

June 8, 2023

KERAMIDA Inc. (KERAMIDA) was engaged by The Macerich Company (Macerich) to provide limited assurance greenhouse gas (GHG) verification of their 2022 Scope 1, 2, and 3 GHG emissions inventory. Scope 3 sources included in this verification scope were,

- Category 5, Waste
- Category 6, Business travel
- Category 7, Employee commuting
- Category 13, Downstream leased assets.

Also included in this verification scope was energy usage, renewable energy usage, water, and waste. The data and calculations being verified covers the period of January 1, 2022 to December 31, 2022. The calculation of the GHG inventory is the sole responsibility of Macerich using guidance per US Environmental Protection Agency, GHG Protocol standards, and other accepted guidance documents.

### **Statement of Independence**

KERAMIDA affirms our independence from Macerich 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 no evidence that the GHG emissions calculations and verified data are not a fair representation of the actual GHG emissions data and information.

In KERAMIDA's opinion, Macerich 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.

### **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*. The verification was led by an accredited California and Oregon Lead GHG Verifier and KERAMIDA.

#### *Validation scope of the reporting company GHG emissions*

- Organizational boundaries: Operational Control Approach

#### *Time Period*

- January 1, 2022 to December 31, 2022

#### *Level of Assurance*

- Limited

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- 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 compiling, calculating, and preparing the emissions data report and energy data;
- Review of evidence and data in support of key disclosures in the emissions report, energy, water usage, and waste disclosure;
- 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 <sub>2</sub> e (MT)
Scope 1	20,123
Scope 2 (Location Based)	52,577
Scope 2 (Market Based)	23,574
Scope 3, Category 5; Waste (Landfilled)	12,048
Scope 3, Category 5, Waste (Recycled)	1,358
Scope 3, Category 6; Business Travel (Air/Rail only)	301
Scope 3, Category 7; Employee Commuting	1,781
Scope 3, Category 13; Downstream Leased Assets (Location Based)	78,032
Scope 3, Category 13; Downstream Leased Assets, (Market Based)	79,605
<b>Category</b>	
<b>Energy Usage,</b>	
Total Electricity Purchased	361,151,926 kWh
Total Natural Gas Purchased	1,860,571 CCF
Total Fuel Oil Purchased	41,106 Gallons
Diesel Purchased	3,792 Gallons
Gasoline Purchased	76,445 Gallons
Steam Purchased	6,037,000 Lbs
<b>Renewable Energy,</b>	
Renewable Energy Certificates Purchased	75,000,000 kWh
Solar Participation	58,665,497 kWh
Solar Electricity Generated	14,809,507 kWh
<b>Waste,</b>	
Waste from Operations Generated	23,170 tons
Recycling Generated	15,088 tons
<b>Water,</b>	
Water Consumed	757,721,406 Gallons

This verification statement, including the opinion expressed herein, is provided to Macerich and is solely for their benefit in accordance with the terms of our agreement.

KERAMIDA, Inc.



Albert Lu, M.S.ENE  
Sustainability Analyst  
KERAMIDA, Inc.



Albert Chung, PhD, PE  
Senior Vice President  
CA/OR Lead GHG Verifier  
CA H21-024 and OR GHGPRV-062  
KERAMIDA, Inc.