

August 10, 2022

KERAMIDA Inc. (KERAMIDA) was engaged by Steel Dynamics, Inc. (SDI) to provide limited assurance greenhouse gas (GHG) verification of their 2021 Scope 1 and 2 GHG emissions inventory, and energy use. The data and calculations being verified covers the period of January 1, 2021 to December 31, 2021. 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).

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: Domestic and International SDI sites

Time Period

- January 1, 2021 to December 31, 2021

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;
 - Conducting assurance procedures to assess the accuracy of data collected and reported; and
 - Understanding the calculation approach and methods.

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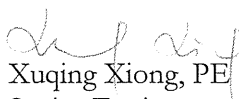
- Review of a variety of data analytics to check the reasonableness of the data and calculations;
- A variety of re-calculation procedures to confirm stated quantities;
- Evaluated the reasonableness of any assumptions used in support of disclosures;
- Reviewed how disclosures were presented and determine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

Table 1. Data Verified by KERAMIDA

Scope		CO ₂ e (MT)
Scope 1	Steel Mills	1,860,789
	Other facilities	631,541
	Total	2,492,330
Scope 2 (<i>Location-Based</i>)	Steel Mills	2,511,695
	Other facilities	327,295
	Total	2,838,990
Scope 2 (<i>Market-Based</i>)	Steel Mills	1,964,822
	Other facilities	257,949
	Total	2,222,771
Resource Specific Verified Values		
Natural Gas		22,724,184 Dth
Diesel Fuel		7,558,805 Gallons
Gasoline		357,192 Gallons
Acetylene		607,006 scf
Propane		791,320 Gallons
Propylene		14,411 lbs
Electricity		6,607,423 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 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 Engineer
KERAMIDA, Inc.

August 10, 2022

KERAMIDA Inc. (KERAMIDA) was engaged by Steel Dynamics, Inc. (SDI) to provide limited assurance greenhouse gas (GHG) verification of their 2021 Scope 3 GHG emissions inventory for SDI steel mill facilities. The data and calculations being verified covers the period of January 1, 2021 to December 31, 2021. 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).

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

Time Period

- January 1, 2021 to December 31, 2021

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;
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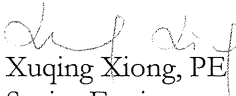
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- Reviewed how disclosures were presented and determine if they were representative of data and operations.

Table 1. Data Verified by KERAMIDA

Scope	CO ₂ e (MT)
Scope 3 (Category 1)	3,214,200
Scope 3 (Category 9)	300,143
Scope 3 Total	3,514,343

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