2024
APACHE FOOTWEAR GROUP
GHG Inventory Report

About the Report

In line with global sustainability efforts, Apache Footwear Ltd. joined the Science Based Targets initiative (SBTi) in 2022 and initiated its greenhouse gas (GHG) inventory process in 2022. In 2024, the company published its first **GHG Inventory Report.**

This report outlines our 2024 carbon emission inventory, 2030 carbon reduction target, changes in emissions compared to the 2022 baseline, and the actions we are taking to meet these goals.

Reporting Period

The reporting period covered in this report is from **January 1 to December 31, 2024**. To ensure the completeness and comparability of the information, historical data from previous years have also been included for certain indicators.

Report Publication

The sustainability information and performance disclosed in this report are published annually in both Chinese and English on the Apache Group website.

Current Version May 2025
(Reporting Year 2024)

Previous Version November 2024
(Reporting Year 2023)

Disclosure Scope

The information disclosed in this report includes data from the production sites in China, Vietnam, and India, which are involved in actual production operations. Any adjustments or discrepancies in the scope of the data will be noted within the relevant sections of the report.

Production Sites

China	Apache Footwear Ltd.
India	Apache Footwear India Pvt. Ltd.
Vietnam	Apache Footwear Vietnam Company Ltd.

Identification and Interaction with Stakeholders

Apache Group aligns with the AA1000 Stakeholder Engagement Standard (SES) and identifies, engages, and regularly communicates with key stakeholders based on five principles: responsibility, influence, concern, diverse perspectives, and dependency, working together to advance sustainability goals.

Customers

As a key sustainability partner, Apache actively supports customers' initiatives by sharing experiences, carbon reduction goals, and achievements to jointly advance sustainability.

Employees

Enhances employee ESG awareness through knowledge campaigns, seminars, regular OHS drills, and the distribution of group sustainability newsletters.

Community

Engages in community care and public welfare activities to strengthen local ties and promote sustainable community development.

Suppliers

Promotes sustainable supply chain strategies by encouraging suppliers to produce recyclable and refurbishable products, reducing energy use and carbon emissions.

NPOs

Actively supports local non-profit organizations, community groups, and individuals to foster social well-being and development.

Government

Complies with relevant regulations and supports government sustainability policies and environmental protection goals.

Key Sustainability Topics and Management Approaches

Climate Strategy and Low-Carbon Transition

Apache Group has actively responded to climate change by joining the SBTi and initiating GHG inventory process. In 2024, we published our first annual GHG Inventory Report, disclosing emissions data, targets, and progress toward carbon reduction. This demonstrates our commitment to transparency and ongoing carbon management toward our 2030 reduction goals.

Highlight Actions of 2024

- Set carbon reduction targets and strategies with regular performance tracking.
- Complete GHG inventories across production sites, with annual updates and disclosures.
- Raise carbon reduction awareness among employees through sustainability publications, energy-saving campaigns, and tree-planting activities.

Energy and Resource Management

Apache Group focuses on energy conservation and management, implementing energy-saving measures and optimizing usage. By adopting smart energy management systems, we improve monitoring and data analysis to enhance efficiency. Also, we expand renewable energy usage, including rooftop solar, green electricity, and renewable certificates, gradually reducing reliance on traditional sources and promoting low-carbon operations.

Highlight Actions of 2024

- Expand the Group's RE use, reaching 16.4% of total energy in 2024.
- Purchased 13.38M KWh green power; generated 4.26M KWh solar.
- Replaced LPG with electric cookers in canteens.
- Upgraded high-energy equipment to enhance efficiency and cut emissions.

Resource Sustainability and Environmental Management

Apache Group is committed to sustainable resource use and environmental protection.
We actively reduce environmental impact through water conservation, zero landfill, and optimized VOC treatment systems.

Highlight Actions of 2024

- Promote resource recycling and reuse, achieving a 99%+ waste diversion rate in 2024 to support circular resource use.
- Follow ZDHC standards to ensure compliant chemical management and strengthen pollution control.
- Continuously optimize waste gas treatment systems to reduce environmental impact.

Progress Towards Carbon Reduction Targets in 2024

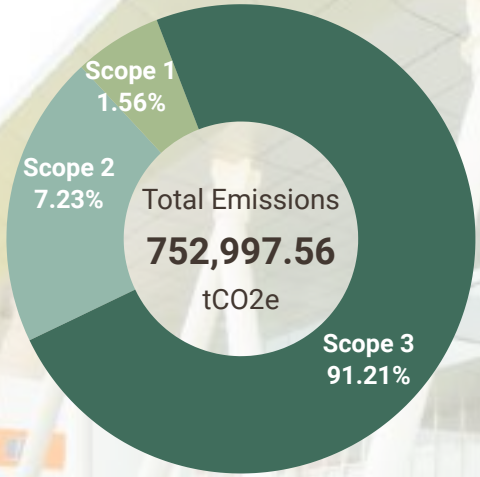
Since 2022, Apache has initiated greenhouse gas (GHG) inventories and set reduction targets for 2030. We are committed to reducing absolute Scope 1 and 2 GHG emissions by 42% from a 2022 baseline, while also reducing Scope 3 GHG emissions intensity by 51.6% per million USD of value added within the same timeframe.

In accordance with ISO 14064 standards and the GHG Protocol methodology, Apache conducts annual GHG inventories across its production sites in China, Vietnam, and India. These inventories serve as the foundation for our decarbonization strategies and action plans. Based on historical results, the majority of Scope 1 and 2 emissions originate from Scope 2; therefore, our strategy prioritizes energy conservation and management, supported by the use of renewable energy.

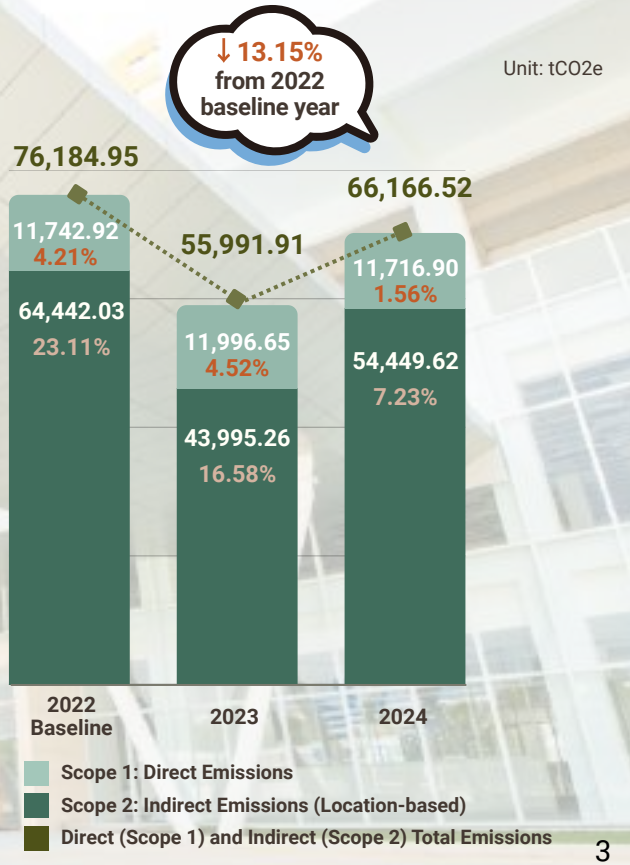
In 2024, total direct (Scope 1) and indirect (Scope 2) emissions from all production sites amounted to 66,166.52 tCO_2e (location-based), marking a 13.15% decrease compared to the 2022 baseline. This reduction was driven by the continued implementation of energy-saving measures, adoption of smart management systems, and increased integration of renewable energy. Key actions included installing rooftop solar power systems, procuring green electricity, and acquiring unbundled energy attribute certificates (unbundled EACs).

For other indirect emissions (Scope 3), total emissions in 2024 reached 686,831.04 tCO_2e, showing an increase from the 2022 baseline. This rise was primarily driven by a significant increase in production volume, which in turn intensified supply chain activities such as Category 1: Purchased goods and services and Category 9: Downstream transportation and distribution. Moving forward, the Group will continue to promote the use of reusable materials and packaging, optimize waste management and energy transitions, and strengthen supply chain management to further reduce Scope 3 emissions.

Apache Group
2024 GHG Emissions (by Scope)



Direct and Indirect GHG Emissions



GHG Emissions Overview (2021–2023)

Unit: tCO2e

Project	2022 (Baseline Year)	2023	2024
Scope 1: Direct Emissions	11,742.92	11,996.65	11,716.90
Scope 2: Energy Indirect Emissions (Location-based)	64,442.03	43,995.26	54,449.62
Scope 3: Other Indirect Emissions	202,608.47	209,425.52	686,831.04
Total	**278,793.42**	**265,417.43**	**752,997.56**

Scope 3 Greenhouse Gas (Other Indirect Emissions)

Unit: tCO2e

Project	2022 (Baseline Year)	2023	2024	Emission Source Description
S3-1 Purchased goods and services	139,458.39	156,963.84	614,005.93	Procured raw materials, and water supply transportation.
S3-2 Capital Goods	2,795.64	2,314.36	2,695.78	Fixed assets (such as machinery and computers)
S3-3 Fuel- and energy- related activities	17,865.52	16,413.72	21,011.18	Various types of energy used in factories
S3-4 Upstream transportation and distribution	7,348.17	2,636.85	4,306.69	Raw material transportation (by sea, air, cargo).
S3-5 Waste generated in operations	659.40	741.08	853.99	Waste transportation (by truck) and other factory-generated waste.
S3-6 Business travel	133.14	257.71	391.85	Air travel (economy class), rail, bus, and hotel stays.
S3-7 Employee commuting	10,340.67	8,369.47	10,585.94	Self-driving cars, electric (motorcycles).
S3-8 Upstream leased assets	-	-	-	Not applicable
S3-9 Downstream transportation and distribution	18,691.10	17,847.14	26,227.82	Finished footwear (online, offline)
S3-10 Processing of sold products	-	-	-	Not applicable
S3-11 Use of sold products	-	-	-	Not applicable
S3-12 End-of-life treatment of sold products	5,316.44	3,881.35	6,751.85	End-of-life product disposal (landfilling)
S3-13 Downstream leased assets	-	-	-	Not applicable
S3-14 Franchises	-	-	-	Not applicable
S3-15 Investments	-	-	-	Not applicable
Total	202,608.47	209,425.52	686,831.04	

Note:
1. Greenhouse Gases include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), and nitrogen trifluoride (NF3).
2. The inventory follows the ISO 14064 standards and GHG Protocol. As Apache Footwear Ltd. is not involved in upstream leased assets, processing of sold products, use of sold products, downstream leased assets, franchises, or investments, these are considered not applicable.
3. Through SBTi, we regularly review progress and implementation of short-, medium-, and long-term energy-saving and carbon reduction targets.
4. Establish an internal greenhouse gas (GHG) management and policies to control changes in the baseline year, emissions, and targets, including clear conditions for baseline year adjustments and the need to adjust targets based on circumstances.

SBTi target carbon reduction strategy and implementation progress

Sites	Key Strategy	Strategy Description & Progress	Implementation
China (APE)	Renewable Energy	In 2024, APE installed rooftop solar power systems (including solar streetlights) and signed a green power purchase agreement (PPA), reducing Scope 2 emissions by 1,064.37 tCO_2e and 3,423.83 tCO_2e, respectively.	
	Energy / Resource Usage	Energy efficiency is improved via both management and technical measures, as process optimization, consolidating production lines, waste and leakage reduction, use of energy-efficient elevators, and replacement of outdated equipment. An Energy Management Team has been established to monitor reduction targets, issue energy-saving guidelines, and conduct regular reviews to enhance overall energy performance.	
		Following circular economy principles, waste is managed through recycling, reuse, or incineration for power generation.	
		Used automatic cutting machines to maximize material utilization and reduce waste.	
	Low-carbon Materials	Selected materials certified by RCS, such as recyclable mesh fabric, synthetic leather, and TPU; packaging uses reusable cartons.	
Vietnam (APH)	Renewable Energy	Purchase unbundled EACs and the I-REC's generating capacity reached 5,500 MWh in 2024.	
	Energy / Resource Usage	Fixed capacitor installation for Plant L's transformers to improve power factor and reduce transmission loss, cutting emissions by 39.99 tCO_2e annually.	
		Optimized air compressor room intake system to improve heat management and reduce indoor temperature by an estimated 5–15°C, improving efficiency and cutting energy use: Estimated annual energy savings: 22.35 tCO_2e.	
		Regularly inspect and maintain the air compressor system, including valves, pipes, and connections; repair any damaged parts; and provide regular training to prevent misuse. Estimated annual energy savings: 47.21 tCO_2e.	
		Implement the Energy Audit Program to assess energy use, identify improvement opportunities, and propose energy-saving solutions.	
		Assign a responsible person in each area to manage light switches and actively turn off lights in unoccupied or overlit areas. Estimated annual energy savings of 5.17 tCO_2e.	
	Waste Diversion	Increase waste recycling and promote waste-to-energy conversion, reducing 3,236 tCO2e in 2024.	
	Employee Awareness & Behavior Change	• Enhance employee energy-saving awareness via broadcasts, posters, monthly audits with improvements, and regular training for managers. • Energy officers completed the Energy Manager Course and received certification in June 2024.	
India (APC)	Renewable Energy	• Installed roof top solar with 1.97 MW in 2021, which have been generating stable power since. • Signed a direct power purchase agreement (PPA) with the power company to expand the rooftop solar system by 2.5 MW, expected to be completed by August 2025, with plans to further increase capacity by 1 MW by June 2026.	
		Purchase unbundled EACs and the I-REC's generating capacity reached 1,500 MWh in 2024.	
	Energy / Resource Usage	Gradually upgrade factory equipment to optimize energy use and reduce carbon emissions. Measures include: • Installed electric rice cabinets, griddles, and kettles to replace LPG usage, expected to reduce 50 tCO_2e and save $9,500 per month. • Replaced 70% of steam hot-press machines with electric hot-press mold machines, expected to reduce 45 tCO_2e and save $12,000 per month.	
		Gradually replace existing forklifts with electric models, expected to be completed by the end of 2025 to reduce mobile emissions.	
		Continuously promoting energy saving and carbon reduction through multiple measures to optimize energy efficiency and lower emissions, with results as follows: • Replacing high-energy-consuming equipments (such as VFD based model compressors, servomotor stiching machines, PLC module ovens), saving 961,872 kWh of electricity annually and reducing 540 tCO_2 emissions. • Optimized LED lighting system, saving 40% of electricity use and reducing 54.09 tCO_2e annually.	
	Purchase Goods & Services	Actively promote sustainable supply chain strategies, ensure suppliers produce recyclable and renewable products, with 6 local suppliers onboard and plans to further expand local partnerships.	

Apache's Sustainability Learning Hub -- Hydrogen: Powering the Future

At COP29, former U.S. Vice President Al Gore emphasized that
we can no longer keep paying for disaster recovery while ignoring the root causes of the problem.

In response to climate change, global initiatives have increasingly emphasized the urgency of immediate action.
Clean energy has become a key driver of the transition, and hydrogen energy has drawn widespread attention this year due to its high potential.

COP29：Hydrogen Declaration

At COP29 held in November 2024, over 30 countries committed to advancing low-carbon and clean hydrogen development. **They aim to reduce the annual 96 million tons of fossil-fuel-based "grey hydrogen" and greatly expand green hydrogen capacity to achieve long-term decarbonization goals.** This marks a shift as hydrogen energy moves from research to the center of global policy and investment.

What is hydrogen energy? Common production methods

Hydrogen energy uses hydrogen as an energy carrier, producing electricity and heat by reacting with oxygen, **with water as its only byproduct and zero carbon emissions.** Depending on the production method, hydrogen is classified into several types—these categories reflect the carbon footprint of the process and determine its environmental friendliness.

Gray Hydrogen

Most of today's hydrogen is produced from natural gas through steam methane reforming, which generates high carbon emissions. It is commonly known as "grey hydrogen."

Blue Hydrogen

Blue hydrogen is also produced from fossil fuels, but unlike grey hydrogen, its emissions are reduced through carbon capture, storage, and utilization (CCSU) technologies.

Green Hydrogen

Using renewable energy sources (such as wind and solar) through the process of electrolysis to produce hydrogen and oxygen with nearly zero carbon emissions, it is therefore referred to as 'clean hydrogen.'

Challenges

1. **Cost and Efficiency:** Green hydrogen production costs $3–6/kg, higher than gray hydrogen ($1–2/kg); also with high energy consumption and low efficiency.
2. **Infrastructure Gaps:** Hydrogen storage requires high-pressure or low-temperature facilities, however, storage, transport, and refueling stations are still under development.
3. **Economic and Policy Uncertainty:** International policy support and subsidies vary and fluctuate, with immature market demand limiting industry growth.

Opportunities

1. **Key to Clean Energy Transition:** Hydrogen offers zero-carbon emissions and serves as a vital decarbonization solution, especially in hard-to-electrify sectors like steel and transporta.
2. **Flexible Use and Storage:** As a renewable energy storage medium, hydrogen supports supply-demand balance and system stability.
3. **International Cooperation and Policy Support:** COP29 promotes cross-border collaboration and investment, driving innovation and infrastructure growth.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