defining clear business goals is essential. Below are three potential business goals for **Ace Computers** in the context of Scope 3 emissions:



1. Reputation and Stakeholder Expectations:

- **Objective:** Enhance company reputation and meet stakeholder expectations.
- **Motivation:** Respond to the growing environmental consciousness of stakeholders, including customers and employees.
- **Actions:**
 - Implement robust GHG reporting regimes.
 - Set reduction targets and track performance over time.
 - Identify areas for feasible emission reduction.
 - Engage with stakeholders to demonstrate commitment to sustainability.



2. Risk Mitigation and Preparedness:

- **Objective:** Proactively address risks associated with value chain emissions.
- **Motivation:** Understand and manage risks related to emissions throughout the value chain.
- **Actions:**
 - Assess current product transport systems to determine areas for sustainability growth.
 - Increase awareness of operations in the value chain.
 - Identify risks and opportunities.
 - Prepare for possible future scenarios given the planet's limited resources.



3. Collaboration and Financial Benefits:

- **Objective:** Partner with value chain actors to reduce emissions and gain financial benefits.
- **Motivation:** Shed light on transport operations and drive energy and material savings.
- **Actions:**
 - Understand value chain partners better.
 - Collaborate with companies and other actors to reduce emissions.
 - Leverage energy and material efficiency for financial gains.

1.3 Accounting and Reporting Principles

Ace Computers rigorously evaluates Scope 3 accounting and reporting principles across various issues. In our Corporate Sustainability Report for Fiscal Year 2023, we highlight our steadfast commitment to environmental responsibility and sustainability. Key points include:

Environmental Philosophy:

Ace Computers strives to improve the sustainability of their systems by incorporating best practices in waste management and IT product recycling. All employees contribute to environmental goals by reducing, reusing, and recycling products and waste.

GHG Emissions:

Ace Computers utilizes the protocols established by the WRI/WBCSD GHG (Greenhouse Gas) and collaborates with experts to assess their greenhouse gas emissions. For fiscal year 2023 (January 2022 to December 2022), Ace Computers' total greenhouse gas emissions were **15395 metric tons of CO2 equivalent (CO2e)**.

Scope 3 Emissions:

The Scope 3 Standard allows companies to assess their entire value chain emissions impact, including indirect emissions resulting from value chain activities. Ace Computers evaluates emissions from 15 categories of Scope 3 activities, including downstream emissions. This framework supports strategies to partner with suppliers and customers to address climate impacts throughout the value chain.³

Other Initiatives:

Ace Computers participates in the EPEAT program, which ensures environmentally friendly IT products. They are also an ENERGY STAR participant, offering energy-efficient computers. Responsible minerals sourcing and conflict minerals due diligence are part of their commitment to ethical practices.⁴

For more detailed information, you can refer to Ace Computers' Corporate Sustainability Report Fiscal Year 2023 here.⁵

Note: Ace Computers' Corporate Sustainability Report for FY2024 is currently being compiled and will be available on Ace Computers' website between Q2 and Q3 of 2025.



2. Introduction

2.1 Background

The **Global Logistics Emissions Council (GLEC)** spearheads efforts to standardize and harmonize greenhouse gas (GHG) emissions accounting and reporting within the logistics sector. As climate change presents mounting challenges, the importance of understanding and mitigating the environmental impact of product transportation grows ever more critical. The **GLEC Framework** offers a unified language and methodology for evaluating emissions across various transportation modes.

2.2 Purpose of the Report

This report provides an in-depth analysis of product transportation through the lens of the Global Logistics Emissions Council (GLEC). It explores the environmental impacts of different transport modes, highlights best practices, and offers actionable recommendations for enhancing sustainability. By grasping GLEC's pivotal role in shaping the future of logistics emissions, stakeholders can make informed decisions to minimize their carbon footprint and foster a more sustainable supply chain.



3. Scope and Methodology

3.1 Scope

This study evaluates the emissions from product transportation for **Ace Computers**, a premier technology company renowned for high-performance computing solutions. It examines the journey of finished products from manufacturing facilities to end-users, covering both domestic and international transportation routes.

3.2 Methodology

The methodology employed for this assessment follows the **Global Logistics Emissions Council (GLEC) Product Transportation Framework**. The key steps in the methodology are as follows:

3.2.1 Data Collection:

- Detailed data on transportation activities were collected from **Ace Computers'** internal records, logistics partners, and carriers. This included information on shipment weights, distances traveled, modes of transport (road, air, rail and sea), and fuel types used. Proxy data was used for air transport when it was unavailable from primary sources.
- Emission factors were sourced from GLEC emission calculation guidelines and the US EPA, considering different modes of transport and regional variations.

3.2.2 Data Analysis:

- The collected data were analyzed to quantify the greenhouse gas (GHG) emissions associated with product transportation.
- Where available, emissions were calculated for each transportation mode, considering factors such as fuel consumption, load factors, and distance traveled.

3.2.3 Scope of Assessment:

- The assessment covers **Scope 3 emissions** as defined by the Greenhouse Gas Protocol and GLEC Framework. These include **Ace Computers'** emissions from transportation and distribution.
- The study excludes emissions from upstream activities such as raw material extraction and manufacturing.

3.2.4 Assumptions and Limitations:

- The assessment assumes that transportation routes remain consistent over the study period.
- Variability in fuel efficiency due to factors like traffic conditions and weather is not considered within the emission factors.
- Limitations include the availability of accurate data from the company database, logistics partners and the challenge of tracking indirect emissions.

3.3 Key Considerations

The following considerations guided the scope and methodology of this assessment:

Accuracy and Reliability:

- Efforts were made to ensure data accuracy and reliability by collaborating with the company database manager, with logistics partners and using standardized emission factors.
- Limitations in data availability were acknowledged, and conservative assumptions were made where necessary.

Comparability:

- The methodology aligns with GLEC guidelines, allowing for comparability with other companies' assessments.
- **Ace Computers'** results can be benchmarked against industry peers.

Transparency:

- The methodology and data sources are transparently documented to facilitate peer review and stakeholder engagement.



4. GLEC Overview

As we enter a new year in global logistics, the urgency to address greenhouse gas (GHG) emissions from product transportation continues to grow. Leading this charge is the **Global Logistics Emissions Council (GLEC)**, which remains instrumental in unifying emissions reporting standards and advancing sustainability across complex, multi-modal supply chains. For companies like **Ace Computers**, aligning with GLEC's frameworks is not just a commitment to compliance—it's a strategic step toward a greener, more transparent future.

4.1 What is GLEC?

The **GLEC Framework** serves as the industry's primary guideline for calculating and reporting logistics emissions. Imagine comparing GHG emissions across different transport modes or suppliers—like comparing apples with oranges. GLEC recognized this challenge and developed a standardized approach to harmonize emissions calculations. Here's what you need to know:

1. **Methodology:** The **GLEC Framework** provides a consistent method for measuring and reporting logistics emissions. It aligns with ISO 14083 standards, ensuring uniformity in emissions accounting across the industry.⁶
2. **Multi-Modal Focus:** Whether it's road transport, air freight, rail freight or maritime shipping, GLEC covers all modes of transportation. Shippers, carriers, and logistics service providers can implement it to track emissions effectively.
3. **Climate Goals:** Designed to inform business decisions, the **GLEC Framework** helps companies reduce emissions and progress toward climate goals. It works seamlessly with other initiatives like the Greenhouse Gas Protocol, UN-led Global Green Freight Action Plan, and CDP Reporting.⁷

4.2 Why is GLEC Important for Product Transportation?

1. **Demonstrating Leadership:**
 - By embracing the **GLEC Framework**, companies like **Ace Computers** continue to set the standard for environmental leadership in their industry. Their proactive stance not only strengthens internal sustainability goals but also encourages suppliers to elevate their own practices.
 - This visible commitment to responsible logistics resonates with customers, further solidifying **Ace Computers'** reputation as a forward-thinking and environmentally conscious brand.

2. Informed Decision-Making:

- **GLEC** promotes using GHG emissions as a key factor in freight decisions, helping **Ace Computers** compare transport options with environmental impact.
- Emissions data enables smarter supply chain choices—optimizing routes, carriers, and modes to cut carbon footprint.

3. Performance Management:

- The **GLEC Framework** helps **Ace Computers** track transport emissions, measure efficiency, and target improvements.
- Ongoing monitoring ensures emission reduction efforts deliver real, measurable progress.

4. Transparency and Accountability:

- **Ace Computers** shares emissions reductions with customers, reinforcing transparency and trust in their sustainability efforts.
- Proactive compliance with evolving regulations highlights the company's leadership in environmental responsibility.

5. Updated Framework:

- The evolving GLEC Framework—now in Version 3.1—reflects the latest insights, including updated data on fossil fuel emissions.
- Ace Computers stays aligned with current standards, benefiting from a tool that reflects best practices and industry progress.⁸

5. Key Findings

In the **GLEC Product Transportation report for Ace Computers**, several key findings emerged from the analysis of their product transportation practices. These findings provide insights into emissions, energy efficiency, environmental impact, and opportunities for emission reduction.

Learning to use new standards comes with lessons. Last year was our inaugural report. AS we completed this year's reporting with a more informed perspective and knowledge base, we realized we had some misunderstandings and incorrect results last year. We corrected those so that we could represent a more accurate accounting from last year to this year. You can see these corrected results in Table 7 below. Ace Computers strives to report the most complete and correct information in every reporting. We stress the importance of reviewing past information against current calculations so that we can grow sustainably using the most correct information as we have and understand it, while providing the most complete understanding to our stakeholders.

5.1 Data^{9&10}

Table 1

GHG Emissions			
Total Emissions by Transportation Mode Type			
Transport Type	CO2 (kg)	CH4 (g)	N2O (g)
Medium- and Heavy-Duty Truck	2438809	21358.6	67702.7
Light-Duty Truck	124	3.4	3
Passenger Car	0	0	0
Rail	0	0	0
Aircraft	20196953	0	621911.3
Waterborne Craft	0	0	0
Total CO2 Equivalent Emissions (metric tons) - Product Transport		22,819.20	

Table 2

Total GHG Intensity Value			
	CO2 kg	tkm	GHG Intensity
Medium/Heavy-duty Truck	2438809	904311180	0.002696869
Light-Duty Truck	124	409	0.303178484
Aircraft	35923189.16	35923189	1.000000005

Table 3

Medium/Heavy-Duty Road Transport WTW

Item	GHG intensity (WTW) CO2 kg/tkm	tkm	WTW GHG emission (kg CO2 e)
Medium/Heavy-duty Truck	0.002696869	904311180	2438809
Total emissions kg CO2 e			2438809
Input data type	Primary data and secondary proxy data		
Mode coverage	Road		
Data verification statement	Data has been independently verified by a 3rd party		
Period covered	January 1, 2024 to December 31, 2024		

Table 4

Light-Duty Truck Transport WTW

Item	GHG intensity (WTW) CO2 kg/tkm	tkm	WTW GHG emission (kg CO2 e)
Light-Duty Truck	0.303178484	409	124
Total emissions kg CO2 e			124
Input data type	Primary data and secondary proxy data		
Mode coverage	Road		
Data verification statement	Data has been independently verified by a 3rd party		
Period covered	January 1, 2024 to December 31, 2024		

Table 5

Long Haul Air Transport WTW

Item	GHG intensity (WTW) CO2 kg/tkm	tkm	WTW GHG emission (kg CO2 e)
Long Haul Air	1.000000005	35923189	35923189.16
Total emissions kg CO2 e			35923189.16
Input data type	Primary data and secondary proxy data		
Mode coverage	Air		
Data verification statement	Data has been independently verified by a 3rd party		
Period covered	January 1, 2024 to December 31, 2024		

Table 6

Percentage WTW GHG Emission (kg CO2e) by Transport		38362122.16	kg CO2e
% Medium/Heavy-Duty		0.06357336	
% Light-Duty		0.000003232	
% Long Haul Air		0.936423408	

Table 7

Errors were found in both our understanding of the calculations and the calculations themselves as our learning of the Product Transport reporting process has evolved. We work within a calculator we developed ourselves. As our knowledge of the processes evolves, we modify and correct misinterpretations within our calculator. While GLEC offers a framework, we are often dependent on many other resources to build a calculator that provides correct final calculations. We seek to improve our calculators year-over-year and in doing so we are reporting our corrections here. In last year's reporting we realized that we had misunderstood the usage of "estimated" reporting. This was the first incorrect variation in our final numbers. The second incorrect variation was adding unnecessary shipment numbers which hyper-inflated data we applied to a dependency calculator used to achieve the total CO2e (metric tons). Lastly, there were categorizations for on-road versus non-road and we inadvertently entered data into wrong categorizations. We have corrected the values for FY 2023 below for transparency and to allow our stakeholders to view this year's FY2024 values against the corrected values for FY2023.

FY 2023 Transparency Review: Published VS. Corrected Values

Published: Total CO2 Equivalent Emissions (metric tons) - Product Transport	Corrected: Total CO2 Equivalent Emissions (metric tons) - Product Transport
13234.5	33497
Published: Total GHG Intensity Value	Corrected: Total GHG Intensity Value
M/H Duty: 7.084077643	M/H Duty: 0.054179646
L Duty: 7.207207207	L Duty: 6.288978416
Aircraft: 0.433717069	Aircraft: 0.433717094106309
Published: WTW	Corrected: WTW
M/H Duty: 405257.6255	M/H Duty: 1099857
L Duty: 23.78378378	L Duty: 24
Aircraft: 10578727.08	Aircraft: 8809825
Published: Percentage WTW GHG Emission (kg CO2e) by Transport	Corrected: Percentage WTW GHG Emission (kg CO2e) by Transport
M/H Duty: 3.6895	M/H Duty: 11.09879
L Duty: .0002	L Duty: .000242
Aircraft: 96.3103	Aircraft: 88.90097

5.2 Emissions Inventory

The latest emissions inventory analysis indicates that **Ace Computers'** product transportation remains a major contributor to its overall carbon footprint. The emissions are largely due to the transportation of finished products from manufacturing facilities to end-users, involving both road and air modes. To mitigate this, Ace Computers should prioritize optimizing transportation routes, enhancing load factors, and adopting cleaner fuels.

5.3 Energy Efficiency

Energy efficiency is crucial for reducing emissions. Ace Computers can optimize transportation routes, improve load factors, and enhance fuel efficiency. By refining data capture methods in shipping software, they achieve precise freight weight measurements, leading to accurate emission calculations. Additionally, Ace Computers is exploring ways to redirect air load to more efficient methods, such as combining freight trips or using rail or maritime options.

5.4 Environmental Impact Assessment

The latest environmental impact assessment highlights the importance of the entire product life cycle. Upstream (raw material extraction, manufacturing) and downstream (product use, disposal) emissions are significant. Ace Computers has completed six product carbon footprints, including transport data, to extend life cycle thinking. They are collaborating with suppliers and customers to address emissions holistically, identifying hotspots and prioritizing reduction efforts across the value chain.

5.5 Emissions Reduction Opportunities

Several emissions reduction opportunities were identified:

1. **Mode Shift Strategies:** **Ace Computers** can explore shifting from high-emission modes (e.g., air freight) to more sustainable options (e.g., rail or sea). Mode shift can significantly reduce emissions and enhance overall efficiency. We are actively assessing these possibilities.
2. **Fuel Efficiency Measures:** Investing in fuel-efficient vehicles, adopting alternative fuels, and optimizing vehicle maintenance can lead to substantial emission reductions. **Ace Computers** should evaluate fuel-efficient technologies and practices with realistic potential for implementation. In this past year, we started to track our company owned vehicles' mileage and maintenance as a step toward analyzing what we can do better.
3. **Collaboration Opportunities:** Collaborating with logistics partners and carriers can enhance emission reduction through shared transportation networks. However, accessing information is challenging due to paywalls. Ace Computers hope larger logistics companies will find a middle ground to assist small companies.
4. **Data-Driven Decision-Making:** **Ace Computers** should collect granular transportation data, analyze emissions trends, and set ambitious reduction targets. Data transparency is crucial. This year, they improved weight reporting accuracy and analyzed emission trends for the first time, leading to better understanding and corrections in their reporting process.



6. Case Studies

Efficient and sustainable product transportation remains a critical component of modern supply chains. In this report, we explore two case studies, each focusing on a distinct mode of transportation: **Road Transport** and **Air Transport**. Additionally, we examine our current understanding and future strategies for monitoring and influencing **Rail** and **Maritime Transport**. Our emphasis is on **Ace Computers'** commitment to sustainability as a leading technology solutions provider.

6.1.1 Case Study 1: Road Transport

Overview: Road transport involves the movement of goods via road networks using trucks, vans, and other motor vehicles. It is a versatile mode of transportation suitable for short to medium distances.

Ace Computers' Road Transport Strategy: **Ace Computers** relies significantly on road transport for its product distribution. The company maintains two well-maintained delivery trucks for light-duty short hauls, which are currently not equipped with advanced tracking systems. For medium to long-haul shipments, Ace Computers depend more heavily on large freight shipping partners. Here are some key points:

1. **Last-Mile Delivery:** **Ace Computers** use road transport for last-mile delivery to customers' doorsteps. This ensures timely and personalized service.
 2. **Challenges and Solutions:**
 - **Traffic Congestion:** Urban traffic congestion can delay deliveries. **Ace Computers** mitigate this by optimizing delivery routes and using real-time traffic data. We ask our freight partners to do the same.
 - **Environmental Impact:** The company is continuing to evaluate a transition to electric and hybrid vehicles to reduce emissions.
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6.1.2 Case Study 2: Air Transport

Overview: Air transport is synonymous with speed and efficiency. It is ideal for urgent shipments and long-distance transportation.

Ace Computers' Air Transport Approach: **Ace Computers** leverage air transport for critical scenarios, such as delivering high-value components or meeting tight deadlines. Here's how they do it:

1. **Cargo Airlines:** **Ace Computers** partners with reputable freight partners who use cargo airlines for international shipments. These airlines offer specialized cargo planes with secure compartments for sensitive electronics.

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2. **Cost Considerations:** While air transport is expensive, **Ace Computers** balances costs by prioritizing high-priority orders or orders that must be shipped overseas. We clearly determined from analysis of this year's data that we need to put a higher priority on assessing our air freight practices and determine more efficient systems to reduce air transportation CO2 emissions. Factoring for better and more efficient air freight protocols can potentially reduce cost and emissions.
 3. **Carbon Footprint:** The company has already invested in carbon offset programs to mitigate the environmental impact of air transport.
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6.1.3 Other Transport Modes

Overview: Both maritime and rail transport are essential components of a well-functioning global supply chain. They offer economic benefits, environmental sustainability, and strategic advantages.

Ace Computers' Maritime and Rail Strategy: A review of **Ace Computers'** data does not currently reveal the utilization of maritime or rail transport for bulk shipments and global distribution. This is data that we are looking to find for next year's reporting. Going deeper into documentation that can be provided by our partner carriers is on our radar. Key points include:

1. **Container Shipping:** The company can investigate the use of standardized containers for efficient loading and unloading. Containers protect products during transit.
 2. **Global Trade:** **Ace Computers'** products reach international markets through major ports. Ace Computers can determine if rail or maritime collaboration with shipping lines to optimize routes is a realistic sustainability option.
 3. **Environmental Responsibility:** **Ace Computers** adheres to environmental regulations and supports clean shipping initiatives.
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7. Recommendations

In our ongoing pursuit of sustainable and efficient product transportation, we present a set of recommendations tailored to **Ace Computers**, a technology solutions provider committed to environmental responsibility. Last year marked our inaugural year of reporting, and we are now looking to compare data and assess potential changes. These recommendations span three critical areas: **Policy, Fuel Efficiency Measures, and Operational Practices**.

1. Policy Recommendations

1. Refine Our Understanding and Usage of the GLEC Framework:

- The **Global Logistics Emissions Council (GLEC) Framework** provides a universal method for calculating and reporting logistics emissions across multi-modal supply chains.¹¹ By implementing this framework, **Ace Computers** can harmonize emissions reporting, making it easier to compare performance across different modes of transport.
- The **GLEC Framework** aligns with ISO 14083 standards and demonstrates **Ace Computers'** commitment to transparency and sustainability.

2. Collaborate with Industry Stakeholders:

- Engage with industry associations, regulatory bodies, and other stakeholders to shape policies that promote sustainable transportation practices.
- Advocate for incentives or tax breaks for companies investing in fuel-efficient technologies and alternative fuels.

3. Set Emission Reduction Targets:

- Last year marked our inaugural year of reporting, during which we began the process of establishing emission reduction targets. We are pleased to announce that we have now completed and published our targets.
- We continue to regularly monitor progress and adjust strategies as needed.

4. **Target:** Our original target was to reduce CO2e emissions from product transportation by 10% by 2030. However, we had not actually started the process of setting a Science Based Target. As we went through that process, we realized that we required realistic adjustment. We have amended this target based on our findings from this process of SBTi analysis. Our new target is as follows: We are declaring Scope 1 & 2 targets aligned with climate science as an absolute average annual linear reduction of at least 4.2% of Scope 1 and 2 emissions from the Baseline year of 2022 to the target year of 2032.

2. Fuel Efficiency Measures

1. Fleet Optimization:

- Evaluate the composition of Ace Computers' vehicle fleet and the major freight providers we use. Consider transitioning to electric or hybrid vehicles where feasible.
- Continue to verify that freight partners are using telematics and route optimization software to minimize fuel consumption and reduce idle time.

2. Eco-Driving Training:

- Train drivers on fuel-efficient driving techniques. Encourage practices such as smooth acceleration, maintaining consistent speeds, and avoiding unnecessary idling.
- Monitor driver behavior and provide feedback to promote eco-friendly driving habits.

3. Alternative Fuels:

- Explore biofuels, compressed natural gas (CNG), or hydrogen as alternatives to traditional fossil fuels.
- Collaborate with fuel suppliers to ensure availability and cost-effectiveness.

4. **Target:** Provide fuel-efficient driving technique training for our company drivers, assess company drivers once per year and provide feedback and additional training. We are working to create training for our online LMS system that would effect this training, assessment and feedback process.

3. Operational Recommendations

1. Cargo Consolidation:

- Optimize cargo loads to maximize capacity utilization. Consolidate shipments whenever possible.
- Use standardized containers for efficient handling and reduced waste.

2. Modal Shift:

- Evaluate the most suitable mode of transport for each shipment. Consider rail or maritime transport for longer distances.
- Prioritize air transport only for urgent or time-sensitive deliveries.

3. Maintenance and Upkeep:

- Regularly service and maintain vehicles to ensure optimal fuel efficiency.
- Monitor tire pressure, engine performance, and aerodynamics.

4. **Supplier Collaboration:**

- Consider joint transportation initiatives with other companies to reduce empty backhaul trips.

5. **Targets:** (1) Audit company vehicle service and maintenance records bi-annually to ensure optimal fuel efficiency. We are working to create a process to capture this information. (2) Evaluate use of rail and maritime routes in place of 5% of current road and air transportation. This was a larger initiative than we could handle in one year and we are continuing to look into how to effect a change like this.



8 Scope 3 Greenhouse Gas (GHG) Protocol Declaration - Ace Computers (2022)

Ace Computers is committed to environmental responsibility and sustainability. As part of our efforts to address climate impacts throughout our value chain, we assess and report our Scope 3 emissions.

Scope 3 Emissions

Scope 3 emissions include indirect emissions resulting from value chain activities. We evaluate emissions from the following 15 categories:

1. Purchased goods and services
2. Capital goods
3. Fuel- and energy-related activities (not included in Scopes 1 and 2)
4. Upstream transportation and distribution
5. Waste generated in operations
6. Business travel
7. Employee commuting
8. Upstream leased assets
9. Downstream transportation and distribution
10. Processing of sold products
11. Use of sold products
12. End-of-life treatment of sold products
13. Downstream leased assets
14. Franchises
15. Investments

Total Product Transport Scope 3 Emissions

This report is a drill down of **Product Transport** scope 3 emissions. This is our second year capturing Scope 3 emissions. Our total Product Transport Scope 3 emissions for fiscal year 2023 was reported as **13234.5 metric tons of CO2 equivalent (CO2e)**. We discovered errors in our understanding and utilization of the GLEC framework and data accounting. We corrected the data from last year, and accurately, it was **33,497.9 metric tons of CO2 equivalent (CO2e)**. Our fiscal year 2022 data indicated **4604 metric tons of CO2 equivalent (CO2e)**. This large discrepancy from 2022 to 2023 is accounted for in our ability to assess data on a more granular level between these years.

Ace Computers fiscal year 2024 reporting is **22819.2 metric tons of CO2 equivalent (CO2e)**. Analysis between FY2023 and FY2024 shows a **decrease of 10678.7 CO2e**. Upon analysis, we believe this is due to our more precise data capture of freight weight from 2023 to 2024, where we corrected an inefficient data entry gap within our internal shipping process. Due to this change, we were able to more accurately assess our product transport data.

While we did not do better in terms of the values we reported last year, we were able to uncover flaws with our understanding, data analysis and data calculation to more accurately reflect our true CO2e footprint for product transportation. In addition, these changes did help us to determine a more accurate measure for us to compare against next years data where we will work to enact changes to continue this CO2e decrease.

Commitment

Ace Computers actively collaborates with suppliers, customers, and partners to reduce our environmental impact and promote sustainable practices.

For more detailed information, please refer to our Corporate Sustainability Report FY2023. The values calculated as part of this report, plus the additional 15 categories above, will be available together in our FY2024 Corporate Sustainability Report and FY2024 Corporate GHG Inventory report.

Note: Ace Computers' Corporate Sustainability Report for FY2024 is currently being compiled and will be available on Ace Computers' website between Q2 and Q3 of 2025.



9 Conclusion

As the logistics and sustainability landscape continues to evolve, **Ace Computers** reaffirms its dedication to innovation, quality, and environmental stewardship. By aligning with the **GLEC Framework**, we strengthen our commitment to a sustainable future while maintaining efficient and reliable product transportation for our clients.

This year's analysis offers a detailed view of **Ace Computers'** transportation-related emissions, providing the insights needed to make strategic, data-driven decisions and implement focused emission reduction initiatives.

The **GLEC Framework** continues to serve as a vital tool for companies like **Ace Computers** to manage logistics emissions effectively. By leveraging this globally recognized standard, we not only responsibly track our environmental footprint but also demonstrate leadership in sustainable logistics. The synergy between sustainability and efficient transport remains central to our operations, with **GLEC** guiding the way.

Ace Computers is well-positioned to lead the charge in sustainable logistics. By executing the recommended strategies, we can further reduce emissions, improve energy efficiency, and support the broader transition to a net-zero logistics sector.

Our transportation model, which strategically combines road and air freight, is designed to balance speed, cost, and sustainability. Through careful analysis of each case study, **Ace Computers** ensures timely deliveries while consistently working to uphold our environmental values. Our commitment to sustainable logistics remains unwavering.

Ace Computers continues to embrace its role as a sustainability leader in product transportation. By acting on these recommendations, we can enhance operational performance, reduce our carbon footprint, and contribute meaningfully to a more sustainable global supply chain.

For more information about our offerings, please visit our website: **Ace Computers**.¹²



REFERENCES

1. GLOBAL LOGISTICS EMISSIONS COUNCIL (GLEC) FRAMEWORK
2. IT SERVICES COMPANY SOLUTIONS ACE COMPUTERS
3. GHG PROTOCOL
4. RESPONSIBLE MINERAL
5. ACE CSR FY2023
6. ISO ALIGNMENT
7. GLEC AND OTHER INITIATIVES
8. INDUSTRY STANDARDS AND BEST PRACTICES ALIGNMENT
9. GHG PROTOCOL CALCULATIONS TOOLS AND GUIDANCE
10. SIMPLIFIED GHG EMISSIONS CALCULATOR
11. MULTI-MODAL SUPPLY CHAIN CALCULATIONS AND REPORTING
12. IT SERVICES COMPANY SOLUTIONS L ACE COMPUTERS