



### Introduction

Kenmare's 2024 Double Materiality Assessment methodology builds on materiality reviews undertaken since 2020 and is aligned with the European Union (EU) Materiality Assessment Implementation Guidance. Kenmare's previous materiality assessments used two dimensions to assess materiality: (1) 'stakeholder importance', which represented impacts on our stakeholder groups and environment (inside-out), and (2) 'strategic importance', which represented impacts and risks to our business (outside-in). Kenmare's starting point was management's mapping of sustainability issues relevant to our business model and value chain, building on impacts that Kenmare had identified in previous assessments. In 2024, Kenmare also conducted a financial assessment (outside-in) of the sustainability related risks we are exposed to as a business. Where possible, the effects of those matters were quantified and supplemented with qualitative assessments. The financial assessment considers the context of Kenmare's organisation, business operations, and activities to determine which of the material European Sustainability Reporting Standards (ESRSs) the Company should report to. The following pages provide detailed information on the results of our double materiality assessment and the process we have applied. Below is a high-level summary of the DMA process:

A. Initial mapping of material issues relevant to business model and value chain	B. Stakeholder identification and engagement	C. Impact materiality	D. Financial materiality	E. Materiality outputs and ESG indicators
Management conducted a review of the business model and value chain and completed an initial mapping of potential material issues.	Stakeholders were identified and engaged to secure their input on ESRS defined topics. Subject matter experts were interviewed to understand the wider value chain IROs. CSRD draft sector guidance, ICMM¹ Mining Principles and SASB's Metals & Mining Sustainability Accounting Standard were taken as proxies for the wider industry material issues.	A list of issues was mapped against Kenmare's Risk Register. Issues were categorised as IROs. The 'scale', 'scope', and 'irremediable character' were assessed in the scoring of the 'severity' of topics.	Risks were assessed for their potential financial impact, according to specific scenarios. The financial risks were evaluated based on short, medium, and long-term timeframes.	Topics were mapped in a matrix and the relevant indicators for monitoring and performance management were determined by the material topics.

<sup>&</sup>lt;sup>1</sup> International Council of Mines and Metals

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# **Double Materiality Assessment outcome**

The outcome of Kenmare's DMA process aggregates the impacts and financially material risks for each ESRS topic, and shows that E1 Climate Change, E3 Water Stewardship, Tailings Storage and Social Licence to operate are Kenmare's highest impact and most financially material topics. The climate risks within E1 are closely linked to our strategic efforts to decarbonise Kenmare's direct operations and ensure the resilience of operations to the direct physical effects of climate change. The water risks within E3 highlight the dependency of Kenmare's business on freshwater resources for dredge mining. Tailings Storage is a principal risk for the business relating to geotechnical risks associated with the storage of noncommercial mineral sands. To date, tailings have been stored in paddocks, however, from 2025 this risk increases when the Company will establish its first permanent Tailings Storage Facility. Finally, Kenmare's Social Licence to operate relates to the impact of mining operations on the local communities and in turn the Company's need for their acceptance of those operations, highlighting the importance of socio-economic development opportunities for those communities.





The impact and financial materiality assessment carried out by management identified eight risks, and one opportunity, five potential negative impacts and two actual positive impacts. Further work will be undertaken in future years to ensure Kenmare is not overlooking additional material opportunities, which are currently under-represented in this materiality review.

# **Double Materiality Assessment governance**

Kenmare's Board and Executive Committee had oversight on the development, process, and outcomes of the DMA. Specifically, the Audit and Risk Committee reviewed the qualitative assessments made in the DMA, and its alignment to ESRS and completeness of the IROs identified in the context of its relevance; faithful representation; verifiability; and understandability. The Sustainability Committee reviewed the assessments considering its understanding of the material sustainability impacts, risks and opportunities managed at the Mine and across the value chain, building

#### Strategy key

A healthy natural environment

High impact, financially material

Thriving Communities
A safe and engaged workforce

Risk

G Trusted Business

1	E1 Climate Change	Risk							
2	E3 Water Stewardship	Risk							
3	Kenmare topic Tailings Storage Risk								
4	Kenmare topic Social Licence to operate	Risk							
Hig	h impact, financially less material								
5	<b>\$1</b> Health and safety	Risk							
6	E4 Biodiversity	Impact							
7	<b>\$3</b> Land-related impacts	Impact							
8	<b>\$1</b> Diversity and inclusion	Impact							
9	<b>\$1</b> Training and development	Impact							
10	<b>S1</b> Human rights	Risk							
11	Kenmare topic Socio-economic development	Opportunity							
12	E1 Energy efficiency	Risk							

### Lower impact, financially material

None

#### Low impact, financially less material

- 14 S1 Measures against Violence and Harassment Impact
  15 S1 Labour Practices Impact
- 16 E2 Pollution Impact

#### Non-material topics

- E5 Resource use and circular economy
- **\$4** Consumers and end-users
- G1 Animal Welfare

Note that S2 Workers in the value chain is likely to be a material topic, however, Kenmare does not currently have sufficient data on its suppy chain to conclude this is the case or report on this ESRS.

on materiality reviews undertaken in prior years. Kenmare's Executive Committee identified and evaluated the IROs managed at the Mine and across the value chain, and scored its Impact and Financial materiality, more information on which can be found in sections C and D below.

13 G1 Bribery and corruption



# **Double Materiality Assessment process**

### A. Initial mapping of material issues relevant to business model and value chain

Kenmare's management reviewed its business model and value chain and mapped the relevant sustainability topics across its direct operations and value chain. This mapping exercise was informed by input from site-based leadership, topic specialists, internal audit, the Executive Committee and Board-Sustainability Committee. Management's view of the value chain was informed through its experience of engaging with and managing tier 1 suppliers and customers and their wider knowledge and understanding of the industry. Topics defined by the ESRSs, as well as those outside those defined by CSRD were considered. Management also drew on information from independent studies commissioned by or governing Kenmare's operations, as well as industry best practice.

### B. Stakeholder identification and engagement

Building on the stakeholder engagement process that has taken place since the inception of the mine in 2004, Kenmare considered the most relevant stakeholders and those most impacted by its business model and operations. Input was gathered directly from stakeholders via standardised quantitative surveys where respondents were asked to score the relevance of topics (aligned to the CSRD ESRSs). Qualitative interviews were then conducted with representatives from each stakeholder group. Respondents were asked to provide context and insight on the survey findings and share their thoughts on the reasons why issues had scored particularly highly as well as highlighting any topics the survey did not cover. The findings were documented and reviewed by management. Separately, interviews with subject matter experts who have an oversight of the wider value chain were undertaken. Kenmare also used the Draft CSRD mining sector guidance, SASB's Metals & Mining sustainability accounting standard and ICMM guidance as proxies for identifying the most material issues within Kenmare's value chain.

## C. Impact Materiality

Kenmare's management considered both the stakeholder engagement findings and its internal list of sustainability matters in the context of the Company's activities and business relationships, value chain and affected stakeholders. It then categorised the topics as Impacts or Risks and Opportunities (IROs), to assess the scale and scope of the impact, the remediability of the issue, the likelihood of occurrence, and the financial magnitude (for risks and opportunities). In line with the ESRS guidance, three parameters of 'scale', 'scope', and 'irremediable character' were used in the scoring of the 'severity' of Kenmare's impacts:



- When scoring 'scale', the extent of the impact on the environment or people and post risk mitigation was assessed.
- When scoring 'scope', how widespread the impact would be, based on parameters such as percentage of sites, employees, or financial spend related to the impact, was assessed.
- When scoring 'irremediable character', the difficulty of reversing the damage in terms of cost and time horizon was assessed. For potential impacts, an additional parameter of 'likelihood' was scored.

Management also considered the IROs across various time horizons and highlighted where the IRO was most prevalent: upstream in the supply chain, directly in our own operations, or downstream in the customer value chain.

Management also considered the time horizon when the IRO was most likely to impact the business: short, medium or long-term and these are set out below in section E. Materiality outputs and ESG indicators.

Sustainability topics and sub-topics that were not relevant to our business model were omitted from the review. ESRS S4: Consumers and end-users were omitted because Kenmare serves business customers, not end-users or consumers (these are our customers' customers), therefore, S4 was deemed not applicable. The sub-topic of animal welfare within G1 was excluded as Kenmare is not involved in animal husbandry, handling etc. in its standard operations and cannot take responsibility for the communities' management of animal welfare.

## D. Financial materiality

Kenmare evaluated the potential financial impact of the identified risks and opportunities. Scenarios of how the risk (or opportunity) could manifest were set out. Those scenarios focused on the consequences of lost or reduced production arising from the occurrence of the selected risk or, as in the case of climate risk, the investment required to mitigate or eliminate emissions from operations. The full set of scenarios evaluated are set out in appendix. Of the risks identified, the following were deemed financially material: Climate Change, Water Stewardship and Tailings Storage. The following were deemed less financially material: Health and Safety, Bribery and Corruption, Energy Efficiency and Human Rights in the supply chain.

## E. Sustainability Matters covered in topical ESRS

Time Horizon: Short-term - S Medium-term - M Long-term - L

2024 Materiality matrix translated to ESRS list of issues: Not material, not covered in report Material, covered in report Highly material, more extensively covered

Own operations – OO Value chain – VC



ESRS	Topic	Sub-topic	Sub-sub-topic	Tim	VC/00	Material impact or risk	Current and anticipated effects of IROs on business model, value chain, strategy
				e Hori zon		The content of the co	and decision making
E1	Climate change	Climate change adaptation		S	00	Risk: effect of climate- related extreme weather events impacting operations, the mine personnel, communities.	Material topic: Climate change Mozambique, where Kenmare's single asset is located, has historically been vulnerable to extreme weather events, in particular cyclones, flooding, and extreme heat, which are being exacerbated by climate change. Extreme weather is a principal risk of the Company. In extreme weather circumstances, there is a risk of loss of life. There is a risk of physical damage to the operating assets of the Mine, which may result in an inability to operate the Mine. Weather forecasting allows for disaster planning. Heavy rain and flooding can also impact supply logistics to and from the Mine.
		Climate change mitigation		S	00, VC	Risk: Kenmare's ability to play its part in reducing direct and indirect carbon emissions to limit the damage of climate change.	Kenmare's mining assets make a relatively limited contribution to climate change and the Company is identified in industry reports <sup>2</sup> as being in the top quartile on low-carbon intensity. However, Kenmare's processing of sold goods in the value chain in its Scope 3 emissions is significant. Additionally, investors and regulators increasingly expect companies to have decarbonisation targets aligned to the Paris Agreement.
	Energy			S	00	Risk: The energy efficiency of Kenmare's operations to ensure it can stay within the available grid capacity and avoid turning on diesel generators.	Material topic: Energy efficiency  Electrical grid energy is sourced from the hydro-electric dam via Electricidade de  Moçambique (EdM), the national energy provider. That power capacity is limited by electrical infrastructure, and therefore may not be able to deliver Kenmare's ambitions to electrify equipment or maintain its clean energy supply. Kenmare is exploring additional sources of renewable energy.
ESRS	Topic	Sub-topic	Sub-sub-topic	Time horiz on	VC/00	Material impact or risk	Current and anticipated effects of IROs on business model, value chain, strategy and decision making
E2	Pollutio n	Air		S	VC	Potential negative impact	Material topic: Pollution Kenmare's business model is solely focused on mineral sands mining, which does not
		Water		S	VC		discharge chemicals to the freshwater sources or use any chemicals in the mineral separation
		Soil		S	VC		process. Kenmare reports its approach to pollution management and any traces of pollutants it emits.
		Living organisms		S			The smelting of TiO2 products (by Kenmare's customers by either a sulphate or chloride
		and food					process) involves harmful pollutants, such as calcined coke and chlorine gas which produce
		resources Substances		S	VC		hazardous waste, including iron chloride and acidic residues; sulfuric acid results in large
		of concern		٥	VC		quantities of acidic waste, including iron sulphate and other by-products. Similarly, titanium



		Substances of very high concern Micro- plastics		S	VC		metal processing involves reacting the slag with chlorine gas and carbon and heating to 900oc; zircon processes involve size reduction, chemical and thermal processing. All of these pollutants pose a significant threat to the environment and care is taken to manage these responsibly.
E3	Water and Marine Resourc es	Water	Water consumption	S	00	Risk: The Moma Mine is not located in a water-stressed area, however, given the criticality of water to dredge mining operations, Kenmare considers freshwater availability as a risk.	Material topic: Water stewardship  Dredge mining relies on significant volumes of continuous freshwater use. Most of this water is recirculated. Kenmare currently achieves a 90% water reuse rate. Kenmare uses no chemicals in the mining process and therefore does not pollute water bodies. Due to the distribution of water boreholes and proximity to wetlands and coast, siltation and water flow changes can occur. Despite the Mine being situated in area not considered water-stressed, given the dependency of the mining process on freshwater, it must be highlighted as a risk to operations.  Kenmare's mining operations have limited direct impact on marine resources. It controls the transfer of product from land to customer cargo vessels via two transshipment vessels. In the value chain, cargo vessels impact marine life, with vessels travelling from Mozambique to 15 countries globally. This impact has not been measured. No part of Kenmare's direct operations or value chain involves water discharges to oceans or the extraction or use of marine resources.
ESRS	Topic	Sub-topic	Sub-sub-topic	Time horiz on	VC/00	Material impact or risk	Current and anticipated effects of IROs on business model, value chain, strategy and decision making
		Marine Resources	Water withdrawals	S	00		
			Water discharges	S	00		
E4	Biodive rsity and	Direct impact drivers of	Climate change Land-use change, fresh water-use	S	00	Potential negative impact: biodiversity is lost through the mining process, which takes time to replace	Material topic: Biodiversity  Dredge and dry mining involve the clearing of vegetation ahead of the mine path. The mined land is degraded over the short term. Topsoil is removed and stored for post-mining rehabilitation and vegetation is removed. However, Kenmare's EMPs require the company to



ecosyst ems	biodiversit y loss	and sea-change use Direct exploitation Invasive alien species Pollution Others		through rehabilitation and biodiversity offset projects.	restore the land through rehabilitation. Much of the land Kenmare mines is modified by communities through subsistence level farming, including slash and burn agriculture. Two thirds of Kenmare's concession fall within an Environmental Protected Area: the Primeiras and Segundas archipelago of protected islands, marine and coastal area.  In 2022, Mozambique introduced the Biodiversity Offset Diploma stipulating No Net Loss (and 15% Net Gain of critical habitats) of biodiversity for projects of the Moma Mine's scale,
	Impacts on the state of species				and Kenmare has developed its first 5-year Biodiversity Offset Management Plan (BOMP) for 2023-2028.
	Impacts on the extent and condition of ecosystems				Several endangered flora species exist within the mining concession including Icuria Dunensis (Endangered), Brachystegia oblonga (Critically Endangered), Waernecka sessilicarpa (Critically Endangered) and Nesogordonia holtzii (Near Threatened). The BOMP will work to restore these endangered species.



ESRS	Topic	Sub-topic	Sub-sub-topic	Time horiz on	VC/00	Material impact or risk	Current and anticipated effects of IROs on business model, value chain, strategy and decision making
E5	Circular econo my	Resource inflows, including resources use Resource outflows related to products and				Not considered material.  Not considered material.	The most material resource inflow is the mineral sand itself, which is physically separated with non-valuable material put back on the land for rehabilitation.  Kenmare's Tailings Management does not recycle the waste product, so this item will be disclosed separately outside ESRS disclosure requirements.
S1	Own workfor ce	services Working conditions	Secure employment Working time Adequate wages	S	00	Potential negative impact	Material topic: Kenmare labour practices  Kenmare's business requires its employees to support mining operations all year round,
			Social dialogue Freedom of association, the existence of works councils and the information, consultation and participation rights of workers Collective bargaining including rate of workers covered by				typically in shift or rotational work patters. Kenmare complies with laws relating to applicable wage, work hours, overtime, and benefits.  Kenmare respects employees' right to freedom of association and collective bargaining without interference and freedom from discrimination. Almost half of the Company's Mozambican workforce are members of the trade union, SINTICIM. Kenmare engages in proactive and transparent dialogue with employees and trade unions.  Material topic: Health & Safety
			collective agreements Work-life balance Health and safety			Risk	Mining presents inherent safety risks to the workforce. The improper use of machinery, poor maintenance, technical failure of certain equipment or failure to meet and maintain appropriate safety standards could result in significant injury, loss of life or significant negative impact on the surrounding environment and/or communities.



ESRS	Topic	Sub-topic	Sub-sub-topic	Time horiz on	VC/00	Material impact or risk	Current and anticipated effects of IROs on business model, value chain, strategy and decision making
		Equal treatment and opportuniti es for all	Gender equality and equal pay for work of equal value Training and skills development Employment of persons with disabilities Measures against violence and harassment in the workplace Diversity	S	00	Actual positive impact  Actual positive impact  Potential negative impact	Material topic: Diversity & inclusion  Kenmare is committed to gender equality and ensuring everyone regardless of gender is paid equally for work of equal value. It is focused on reducing its gender pay gap through programmes to improve its gender diversity. Notwithstanding the extractives industry is under-represented by women, Kenmare has programmes and targets in place to increase the representation of women in the workforce, including senior management levels.  Material topic: Staff training & development  Kenmare invests continuously in the training and development of its workforce, to improve skills and technical competence and ultimately drive business and operational success.  Material topic: Measures against violence & harassment  Kenmare strives to create a work culture where everyone can feel safe and thrive. A low level of incidents relating to harassment and bullying have previously been recorded, which Kenmare deems unacceptable, and incompatible with the Company's inclusive and respectful work environment.
		Other work- related rights			Child labour Forced labour Adequate housing Privacy	Not considered material.	Kenmare upholds the ILO Conventions and takes steps to ensure that modern slavery has no place in Kenmare's business or supply chain and works in collaboration with suppliers to eradicate modern slavery.
<b>S2</b>	Workers in the value chain	Working conditions	Secure employment Working time Adequate wages Social dialogue Freedom of association Collective bargaining Work-life balance Health and safety	S	VC	Risk	Material topic: Health & safety  Mining presents inherent safety risks to the workforce, including contractor workers. The improper use of machinery, poor maintenance, technical failure of certain equipment or failure to meet and maintain appropriate safety standards could result in significant injury, loss of life or significant negative impact on the surrounding environment and/or communities.



ESRS	Topic	Sub-topic	Sub-sub-topic	Tim e hori zon	Value chain / Own operatio ns	Material impact or risk	Current and anticipated effects of IROs on business model, value chain, strategy and decision making
		Equal treatment and opportuniti es for all	Gender equality and equal pay for work of equal value Training and skills development The employment and inclusion of persons with disabilities Measure against violence and harassment in the workplace Diversity			Not considered material.	
		Other work- related rights	Child labour Forced labour Adequate housing Water and sanitation Privacy	S	VC	Risk	Material topic: Human Rights  Kenmare actively works to ensure human rights are upheld across its supply chain and conducts due diligence checks to ensure there are no child labour or forced labour practices. Kenmare is not aware of any human rights abuses in its value chain, however, it will work to get a better understanding of this in future years. Given the prominence of this issue on the global sustainability agenda, it is considered material.
S3	Affecte d commu nities	Communitie s' economic, social and cultural rights	Adequate housing Adequate food Water and sanitation Land-related impacts Security-related impacts	S	VC	Potential negative impact	Material topic: Land-related impacts  A material negative impact related to Kenmare's operations is the availability of land for farming. Kenmare disturbs between 150-250 hectares of land per annum and targets to rehabilitate the same amount of land as it mines, although there is a lag of 12-24 months before the land has been prepared for returning to communities. The mitigation measures for this are fully detailed in the relevant RAPs. These principally involve Government allocation of new land for farming, providing cash compensation for the lost crops, providing seeds and
		Communities' civil and political rights	Freedom of expression Freedom of assembly Impacts on human rights defenders				tools for new farming plots and improving access routes to new farming areas.
		Rights of indigenous peoples	Free, prior and informed consent Self-determination Cultural rights				



ESRS	Topic	Sub-topic	Sub-sub-topic	Tim e hori zon	VC/00	Material impact or risk	Current and anticipated effects of IROs on business model, value chain, strategy and decision making
G1	Busines s Conduc t	Corporate culture Protection of whistle-blowers Animal welfare Political engageme nt Managem ent of relationshi ps with suppliers including payment practices Corruption and bribery	Prevention and detection including training Incidents	S	00	Risk	Kenmare conducts its business with the highest levels of integrity by upholding its purpose, values and standards and complying with relevant regulations and global standards.  Kenmare's reputation is integral to its ability to attract investors, banks, employees, suppliers and customers and maintain its social and regulatory licence to operate.  Material topic: Bribery and corruption  Bribery and corruption is considered a country-related risk, given Mozambique's listing on Transparency International's countries to watch on the 2021 corruption perceptions index. Kenmare manages this risk through its supplier due diligence programme.
Taili ngs stor age				S	00	Risk	Material topic: Tailings Storage  Dredge mining operations generate tailings which are stored in containment areas known as paddocks and drying cells. They store material that does not contain valuable heavy minerals. From 2025 a permanent Tailings Storage Facility will be required. Both current storage areas and the future TSF will be designed and operated in line with the Global Industry Standards for Tailings Management (GISTM). Geotechnical risk is a principal risk for the Company. A failure of a berm could cause loss of life, damage to the operating assets and cessation of the operation of the Wet Concentrator Plants (WCPs) for a prolonged period.



ESRS	Topic	Sub-topic	Sub-sub-topic	Time horiz on	VC/00	Material impact or risk	Current and anticipated effects of IROs on business model, value chain, strategy and decision making
Soci o- econ omic deve lopm ent				S	00	Opportunity	Material topic: Socio-economic development 74.5% of Mozambique's population lives on less than \$2.15 a day, source: World Bank: Poverty headcount ratio at \$2.15 a day (2017 PPP). Within Kenmare's concession, 45,000 people live largely through subsistence agriculture. Since 2004, Kenmare, through its not-for- profit association KMAD, has been working to improve health, education, livelihoods and water and sanitation for the communities directly and indirectly impacted by mining operations.
Soci al licen ce to oper ate				S	00	Risk	Material topic: Social licence to operate  Approximately 45,000 people live and farm in areas close to the mine. Consultation and engagement regarding the future mine path and associated infrastructure is an ongoing process defined through the ESIA and RAP regulations governing public consultation. Formal employment is limited in these communities and there is an expectation that Kenmare should provide employment and business opportunities to help improve the lives and livelihoods of communities. Additionally, Kenmare uses natural resources such as water, which the community also needs to access. The risk of communities perceiving they do not have access to their fair share of opportunities associated with the mine or are limiting their access to natural resources could lead to the communities finding means of preventing ongoing operations. Kenmare manages this risk through both investment in KMAD programmes and through respectful dialogue regarding the mine's activities and associated impacts and opportunities.