

Footprint Verification Program (FVP)

Verification Report

Prepared for:
Steelcase Inc.
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Emission Year:
FY2021 (March 1, 2020 – February 28, 2021)

Prepared by:
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July 21, 2021
SCS Footprint Verification Program (FVP)



Introduction

This report presented by the SCS Global Services Footprint Verification Program, summarizes the process and results of the entity-wide greenhouse gas emissions inventory verification for Steelcase Inc. emission year FY2021 (March 1, 2020 – February 28, 2021). This assessment is based upon an evaluation against the reporting criteria within the WRI GHG Protocol and verification criteria found within ISO 14064-3. See below for a complete list of criteria.

Project Details

The verification was carried out by the verification team per the verification scope, objectives, and criteria as detailed below.

Scope	
Project Name	2021 World Resources Institute/Carbon Disclosure Project - Verification
Reporting Period	FY2021 (March 1, 2020 – February 28, 2021)
Geographical Boundaries	Worldwide operations, 27 global manufacturing (1 new in UK in 2020) and office facilities. Headquarters located in Michigan, United States
Organizational Boundaries	Financial Control
GHG Emission Scope	1, 2, 3 (5 categories)
GHG Emissions	CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , and NF ₃ as applicable
GHG Sources, sinks, and/or reservoirs	Building Energy (purchased Electricity, natural gas, LPG, jet fuel, gasoline, diesel, refrigerants : Scope 3 Categories: Purchased goods and services, Capital goods, Upstream Transportation and distribution, Waste from operations, Business Travel
Level of Assurance	Limited
Treatment of Materiality	+/-5% quantitative threshold for direct and indirect emissions, qualitative based upon requirements specified within referenced criteria

Verification Objectives	
Objective #1	Evaluate the organization's GHG inventory per the level of assurance and materiality specified, including assessment of any significant changes and the organization's GHG-related controls
Objective #2	Evaluate conformance with specified verification criteria

Verification Criteria	
Criteria #1	World Resources Institute/World Business Council for Sustainable Development's "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" dated March 2004
Criteria #2	World Resources Institute/World Business Council for Sustainable Development's "Scope 2 Guidance Document: An Amendment to the GHG Protocol Corporate Standard" dated 2015
Criteria #3	World Resources Institute/World Business Council for Sustainable Development's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" dated 2011
Criteria #4	CDP Investor Information Request
Criteria #5	ISO 14064-3: 2006 Specification with guidance for the validation and verification of GHG assertions

Verification Team	
Lead Verifier	Tavio Benetti
Verifier	Gerry Mansell
Independent Reviewer	Nicole Muñoz

Final Emissions Summary

The final GHG emissions inventory following all corrections made by the client is summarized below both in tonnes of each GHG and tonnes of CO2 equivalents (CO2e).

EMISSIONS SUMMARY - tonnes CO2e	
SCOPE	TOTAL (tCO2e)
SCOPE 1	32,764
SCOPE 2 - LOCATION	57,629
SCOPE 2 - MARKET	-
SCOPE 3 - PURCHASED GOODS & SERVICES	425,991
SCOPE 3 - CAPITAL GOODS	45,635
SCOPE 3 - UPSTREAM TRANSPORTATION & DISTRIBUTION	52,431
SCOPE 3 - WASTE FROM OPERATIONS	5,820
SCOPE 3 - BUSINESS TRAVEL	870

Verification Opinion

Based upon the reporting scope, criteria, objectives, and agreed upon level of assurance, SCS has issued the following verification opinion:

- Positive Verification – No evidence was found that the inventory was not prepared in all material respects with the reporting criteria (Limited)
- Negative Verification – Not prepared in all material respects with the reporting criteria

Verification Methodology

The verification was carried out according to ISO 14064-3. The activities performed for this verification were captured within the Verification Plan and Sampling Plan which detail the verification activities and data checks performed. *See Appendix I – Verification Plan and Appendix II – Sampling Plan.*

In defining the Verification Plan and Sampling Plan, a risk assessment was completed which included an initial review of GHG inventory data and the structure of the GHG accounting and management processes. The risk assessment is utilized to identify potential areas within the inventory data and management processes of higher risk and identify audit activities to target these areas for further evaluation and to guide the remainder of the audit activities. The results of the Risk Assessment were used to develop the Verification Plan and Sampling Plan used to conduct the remainder of verification activities.

Materiality Assessment

The verification included an assessment of inventory materiality which is based upon an independent assessment of whether the data presented is free from material discrepancies (+/- 5% error) in calculated totals assessed for each scope independently. Materiality was assessed through independent crosschecks of data, calculations, emission factors, and/or calculation methodologies. The results of this assessment are displayed below including % of inventory data crosschecked, the difference between auditor and client calculations and an extrapolated % error for all inventory scopes.

EMISSIONS SUMMARY - tonnes CO ₂ e	TOTAL (tCO ₂ e)	SAMPLE SIZE (tCO ₂ e)	% SAMPLED	CLIENT DIFFERENCE (tCO ₂ e)	ERROR (%)	MATERIAL ERROR?
SCOPE						
SCOPE 1	32,763.55	32,832.07	100%	(382.84)	-1.17%	N
SCOPE 2 - LOCATION	57,629.27	45,121.80	78%	(383.05)	-0.85%	N
SCOPE 2 - MARKET	-	-	100%	-	0.00%	N

Misstatements Identified & Final Corrections

Throughout the course of the verification, independent calculations and data checks were performed on the client's data. Discrepancies identified were flagged as a non-conformance (NCR), client notification was provided, and the client was provided an opportunity to respond and correct. The table below summarizes the misstatements identified including the Difference (tCO₂e) and % Error for the initial and final inventory.

Emission Category	FINAL REVISION	CLIENT CALCULATIONS				AR5		Differenc	Units	% Error
		Reporting Unit	Activity Data	Units	Emissions (tCO ₂ e)	Emissions	tCO ₂ e			
SCOPE 1	X	Diesel	143,391	Gallons	1,468	1,482	(13)	tCO ₂ e	-1%	
SCOPE 1	X	Gasoline (Petrol)	8,333	Gallons	57	74	(17)	tCO ₂ e	-23%	
SCOPE 1	X	Jet Fuel (Jet A or A-1)	60,342	Gallons	590	593	(3)	tCO ₂ e	0%	
SCOPE 1	X	Liquefied Petroleum Gas (LPG)	35,575	Gallons	203	204	(2)	tCO ₂ e	-1%	
SCOPE 1	X	Natural Gas	5,692,431	Therms	30,264	30,354	(90)	tCO ₂ e	0%	
SCOPE 1	X	Propane	88,279	Gallons	249	507	(258)	tCO ₂ e	-51%	
						#N/A	#N/A	tCO ₂ e	#N/A	
SCOPE 2 - LOCATION	X	Caledonia Wood Plant	20,335,475	kWh	11,039	11,034	5	tCO ₂ e	0%	
SCOPE 2 - LOCATION	X	Athens Plant	19,645,200	kWh	8,515	8,515	0	tCO ₂ e	0%	
SCOPE 2 - LOCATION	X	Grand Rapids GBC and LINC	12,384,000	kWh	6,723	6,727	(4)	tCO ₂ e	0%	
SCOPE 2 - LOCATION	X	Reynosa Plant	9,328,743	kWh	4,256	4,682	(426)	tCO ₂ e	-9%	
SCOPE 2 - LOCATION	X	Kentwood (Multi Sites)	25,760,498	kWh	13,984	13,983	1	tCO ₂ e	0%	
SCOPE 2 - LOCATION	X	Carrollton Smith System Plant (Building B)	1,425,626	kWh	605	564	41	tCO ₂ e	7%	

Verification Findings

Throughout the verification SCS developed findings which included: New Information Requests (NIRs), Non-Conformity Reports (NCRs), and Observations (OBSs). Please see *Appendix III – List of Findings* for a detailed description of the findings and their resolution.

SCS Certification Mark

Upon receiving a positive verification your project is eligible to use the SCS Kingfisher Certification Mark C for Carbon Footprint – Entity Verification, as represented on the cover page of this verification report. The SCS Kingfisher Certification Mark increases the recognition of your achievements with your verification.

Please refer to the *SCS Verification and Validation Mark Labeling and Language Guide: Mark C* provided to you by the GHG Verification Program staff for more information about your Mark and usage. Should you have any additional questions regarding your Mark, use, messaging, or other marketing opportunities, please contact the GHG Verification Team or SCS Marketing Staff at NRmarcom@scsglobalservices.com.

Appendix I: Verification Plan

PROJECT PHASE	ACTIVITIES
Pre-Engagement	
Conflict of Interest	Assessment of corporate and project team conflict of interest.
Approach Phase	
Kickoff Meeting	introduce audit team, process, review project scope, criteria, and objectives, make initial documentation requests
Risk Assessment	review of initial documentation to assess sources and the magnitude of potential errors, omissions, and misrepresentations which require further verification activities
Verification & Sampling Plan	plan that details the audit activities to be conducted, proposed schedule of events, and specific records or data sets to be reviewed
Findings (Initial)	submission of any findings from Approach Phase, client response required
Verification Phase	
Assessment of the GHG Information System & Controls	assessment of management and data systems used to generate GHG inventory
Assessment of GHG Data and Information	assessment of GHG inventory data including data inputs, calculations, emission factors, and data aggregation
Assessment Against the Verification Criteria	assessment against the requirements for inventory preparation and verification specified within the referenced reporting criteria
Evaluation of the GHG Assertion	evaluation that the GHG assertion is free from material misstatements
Findings (Final)	submission to client of any final findings, client response and corrections, closure of findings
Draft Verification Report & Verification Statement	drafting of report and verification statement in preparation for independent review
Review & Issuance of Verification Statement	
Independent Review	Independent review of the assessment by a qualified individual who has not been involved in the audit process
Verification Statement	Finalization of verification statement
Client Communications	Issuance of final verification statement, report, and logos to client.

Appendix II: Sampling Plan

Inventory Boundary & Infrastructure		
TOPIC	SAMPLE FOR REVIEW	
Boundary	Review 10k disclosure for consistency of property disclosure, review and YOY changes	
Data Management & Controls		
TOPIC	SAMPLE FOR REVIEW	
QA/QC	Review Resource Advisor QA/QC procedures	
Independent Data Checks	See below for invoice & recalculation checks	
Jet Fuel	Confirm data source and YOY reductions are reflective of flight activity	
GHG Data		
SCOPE 1		
EMISSION SOURCE	SAMPLE FOR REVIEW	% of Scope
Natural Gas	Invoice Sample & Recalculation: Kentwood Energy Center, Athens Plant, Caledonia Wood Plant, Kentwood Plant, Grand Rapids GBC and LINC, Carrollton Smith System Plant (Building B)	74%
Other Fuels	Recalculate Emissions from remaining NG, Diesel, Propane, LPG, Jet Fuel	26%
	TOTAL	100%
SCOPE 2		
EMISSION SOURCE	SAMPLE FOR REVIEW	% of Scope
Electricity	Invoice Sample & Recalculation: Caledonia Wood Plant, Kentwood Plant, Athens Plant, Grand Rapids GBC and LINC, Reynosa Plant, Kentwood RDC	74%
Market Based Calculations	Review any RECs, PPAs, or other instruments used for Market Based Renewable Energy claims	
	TOTAL	74%

Appendix III: List of Findings

Status	Finding #	Type	Issued Date	Due Date	Date Closed	Verifier Findings	Client Response	Conclusion
New Information Request (Mandatory request for additional information)								
CLOSED	1	NIR	7/2/2021	7/9/2021	7/22/2021	Confirm the following boundary changes are correct: Removed from inventory: Genk Plant (Sold Feb 2020), Okmulgee Plant (Sold Feb 2020), Plano Warehouse 2, Residence 2, Wallen House New to inventory: Hengoed Plan (Orangebox)	We are actually keeping Wallen House in our Scope 1&2 inventory, the rest of these changes are correct. We are also adding Kentwood Credit Union in the inventory. There's an updated emissions report named "updated 0707-FY21 Emissions Report"	Corrections & YOY changes confirmed, finding closed.
CLOSED	2	NIR	7/2/2021	7/9/2021	7/22/2021	Please confirm Scope 2 Market Based emission calculations. If RECs or other instruments are utilized, please provide records of purchase.	REC & GO purchase records provided	Confirmed that Scope 2 Market = 0 tCO2e based upon 100% coverage with RECS, I-RECS, and/or GO's, finding closed.
CLOSED	3	NIR	7/2/2021	7/9/2021	7/22/2021	For Jet Fuel, year over year changes resulted in a reduction from 4,147.9 tCO2e in FY20 to 590.3 tCO2e in FY21 (-603%). Please provide details on the data source and reasonableness of the reduction based upon changes in flight activity for FY21.	Jet Fuel usage data comes from the Environment, Health, and Safety Manager at the GR Hangar location. Their data is entered and tracked in Resource Advisor. I have also reached out to our Aviation Administrator who sent me the following data that confirms a sharp reduction in jet usage during FY21: Activity (*Aircraft usage is not measured in miles – it is measured in hours flown): FY20 1329.9 hours FY21 71.6 hours Fuel Consumption: FY20 2,942,441 lbs / 439,170.30 gal FY21 399,300 lbs / 59,597.01 gal	Confirmed that aircraft usage reflects the sharp reduction in FY21 emissions from aircraft, finding closed.
CLOSED	4	NIR	7/2/2021	7/9/2021	7/22/2021	Please provide access to resource advisor for invoice review	RA access should be received via email shortly per email from Ken on 7/2/2021	RA access provided

Verification Review of the Scope 3 Greenhouse Gas Emissions Inventory for Steelcase

Prepared for:

Steelcase

Date Completed:

July 22, 2021

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Table of Contents

1.0 Introduction	2
2.0 Scope and Objective	2
3.0 Verification Procedures.....	3
3.1 Estimation Methodology	4
3.2 Purchased goods and services	5
3.3 Capital Goods	5
3.4 Upstream transportation and distribution	5
3.5 Waste generated in operations	5
3.6 Business travel	6
3.0 Assurance Findings.....	6

1.0 Introduction

Steelcase's Scope 3 GHG emissions inventory was reviewed for conformance with the World Resource Institute's (WRI's) Greenhouse Gas Protocol¹ and ISO 14064-3². The Scope 3 GHG inventory report, calculation worksheets and supporting documentation were provided for the verification review. The findings of the review are intended to provide limited assurance that Steelcase's Scope 3 GHG emissions are in conformance with the relevant requirements and guidance of the GHG Protocol.

The review focused on the integrity of the input activity data provided by Steelcase, the GHG emission estimation methodology and the accuracy of calculated results. The verification is based on a review of calculation worksheets and documentation provided.

2.0 Scope and Objective

Objective

The objective of this verification is to provide interested parties with an objective, independent judgment regarding the information, data and emission estimates for Steelcase's Scope 3 GHG inventory for the 2020 reporting period (March 2020 – February 2021). Specifically,

- Evaluate to a limited level of assurance whether Steelcase has completely and accurately measured and reported their total Scope 3 emissions, have reported all applicable data for emissions sources, and have correctly utilized the appropriate software and databases to report their Scope 3 GHG emissions; and
- Evaluate to a limited level of assurance whether the data reported are accurate, complete, consistent, transparent and free of material errors or omissions.

Scope

SCS conducted an assessment of Steelcase's reported Scope 3 GHG emissions for evaluation year 2020 against the requirements of WRI's GHG Protocol. A desk review of the reported GHG emissions expressed as CO₂e, as well as the estimation methodologies and supporting data, was conducted by SCS using documentation supplied by Steelcase as the basis for the evaluation. The verification was performed to a limited level of assurance.

The GHG emission inventory includes the following Scope 3 categories and supporting documentation:

¹ Greenhouse Gas Protocol. Corporate Value Chain (Scope 3) Accounting and Reporting Standard. World Resource Institute

² ISO 14064-3: 2006 Specification with guidance for the validation and verification of GHG assertions

Category	Description	Supporting Data
1	Purchased goods and services:	FY21 PG&S GHG emissions calculation.xlsx; EPD report Elective Elements NA final v2 - MC.pdf; EPD--Steelcase--Migration Desk and Migration SE (EMEA)--2020-02-09 (1).pdf; EPD--Steelcase--Migration SE (NA)--2020-07-22.pdf; EPD--Steelcase--Series 1 (EMEA)--2019-03 [EN].pdf; EPD--Steelcase--Series 1 (NA)--2019-03 [EN].pdf; EPD--Steelcase--SILQ (EMEA)--2019-03 [EN].pdf; EPD--Steelcase--SILQ (NA)--2019-03 [EN].pdf; Revised - FY21 PG&S GHG emissions calculation.xlsx
2	Capital goods	FY21 Capital Goods GHG Calculations.xlsx
4	Upstream transportation and distribution	FY21 Upstream T&D GHG emission calculations.xlsx; ITS Steelcase Import Total Costs Monthly ALL MODES_REV_4 FY21.xlsx; Steelcase Air to All Destinations - Monthly Schedule FY21.xlsx; Steelcase Ocean Export Cost FY21.xlsx; T&D APAC FY21 data analysis.xlsx; T&D EMEA FY20 data_Air and Sea Freight.xlsx; T&D EMEA FY21 data_Air and Sea Freight.xlsx; T&D EMEA FY21 data_Road.xlsx
5	Waste generated in operations	FY21 Waste Generated in Operations GHG calculations.xlsx
6	Business Travel	FY21 Business Travel Data.xlsx; FY21 Business Travel GHG Calculations.xlsx

Materiality

Omissions, misrepresentations, or errors that can be quantified and result in discrepancies of more than 5% with respect to total CO₂e emissions declared are considered material.

Criteria

The verification assessment was conducted based on the requirements and guidance of WRI's Greenhouse Gas Protocol and ISO 14064-3.

3.0 Verification Procedures

A summary of verification review for Steelcase's Scope 3 GHG emission inventory is presented below. GHG emission estimates for each Scope 3 category were reviewed for applicability of methodology, reasonableness of activity and emission factor data, and calculation errors. The review relied on the inventory documentation and calculation workbooks provided by Steelcase. Table 1 summarizes Steelcase's annual Scope 3 GHG emissions for the 2020 evaluation year (March 2020 February 2021).

Table 1. 2020 Scope 3 GHG emissions for Steelcase.

Category	Description	MT CO ₂ e	% Contribution
1	Purchased goods and services:	425,991	80.3%
2	Capital goods	45,635	8.6%

Category	Description	MT CO ₂ e	% Contribution
4	Upstream transportation and distribution	52,431	9.9%
5	Waste generated in operations	5,820	1.1%
6	Business Travel	870	0.2%
Scope 3 Total		530,747	100.0%

SCS evaluated the conformity of Steelcase’s entity Scope 3 emissions, based on the reporting criteria prescribed by WRI’s ‘Corporate Value Chain (Scope 3) Accounting and Reporting Standard’. SCS examined the methodology documentation, calculation sheets and other supporting evidence presented by Steelcase, for each of the eleven reported Scope 3 categories.

For all categories included in the inventory, emission calculations were checked for accuracy and verified by recalculating the results, where possible, using data provided for the verification review. Based on the initial review, a few issues were identified with the reported Scope 3 emissions, which were subsequently addressed (see Table 2 below) to the reviewer’s satisfaction.

Based on the verification procedures conducted, the Scope 3 GHG emission inventories for Steelcase for 2020 were found to be accurate and free of errors based on the input data and calculation methodologies used. A summary of the GHG emission estimation methodology and data sources for each Scope 3 source category reported by Steelcase for evaluation year 2020 is presented below.

3.1 Estimation Methodology

For the current reporting period, Steelcase estimated GHG emission for a select set of Scope 3 source categories, as listed above. Source categories were selected based on expected magnitude and data availability. Steelcase’s GHG emission inventory development follows the GHG Protocol guidelines using recommended emission factors and activity data.

Each category used specific activity data and emission factors selected as deemed most appropriate by Steelcase. For product-specific categories, Steelcase utilized published Environmental Product Declarations (EPDs) based on Life Cycle Assessment (LCA) to estimate emission factors for each product type and relevant source category. Emissions for the Scope 3 inventory are reported in metric tons of CO₂e.

Where possible, actual data was sourced and utilized for emissions and activity. Approximations and estimations were used otherwise and all efforts were made for consistency with applicable Scope 3 GHG standards and guidance.

Specific estimation methodologies and data sources used in the development of Steelcase’s Scope GHG inventory for the 2020 reporting period are summarized below for each Scope 3 category considered.

3.2 Purchased goods and services

The Scope 3 GHG category of Purchased Goods & Services (PG&S) is interpreted as the cradle-to-supplier-gate GWP impact of the representative raw material inputs used to manufacture Steelcase products. The data used to model these impacts are from Steelcase's product LCAs based on primary supplier data and secondary data from the Ecoinvent LCI database. The GWP impact data from the LCA studies are combined and multiplied by the 2020 production volume of the appropriate product manufactured by Steelcase.

Spend-based calculations were performed for all other purchased good and services based on 2020 sales data and emission factors from the EORA multi-region input-output (MRIO) model³. Appropriate classification of sources with available EORA sector data is documented and any required reconciliation across Scope 3 categories is included.

3.3 Capital Goods

Steelcase's Capital Expenditure report are used as activity for this source category. Emission factors are taken from the WRI GHG Protocol Quantis Scope 3 Evaluator Tool⁴ and matched with Steelcase's categorized expenditures. Average emission factors are estimated where needed assuming each of Steelcase's expenditures contribute equally to the corresponding spend category. Adjustments for inflation from the Quantis emission factors, based on 2009 data, to 2021 are included in the reported emission estimates.

3.4 Upstream transportation and distribution

Steelcase maintains records of all incoming upstream transportation to their facilities by carrier and transportation mode. Transport by air, water freight, and road freight are included. Emissions are estimated using a distance approach where possible; a spend-based approach is otherwise used. Air Freight is tracked in ton-miles and other modes are tracked by dollar amount paid to third-party carriers.

Distance-based emission factors are from the EPA's GHG emission factor database. Spend-based emission factors are from EORA 2015. Assumptions are described and applied appropriately.

3.5 Waste generated in operations

Steelcase's waste streams are tracked by logging waste management receipts within Resource Advisor (RA). Data are tracked both by waste type and method of disposal. Total weights by region and disposal route were exported from RA and combined with appropriate emission factors from the 2021 EPA GHG

³ <https://www.worldmrio.com/>

⁴ <https://ghgprotocol.org/scope-3-evaluator>

emission factor database. Emission factors account for transportation, processing of waste, and fugitive emissions released in processing and decomposition.

3.6 Business travel

GHG emission from business travel are estimated using both distance-based and spend-based calculations based on Steelcase’s internal business travel data. Depending on the booking carrier, data were available by distance for air and rail travel, or for all transport modes by expenditures. Emission factors for spend-based calculations are from the 2015 EORA MRIO database while distance-based calculations are based on 2021 EPA GHG emissions factors.

Steelcase’s gasoline usage for the State of Michigan is appropriately removed from the total as these emissions are included in the Scope 1 GHG inventory. Rail, auto, and urban mass transit travel are recorded individually using mileage where possible. Emission factors are from the 2012 DEFRA/DECC GHG Conversion guidance.

3.0 Assurance Findings

Scope 3 data checks were conducted according to a limited level of assurance. SCS reviewed Steelcase’s data, the methodologies used and Scope 3 GHG emission estimates for the evaluation year 2020 as described above. Based on the verification procedures performed and evidence obtained, no matters have come to the attention of the audit team to cause the verification body to believe that the Scope 3 emissions assertion was materially misstated.

A listing of verification findings, including client responses, is provided in Table 2 below.

Table 2. Verification review Findings

Type	Issued Date	Date Closed	Verifier Findings	Client Response	Conclusion
NCR	7/16/2021	7/19/2021	Emission factors for spend-based calculations of PG\$S emissions are not adjusted to 2020 USD.	Revised calculation sheet provided	Emission factors corrected, finding closed
NCR	7/16/2021	7/19/2021	Emission calculations based on EPDs for the Office Seating products omit the emissions from upstream material transport (Phase A2 of the product life cycle)	Revised calculation sheet provided	Calculations corrected, finding closed