

March 7, 2024

KERAMIDA Inc. (KERAMIDA) was engaged by Steel Dynamics, Inc. (SDI) to provide limited assurance greenhouse gas (GHG) verification of their 2023 Scope 1 and 2 GHG emissions inventory, and total energy use. The data and calculations being verified covers the period of January 1, 2023 to December 31, 2023. KERAMIDA is an accredited solution provider to CDP and this Project was managed by a Lead GHG Verifier (CA license H-21-024, OR license GHGRP-V-062).

Statement of Independence

KERAMIDA affirms our independence from SDI and is free from bias and conflicts of interest related to the assurance of the environmental data.

Verification Assurance Opinion

Based on the process and procedures conducted, there is sufficient evidence that the GHG emissions calculations and summaries are a fair representation of the actual GHG emissions data and information.

SDI has established an appropriate system for collecting, calculating, and analyzing quantitative data and information for the GHG emissions for the stated time period, scope and level of assurance. An opinion of limited assurance was concluded based off KERAMIDA's verification.

KERAMIDA's Approach

Verification was conducted in accordance with ISO 14064-3: 2019 *Specification with guidance for the validation and verification of greenhouse gas assertion*, which is an approved verification standard accepted by the Carbon Disclosure Project (CDP). The scope of work was to provide limited assurance for the verification of their GHG emissions inventory and energy use data, and verification was led by an accredited California Lead GHG Verifier.

Validation scope of the reporting company GHG emissions

- Organizational boundaries: Operational Control Approach

Time Period

- January 1, 2023 to December 31, 2023

Level of Assurance

- Limited
- Materiality Threshold: 5% as suggested by ISO 14064-3 (2019).

KERAMIDA's Methodology and Procedure

Procedure performed during the verification

- Interviews with key personnel involved in the process of data collection, compiling, calculating, and preparing the emissions data report. All meetings were conducted virtually;
- Assessed the data management systems and protocols by:
 - Understanding the selection process for data to be used and reported;

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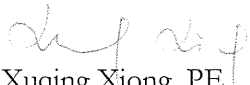
- Conducting assurance procedures to assess the accuracy of data collected and reported; and
- Understanding the calculation approach and methods.
- Review of a variety of data analytics to check the reasonableness of the data and calculations;
- A variety of re-calculation procedures to confirm stated quantities;
- Evaluated the reasonableness of any assumptions used in support of disclosures;
- Reviewed how disclosures were presented and determine if they were representative of data and operations.

Table 1. Data Verified by KERAMIDA

Scope		CO ₂ e (MT)
Scope 1	Steel Mills	2,056,455
	Other facilities	693,916
	Total	2,750,371
Scope 2 (<i>Location-Based</i>)	Steel Mills	3,069,307
	Other facilities	338,618
	Total	3,407,925
Scope 2 (<i>Market-Based</i>)	Steel Mills	2,028,292
	Other facilities	286,387
	Total	2,314,679
Resource Specific Verified Values		
Natural Gas		24,145,731 Dth
Diesel Fuel		9,158,177 Gallons
Gasoline		415,721 Gallons
Acetylene		852,724 scf
Jet A Fuel		149,114 Gallons
Propane		1,032,019 Gallons
Propylene		59,046 lbs
Electricity		7,888,579 MWh

This verification statement, including the opinion expressed herein, is provided to SDI and is solely for the benefit of SDI in accordance with the terms of our agreement. We consent to the release of this statement by you for sustainability reporting disclosures, including to CDP in order to satisfy the terms of CDP disclosure requirements, but without accepting or assuming any responsibility or liability on our part to CDP or to any other party who may have access to this statement.


Albert Chung, PhD, PE
Senior Vice President
KERAMIDA, Inc.


Xuqing Xiong, PE
Senior Project Engineer
KERAMIDA, Inc.

June 27, 2024

KERAMIDA Inc. (KERAMIDA) was engaged by Steel Dynamics, Inc. (SDI) to provide limited assurance greenhouse gas (GHG) verification of their 2023 Scope 3 GHG emissions inventory for SDI steel mill facilities. The data and calculations being verified covers the period of January 1, 2023 to December 31, 2023. KERAMIDA is an accredited solution provider to CDP and this Project was managed by a Lead GHG Verifier (CA license H-21-024, OR license GHGRP-V-062).

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Verification Assurance Opinion

Based on the process and procedures conducted, there is sufficient evidence that the GHG emissions calculations and summaries are a fair representation of the actual GHG emissions data and information.

SDI has established an appropriate system for collecting, calculating, and analyzing quantitative data and information for the GHG emissions for the stated time period, scope and level of assurance. An opinion of limited assurance was concluded based off KERAMIDA's verification.

KERAMIDA's Approach

Verification was conducted in accordance with ISO 14064-3: 2019 *Specification with guidance for the validation and verification of greenhouse gas assertion*, which is an approved verification standard accepted by the Carbon Disclosure Project (CDP). The scope of work was to provide limited assurance for the verification of their GHG emissions inventory and energy use data, and verification was led by an accredited California Lead GHG Verifier.

Validation scope of the reporting company GHG emissions

- Organizational boundaries: SDI steel mill facilities, Operational Control Approach

Time Period

- January 1, 2023 to December 31, 2023

Level of Assurance

- Limited
- Materiality Threshold: 5% as suggested by ISO 14064-3 (2019).

KERAMIDA's Methodology and Procedure

Procedure performed during the verification

- Interviews with key personnel involved in the process of data collection, compiling, calculating, and preparing the emissions data report. All meetings were conducted virtually;
- Assessed the data management systems and protocols by:
 - Understanding the selection process for data to be used and reported;

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Table 1. Data Verified by KERAMIDA

Scope	CO ₂ e (MT)
Scope 3 (Category 1) spend-based method	3,238,481
Scope 3 (Category 4)	696,522
Scope 3 (Category 9)	106,079
Scope 3 Total of Verified Categories	4,041,082

This verification statement, including the opinion expressed herein, is provided to SDI and is solely for the benefit of SDI in accordance with the terms of our agreement. We consent to the release of this statement by you for sustainability reporting disclosures, including to CDP in order to satisfy the terms of CDP disclosure requirements, but without accepting or assuming any responsibility or liability on our part to CDP or to any other party who may have access to this statement.


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