

## VERIFICATION OPINION DECLARATION: GREENHOUSE GAS EMISSIONS

To: The Intended Users and Stakeholders of Kenmare Resources plc

- **Organization & Responsible Party:** Kenmare Resources plc (hereafter, 'Kenmare')
- **Address:** 4th Floor, Styne House, Hatch Street Upper, Dublin 2, Ireland
- **Verification Standard:** ISO 14064-3:2019 'Greenhouse gases - Part 3: Specification with guidance for the verification and validation of greenhouse gas statements'
- **Verification Criteria:** Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004); ISO 14064-1:2018 'Greenhouse gases - Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals'
- **GHG Consolidation Approach:** Operational Control
- **GHG Inventory Period:** 01 January 2022 to 31 December 2022 (FY2022)
- **GHG Inventory Report:** Refer to: *Carbon Accounting Workbook 2022\_15 March 2023*

Kenmare engaged Verify CO<sub>2</sub> to conduct an independent greenhouse gas (GHG) verification with the objective of confirming that the FY2022 GHG Statement is accurate and conforms with the stated criteria. The *GHG Inventory Report* provides historical information about Kenmare's GHG emissions in accordance with the requirements of ISO 14064-1:2018. This *GHG Verification Opinion Declaration* is issued following a review of the *GHG Inventory Report* for the stated inventory period and is based on the scope of work detailed below.

### Responsible Parties

Kenmare is responsible for the preparation of the GHG statement in accordance with ISO 14064-1:2018. This responsibility includes the design, implementation and maintenance of internal controls relevant to the preparation of a GHG Statement that is free from material misstatement.

Verify CO<sub>2</sub>'s responsibility is to express an assurance opinion on the GHG Statement based on the evidence obtained and the audit criteria. The International Standard ISO 14064-3:2019 requires that ethical standards are upheld in planning and performing the verification to obtain the agreed level of assurance that the GHG Statement is free from material misstatement.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit carried out in accordance with the ISO 14064-3:2019 Standard will always detect a material misstatement when it exists. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the intended user's decisions. Verification activities performed to achieve a limited level of assurance are less extensive in nature, timing and extent than those for reasonable assurance.

Furthermore, GHG quantification is subject to inherent uncertainty as the methods used to estimate GHG emissions rest upon incomplete scientific knowledge.

### Verification Scope

- Kenmare owns and operates the Moma Titanium Minerals Mine in Mozambique. The boundary includes all facilities associated with the Moma mining complex as well as the Dublin head office.
- No structural changes took place in FY2022. However, from July 2022 the new Rotary Uninterruptible Power Supply (RUPS) plant became fully operational which will significantly decrease generator diesel consumption.
- The following GHG types are relevant to Kenmare's on-site activities: CO<sub>2</sub>; CH<sub>4</sub>; N<sub>2</sub>O; HFCs and HCFCs.

## Specific Exclusions:

Excluded Facility/Emissions Source	Justification
Facility: Maputo Office, Mozambique	Insignificant (+/- 30 employees)
Facility: Nampula Office, Mozambique	Insignificant (+/- 15 employees)
Scope1/Category 1: Land use/Land use change	No standardized global method for calculating these emissions. The GHG Protocol <i>Land Sector and Removals Guidance</i> will be published by end 2023.
Scope 1/Category 1: On-site landfilled waste & wastewater treatment	Landfill: Site undergoing maintenance (waste is being stored) Sewage: Systems are not yet in place to record this data.

## Level of Assurance and Qualifications

- A limited level of assurance was provided for each of the emissions categories in the GHG Statement below.
- A materiality threshold of 5% per emissions source was applied.
- For Category 4, the following qualifications were raised in relation to the unmodified verification opinion:
  - Reporting of emissions sources in Category 4 commenced in FY2022 but is not yet complete;
  - Country-specific emission factors were not used to calculate emissions from off-site waste treatment.

## GHG Statement

After correction of misstatements, the FY2022 GHG Statement below was finalized on 15 March 2023:

GHG Protocol	ISO 14064-1:2018	Metric tonnes CO <sub>2</sub> e
Scope 1	Category 1 - Direct <sup>1</sup>	66,519
Scope 2	Category 2 - Imported electricity (location-based) <sup>2</sup>	16,337
Scope 3	Category 3 - Transportation <sup>3</sup>	103,727
Scope 3	Category 4 - Purchased goods <sup>4</sup> & Waste	11,492
Scope 3	Category 5 - Processing & use of sold products <sup>5</sup>	0
Scope 3	Category 6 - Other indirect	0
<b>Total Inventory</b>		<b>198,074</b>

## GHG Verification Activities

Evidence-gathering procedures included but were not limited to:

- Communication with Kenmare's Head of Sustainability for information on relevant structural and other changes during the inventory period as well as Kenmare's GHG data management systems and controls.
- A virtual site visit was done due to the remote location of Moma mine.
- A risk assessment where historical documentation that supported the reported information was reviewed.
- Sampling and testing the historical data used to calculate GHG emissions to assess reasonableness.

<sup>1</sup> Includes diesel, petrol, LPG, and refrigerant gas fugitive emissions (including HCFC-22).

<sup>2</sup> Transmission & distribution losses and other life cycle processes used in generating electricity not included.

Market-based emissions equal 0 tCO<sub>2</sub>e as imported electricity is 100% renewable purchased with contractual instruments.

<sup>3</sup> Includes up- and downstream transport, employee commuting (rotational and charter flights) and business travel.

<sup>4</sup> Includes sub-contractor fuel, cement and heavy mobile equipment purchased during 2022 (no amortization applied).

<sup>5</sup> Although relevant in terms of magnitude these emissions are not included as Kenmare has no control or influence over the downstream processing and end use of its products. Furthermore, it is not possible for Kenmare to obtain this information due to the complexity of product distribution and range of end uses.

- Analytical procedures to assess completeness and accuracy of the GHG data including year-on-year variance checks, cross-checking against source data, recalculation and tracing of primary data to GHG information.
- Site calls and email communication to clarify and provide evidence for deviations and anomalies noted.
- Evaluation of the appropriateness of the estimation methodologies and assumptions used.
- Evaluation of the accuracy and consistency of the GHG emissions and GHG intensity calculations.
- Evaluation of conformity of the GHG statement with the verification criteria referenced above.
- Due to time and cost constraints, an evaluation of uncertainty was not carried out.

## Other Information

**Contractual Agreements:** 100% of Kenmare’s imported electricity is purchased using contractual instruments for energy (kWh) bundled with GHG attributes<sup>6</sup> of zero tCO<sub>2</sub>e/kWh compliant with ISO14064-1:2018 Annex E.

The impact of these contractual agreements is reflected in Kenmare's market-based GHG emissions of zero tCO<sub>2</sub>e.

The following additional data points were verified as requested and for the purposes of CDP 2023:

Other Verified Information		Level of Assurance
Consumption of fuel for heat generation (transport)	80,730 MWh	Limited
Consumption of fuel for self-generation of electricity	151,641 MWh	Limited
Consumption of purchased/acquired electricity	233,950 MWh	Limited
Consumption of non-renewable self-generated electricity	151,641 MWh	Limited
2022 Emissions intensity – Scope 1/Category 1	0.001662 tCO <sub>2</sub> e/tonne ore excavated	Limited
2022 Emissions intensity - Scopes 1 & 2/Categories 1 & 2 (market-based)	0.0554 tCO <sub>2</sub> e/tonne finished product	Limited
2022 Emissions intensity - Scope1/Cat.1; Scope2/Cat.2 (market-based); Scope 3/Cat.3 & Cat.4	0.1514 tCO <sub>2</sub> e/tonne finished product	Limited
CDP: Percentage GHG Emissions Verified	Scopes 1 & 2 - 100% ; Scope 3 (reported) - 100%	

## Conclusion and Final Verifier Opinion - Unmodified

Misstatements identified during the verification process were duly corrected.

Based on the evidence obtained in conducting the limited assurance procedures according to ISO 14064-3:2019 and applying the stated criteria, there is no evidence that the GHG Statement set out above:

- does not comply with ISO 14064-1:2018; and
- does not provide a true and fair view of Kenmare’s emissions inventory for the stated inventory period.

Notwithstanding the above qualifications, it is our opinion that Kenmare has established appropriate systems for the collection, aggregation and analysis of data for quantifying the GHG emissions for the stated period and boundaries.

Verify CO<sub>2</sub> did not conduct any work outside of the agreed scope, and our opinion is therefore restricted to the agreed subject matter.

<sup>6</sup> Mozambique: Kenmare has a Power Supply Agreement with EdM whereby 100% of imported electricity is wheeled via the national grid from the Cahora Bassa hydroelectric plant in Mozambique with a declared environmental impact of zero tCO<sub>2</sub>e. Ireland: 100% of imported electricity was from green source products with a stated environmental impact of zero tCO<sub>2</sub>e.

## Statement of Competence, Independence, and Impartiality

Verify CO<sub>2</sub> has completed over 100 corporate GHG audits across a variety of sectors and has sound experience in GHG verification.

We conducted this verification independently and, to our knowledge, there has been no conflict of interest.

No member of the verification team has a business relationship with Kenmare beyond that required of this assignment.

### Attestation:



Kerry Evans  
**Lead GHG Verifier, Verify CO<sub>2</sub>**  
 Cape Town, South Africa  
**Date:** 21.03.2023



Philip Goyns  
**Independent Reviewer, Promethium Carbon**  
 Johannesburg, South Africa  
**Date:** 22.03.2023

## INDEPENDENT REVIEWER DECLARATION

Kenmare Resources plc engaged Verify CO<sub>2</sub> to verify the Company's FY2022 GHG inventory. As part of this process, Promethium Carbon was contracted to conduct an independent review of the verification team competency, verification planning, execution and conclusions reached to support the final verification opinion.

To assess the quality of the verification work conducted, a high-level review was carried out on the GHG risk assessment, the verification and evidence-gathering plans and the verification findings.

Based on this review I can confirm the following:

- Verify CO<sub>2</sub> has the required competencies to conduct and lead a GHG verification.
- All stages of the verification process were sufficiently documented.
- Appropriate procedures were followed for assessing risk, verification planning, data sampling/evidence gathering, and due professional care and judgement were applied.
- Sufficient evidence was available to achieve the stated level of assurance.
- Material misstatements and non-conformities were duly rectified.
- I agree with the verification findings, conclusions and the final opinion expressed in the Verification Opinion Declaration.

I hereby declare that I was not a member of the GHG verification team and was not in any way involved in drawing up the verification plan or verification activities.

Signature			
Name of Independent Reviewer	Philip Goyns		
Position	Principal Climate Change Advisor		
Company	Promethium Carbon (Pty) Ltd		
Date	2023	March	22
	Year	Month	Day