PR-SH-0366

Kestrel SHMS Procedure

Scope 3 Emissions Reporting – FY 2023-2024

Status: Approved and authorised for use
Revision: 0 (02/07/2025)
Business Owner: Principal Carbon Transition
MoC Reference:

Contents Page

1. Purpose

The purpose of this procedure is to set out the emissions reporting boundary, calculation methods and key assumptions required to prepare the Scope 3 emissions associated with the Kestrel Mine.

2. Relevant Reporting Period

The Scope 3 emissions key assumptions, calculation methodology and emissions factors are set out for the emissions inventory for the period from 1 July 2023 to 30 June 2024.

3. Relationship to NGERs Reporting

The Scope 1 and 2 emissions from the Kestrel Mine are prepared and reported each financial year in accordance with the requirements of the *National Greenhouse and Energy Reporting Act 2007 (Commonwealth)* and its subordinate legislation. These are also prepared on a calendar year basis for the purposes of the Kestrel Financial Reporting Year.

Table 1: FY23/24 NGERs Reported Scope 1 and 2 Emissions

Emissions Scope	Total Reported (tCO_2-e)
Scope 1 Emissions	1,233,730
Scope 2 Emissions	160,284
Total Scope 1 and 2	**1,384,014**

4. Accounting and Reporting Principles

The carbon accounting principles adopted in this basis of preparation are consistent with those by the GHG Protocol in the Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("GHG Scope 3 Protocol"):

- ***Relevance:*** *Ensure the GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users – both internal and external to the company.*
- ***Completeness:*** *Account for and report on all GHG emission sources and activities within the inventory boundary. Disclose and justify any specific exclusions.*
- ***Consistency:*** *Use consistent methodologies to allow for meaningful performance tracking of emissions over time. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.*
- ***Transparency:*** *Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.*
- ***Accuracy:*** *Ensure that the quantification of GHG emissions is systematically neither over nor under actual emissions, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable confidence as to the integrity of the reported information.*

5. Organisational Boundary

For the purposes of NGER reporting, Kestrel Coal Group Pty Ltd was identified as the Controlling Corporation (ABN: 70624655518).

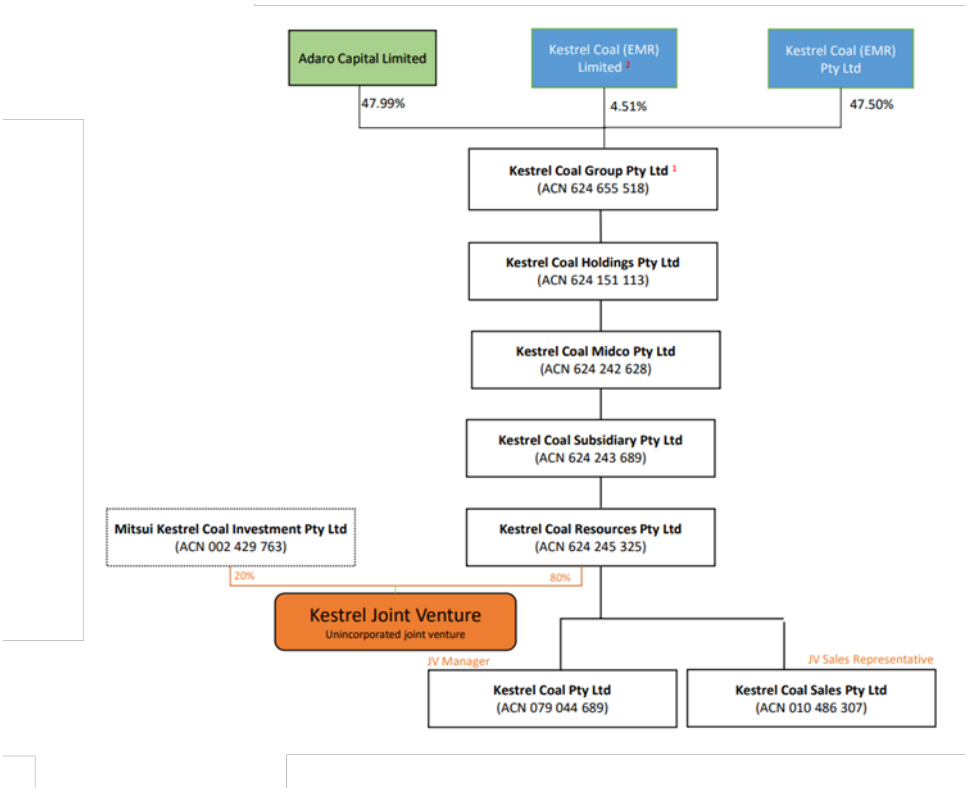

Figure 1: Kestrel Coal Corporate Structure Do we need to show this detail of our corporate structure – doesn't appear other companies do so can we not just say Kestrel Coal Group is the Controlling Corporation? I note Anglo doesn't go to this level and not sure if we should show this? Might be worth check with Warren.

For the purposes of the Scope 3 assessment, all corporate entities set out in the corporate structure in Figure One were assessed using the control approach.

Table 2: Corporate Structure and Greenhouse Gas Emissions Boundary Scope

Kestrel Coal Entity	Ownership Share	Assessment of Control
Kestrel Coal Group Pty Ltd	100%	Yes, Controlling Corporation
Kestrel Coal Holdings Pty Ltd	100%	Yes, 100% ownership
Kestrel Coal Midco Pty Ltd	100%	Yes, 100% ownership
Kestrel Coal Subsidiary Pty Ltd	100%	Yes, 100% ownership
Kestrel Coal Resources Pty Ltd	100%	Yes, 100% ownership
Kestrel Joint Venture	80%	Yes, majority ownership share
Kestrel Coal Pty Ltd	100%	Yes, 100% ownership
Kestrel Coal Sales Pty Ltd	100%	Yes, 100% ownership

The organisational boundary is set at all corporate entities set out in Table 2, with 100% reporting for the emissions associated with the Kestrel Mine, the key asset of the Kestrel Joint Venture.

6. Scope 3 Emissions Assessment

6.1 Assessment Criteria

The GHG Scope 3 Protocol sets out 15 categories of Scope 3 emissions to be considered in preparing a corporate value chain report. Within the organisational boundary set out in Section 5, Kestrel has separately considered all upstream and downstream sources of Scope 3 Emissions. These are depicted in Figure Two.

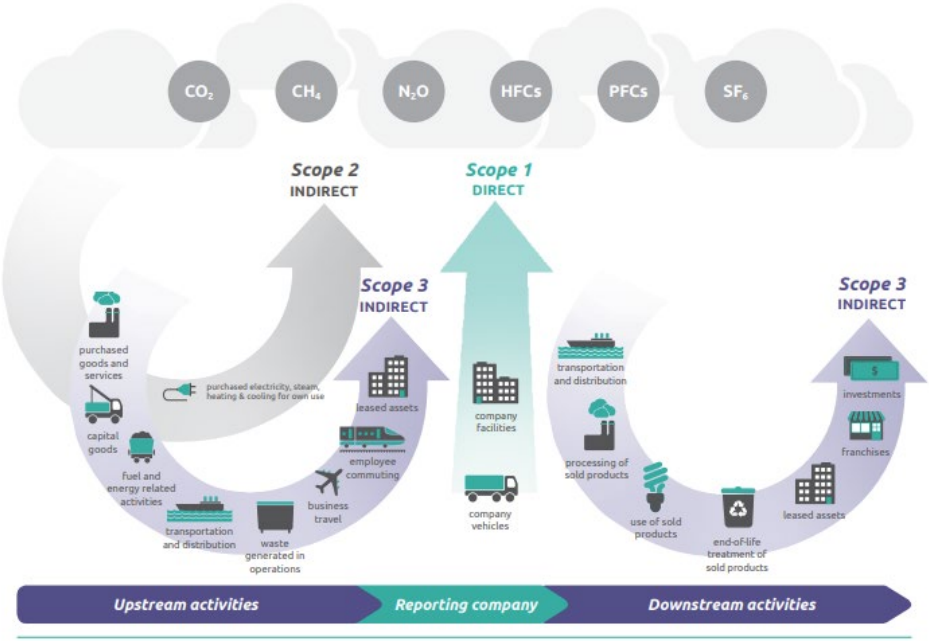

Figure 2: Overview of greenhouse gas protocol scopes and emissions across the value chain

Reference: GHG Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard

6.2 Sector Specific Guidance

In the FY22-23 Basis of Preparation, Kestrel considered all existing Mining industry guidance to determine what our peers have determined are relevant categories for Scope 3 emissions reporting. Following our calculation of the Scope 3 emissions inventory for FY22-23 we then assessed the relevancy of each source category.

There has been no additional guidance issued on categories of reporting for Scope 3 emissions in the intervening period. Accordingly, Kestrel will report consistent with the relevancy assessment conducted in Section 8.3 of the FY22-23 Basis of Preparation and reproduced below.

It is noted that Kestrel leases some landholdings to AACo on a short term lease arrangement. The emissions associated with the lease activities have been included in Kestrel's FY23-24 Scope 3 emissions estimates.

Table 3: Emissions relevancy assessment

Emissions Source	Criteria					Final Relevancy Assessment
	Size (Materiality)	Potential to influence emissions reductions?	Risk	Relevant to Key Stakeholders?	Outsourced Activities?	
1. Purchased goods and services	✓	✓	✗	–	✓	Assessed as relevant - Continue to be Reported.
2. Capital goods						Assessed as relevant - Captured in the assessment of 1. Purchased goods and services.
3. Fuel- and energy-related activities (not included in scope 1 or scope 2)	✗	✗	✗	–	✓	Reported only because data and emissions factors are readily available.
4. Upstream transportation and distribution	✗	✗	✗	–	✓	Captured in the assessment of 1. Purchased goods and services.
5. Waste generated in operations	✗	✓	✗	–	✓	Assessed as relevant - Continue to be Reported.
6. Business Travel	✗	✓	✗	–	✓	Assessed as relevant - Continue to be Reported.
7. Employee Commuting	✗	✓	✗	–	✓	Assessed as relevant - Continue to be Reported.
8. Upstream Leased Assets	Assessed as not applicable to Kestrel Coal Group Pty Ltd					
9. Downstream Transport	✓	✗	✗	–	✓	Assessed as relevant - Continue to be Reported.

Emissions Source	Criteria					Final Relevancy Assessment
	Size (Materiality)	Potential to influence emissions reductions?	Risk	Relevant to Key Stakeholders?	Outsourced Activities?	
10. Processing of sold products	✓	✗	✗	–	✓	Assessed as relevant - Continue to be Reported.
11. Use of Sold Products	✓	✗	✗	–	✓	Assessed as relevant - Continue to be Reported.
12. End of Life Treatment of Products	Assessed as not applicable to Kestrel Coal Group Pty Ltd					
13. Downstream Leased Assets	✗	✓	✗	–	✓	Assessed as relevant – To be reported for the first time in FY23-24.
14. Franchises	Assessed as not applicable to Kestrel Coal Group Pty Ltd					
15. Investments	Assessed as not applicable to Kestrel Coal Group Pty Ltd					

7. Data Collection Procedures and Emissions Calculations

7.1 Purchased Goods and Services

Consistent with the approach in FY22-23, Kestrel is applying a spend based assessment using Environmental Extended Input-Output (EEIO) emissions factors. Kestrel recognises the limitations associated with the use of this approach, noting that the best use case is for a materiality assessment as performed.

Kestrel reports financial accounts on a calendar year basis. To determine the Scope 3 emissions associated with purchased goods and services and/or capital goods, the top 10 highest expenditure categories were considered for each of 2023 and 2024. This category of emissions also includes the emissions sources for, "2. Capital Good" in the same exercise.

With the discontinuation of the Quantis tool by the GHG Protocol, Kestrel considered all recommended calculation tools by the GHG Protocol. Of these, the most current data was contained in the US EPA, "Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities, USEPA Report". As the latest available data, Kestrel used the 2016 Industry summary factors without margins for those top 10 highest spend categories where a Scope 3 Emissions factor was assessed as applicable. Kestrel considered all potential applicable factors and reported all expenditure under the category of "Support Activities for Mining" as the most conservative approach. As Kestrel's spend was recorded in AUD, an average annual exchange rate was applied to ensure consistency in reporting units.

In using the EEIO the emissions factors account for full value of this emissions source, including both the emissions for 2. Capital Goods and 4. Upstream Transportation and Distribution.

Table 4: Emissions calculations key variables for Purchased goods and services

Data		**Value in this reporting period**		
Activity Data		Total expenditure in the reporting period		
Activity Data Key Assumptions		Top ten categories of spend considered only. USD to AUD conversion applied on an annual average basis.		
Emissions Factors				
Category of Scope 3 Emission	**Units of emissions factor**	**Carbon Dioxide**	**Methane**	**Nitrous Oxide**
Support activities for mining	kg/2016 USD, purchaser price	0.325	0.001	0
Emissions Factor Key Assumptions		2016 Industry Summary factors without margins applied.		
Emissions Factor Data Source		US EPA input output tables.		

7.2 Capital Goods

Included in the emissions calculations of 7.1 Purchased goods and services.

7.3 Fuel- and Energy-Related Activities (not included in scope 1 or scope 2)

For all hydrocarbon and electricity reported in Kestrel's FY23/24 NGER report, Scope 3 emissions from the upstream distribution and transportation were calculated using the same NGER activity data and the Scope 3 emissions factors prescribed in the National Greenhouse Accounts Factors: 2024 published by the Department of Climate Change, Energy, Environment and Water for each type and use of hydrocarbon.

Table 5: Emissions calculations key variables for upstream fuel and energy related activities

Data	**Value in this reporting period**	
Activity Data	Consistent with the NGER reporting method	
Activity Data Key Assumptions	Consistent with the NGER reporting method	
Emissions Factors	**Fuel combusted**	**Scope 3 Emission Factor (kg CO_2-e /GJ)**
Stationary Energy	Petroleum based oils (other than petroleum based oil used as fuel), e.g. lubricants	18.0
Stationary Energy	Diesel oil	17.3
Stationary Energy	Liquefied petroleum gas (LPG)	20.2
Cars and light commercial vehicles	Diesel oil	17.3
Heavy duty vehicles	Diesel oil - Euro iv or higher	17.3
Emissions Factors	**State, Territory or grid description**	**Transmission and distribution losses kg CO_2-e/kWh**
Transmission and distribution network operators	Queensland	0.10
Emissions Factor Key Assumptions	Consistent with the NGER reporting method	
Emissions Factor Data Source	From the NGA Factors: Tabe 1 Indirect (scope 2 and scope 3) emission factors from consumption of purchased or acquired electricity Table 8 Direct (Scope 1) and indirect (scope 3) emission factors for the consumption of liquid fuels, including certain petroleum based products for stationary energy purposes Table 9 Direct (scope 1) and indirect (scope 3) emission factors for the consumption of transport fuels in different transport equipment	

7.4 Upstream Transportation and Distribution

As Kestrel used industry factors for "Category 1, Purchased Goods and Services", the upstream transportation and distribution for these emissions sources have been accounted for in this category. Accordingly, no additional work was performed to estimate the emissions from this category.

7.5 Waste Generated in Operations

The total waste collected and disposed of by Kestrel's waste provider, JJ Richards is provided in a monthly report. The "General Waste to Landfill" total tonnages were used in reporting. Kestrel Mine's waste is best characterised by the waste category, "Commercial and industrial".

Emissions Factors for waste are taken from the NGA Factors.

Waste which was recycled and/or regulated waste and septic waste is not included in the emissions boundary as there is currently no robust and transparent emissions factor for this waste.

Table 6: Emissions calculations key variables for waste generated in operations

Data	**Value in this reporting period**
Activity Data	Invoice data from JJ Richards
Activity Data Key Assumptions	Waste to landfill reported.
Emissions Factor	**Scope 3 emission factor (t CO_2-e/t) Volume to mass conversion factor (t/m^3)**
Commercial and industrial waste	1.3
Emissions Factor Key Assumptions	N/A
Emissions Factor Data Source	Table 16 Indirect (scope 3) waste emission factors for total waste disposed to landfill by broad waste stream category, NGA Factors.

7.6 Business Travel

Kestrel uses a centralised booking platform CTM for all employee travel (domestic) and retained a record of International Travel in our financial reporting system Pulse. An extract of all flights for the FY23/24 was generated from these platforms, including the total flight length.

Using the GHG Protocol factors for air travel based on flight length the following assumptions were required to ensure the flights were appropriately represented in each category:

- Air-Domestic is based on the longest flight distance in the UK. This is assumed to be 430km.
- Air-Short Haul-First/Business Class factor was used for Premium Economy fares of this length.

Whilst the CTM Platform calculates emissions per flight, these were not found to align with the GHG protocol and as such were not used.

Table 7: Emissions calculations key variables for business travel

Data	Value in this reporting period
Activity Data	CTM and Pulse Reporting extract for the period from 1 July 2023 to 30 June 2024
Activity Data Key Assumptions	N/A
Emissions Factors	**Emissions Factor (kg CO_2-e/Passenger km)**
Air - Domestic - Economy	0.17147
Air - Domestic - Business	0.17147
Air - Short Haul - Economy	0.09245
Air - Short Haul - Premium Economy	0.13867
Air - Short Haul - First/Business Class	0.13867
Air - Long Haul - Business Class	0.23963
Air - Long Haul - First Class	0.33052
Emissions Factor Key Assumptions	• Air-Domestic is based on the longest flight distance in the UK. This is assumed to be 430km. • Air-Short Haul-First/Business Class factor was used for Premium Economy fares of this length.
Emissions Factor Data Source	GHG Protocol factors

7.7 Employee Commuting

Activity data was not readily available for employee commuting however reasonable assumptions can be made to determine the materiality of this emissions source.

The overwhelming majority of Kestrel staff commute from Emerald to the Kestrel mine with very few staff using the Emerald town office and a small head office in Brisbane excluded from these considerations. The Kestrel Mine consists of two different access points, Kestrel South, the most immediate location for the underground operations and Kestrel North where the Coal Handling, Processing and Preparation plant and train load out facilities are located. As the Kestrel North location is further away from Emerald, the distance from Emerald of 52km was used.

Kestrel employees 800 staff. Assuming equal distribution across the 4 shifts, the commute for 400 staff every day of the year (Assumes 2 shifts) was estimated using a heavy SUV.

Note the following make this estimate conservative:

- The majority of staff will commute to Kestrel South, which is 10km closer to Emerald.
- Busses are organised and compulsory for all rostered coal mine workers, which will result in lower total emissions than these estimates.

As the estimates for immaterial for the mine site, where the majority of staff are located, they were not estimated for the Brisbane office.

Table 8: Emissions calculations key variables for employee commuting

Data	Value in this reporting period
Activity Data	Assumed
Activity Data Key Assumptions	52 km distance travelled each way 400 staff travel each day
Greenhouse Gas	**Emissions Factors**
Heavy SUV and light commercial vehicles	212.5g/km
Emissions Factor Key Assumptions	Average emissions intensity for MA and MC+NA category, 2020–2021
Emissions Factor Data Source	Carbon Dioxide Emissions Intensity for New Australian Light Vehicles 2021

7.8 Upstream Leased Assets

In applying the entity boundary outlined in Section 5, this category of emissions is not relevant for the Kestrel Coal Group.

7.9 Downstream Transportation and Distribution

The GHG Protocol published, "Emissions Factors from Cross-Sector Tools" which consolidates a set of emissions factors including emissions factors for the transport of freight.

7.9.1 Rail Transport

Kestrel rails coal product from the wash plant at Kestrel North, Lilyvale to Gladstone Port on the Aurizon network using Pacific National. The Blackwater System Information Pack outlines the specifics of this rail line. The total distance was estimated at 396.6 km. It is assumed that all product coal is transported to the Gladstone port via this rail line.

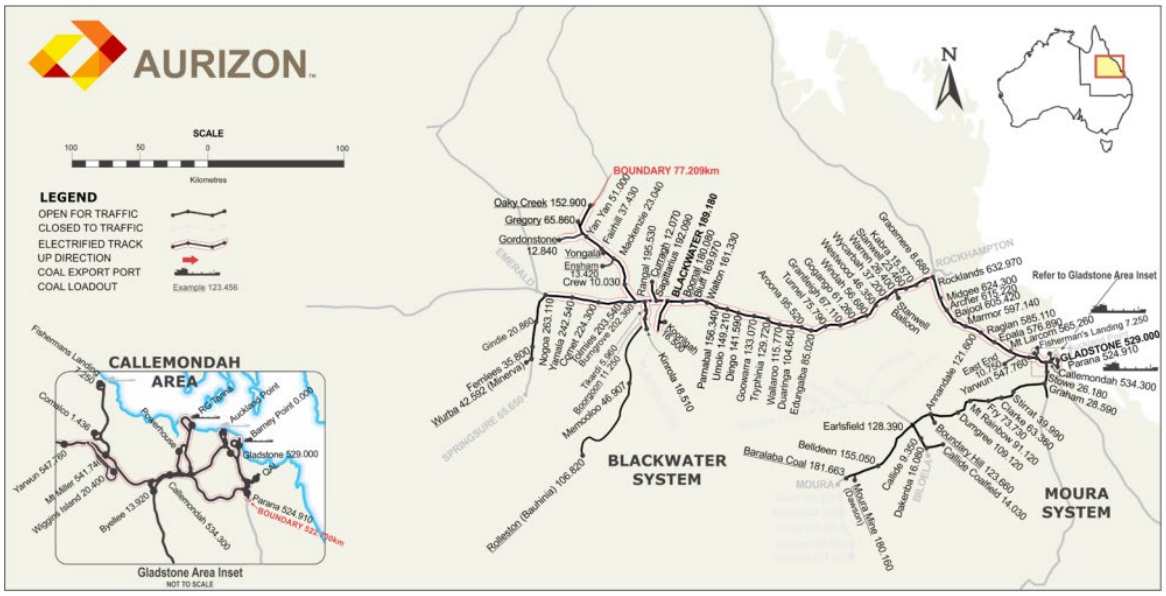

Figure 3: Blackwater Rail System

Pacific National published their operational emissions intensity in the 2024 Sustainability Report for FY23 as 16.2 tCO_2-e/'mNTK where NTK is defined as financed net tonne Kilometres (Pacific National, 2024).

7.9.2 Shipped Transport

Kestrel's sold product is shipped from the Gladstone Port to our clients around the world. It is assumed that all sold coal is shipped, with the total shipped tonnages per location tracked by the Technical Marketing team.

The GHG Protocol Emissions Factors from Cross-Sector Tools Transport-Freight emissions factors were considered. The emissions factor for, "Watercraft Shipping" best describes the seaboard shipping of our product in Region, "Other".

Whilst the factors are available on a type of ship basis, in practice the emissions factors are consistent and as such it does not change the calculated emissions to specific the ship type. For the watercraft-shipping freight type, the CO_2 factor for the Region, "Other" is nominated as 0.048 kg/Short Ton Mile and a CH_4 and N_2O emissions factor for Waterborne Craft of 0.0041 gram/short ton mile and 0.0014 gram/short ton mile respectively.

A short ton mile is the equivalent of 907.18 kg of Product. These factors have been unit converted from a short ton mile to a tonne km.

7.9.3 Summary of Emissions Factors and Activity Data

Table 9: Emissions calculations key variables for downstream transportation and distribution

Data	Value in this reporting period	
Activity Data	Consistent with the NGER reporting method	
Activity Data Key Assumptions	All product sold is railed to Gladstone.	
Emissions Factors for Product Shipped in Tankers/Carriers		
Emissions Factor (total CO_2, CH_4 and N_2O)	0.048055	$kgCO_2$-e/short ton mile
Emissions Factor (total CO_2, CH_4 and N_2O)	0.032881	$kgCO_2$-e/tonne km
Emissions Factors for Product Shipped via Rail		
Emissions Factor (total CO_2, CH_4 and N_2O)	16.2	tCO_2-e/'mNTK
Emissions Factor Key Assumptions	Region nominated as, "Other".	
Emissions Factor Data Source	For shipped product: GHG Protocol, "Emissions Factors from Cross-Sector Tools" For rail transport, Aurizon 2023 Sustainability Report	

7.10 Processing of Sold Products

Kestrel Mine's primary product is metallurgical coal, exported from Australia to our clients around the world. Metallurgical coal is reduced by heating in an oxygen free environment to produce coke which is then in turn used as a reductant for iron oxides to metallic iron. The production of coke oven coke from Kestrel's metallurgical coal is captured in this category.

Whilst there are Australian estimates of the average emissions intensity of coke oven coke, as all of Kestrel's coal is exported, the emissions factors from the 2019 refinement to the IPCC Guidelines were used. The carbon content of coke is taken from Table 4.3 (updated) and the CO_2 emissions factor from Table 4.1 (updated), methane from Table 4.2 (updated). To account for the full value of the metallurgical coal the "Coke production without by-product recovery" factor in Table 4.1 was used, representing a conservative approach to estimating the ultimate emissions from the metallurgical coal.

Table 10: Emissions calculations key variables for sold products

Data	Value in this reporting period
Activity Data	Consistent with the NGER reporting method
Activity Data Key Assumptions	Sold metallurgical coal
Greenhouse Gas	**Emissions Factors**
Carbon Dioxide	1.23 tCO_2-e/t Coke produced
Methane	0.089g CH_4/ t Coke produced
Emissions Factor Key Assumptions	Energy Content Factor of 0.73 kgC/kg
Emissions Factor Data Source	Table 4.2-4.4, Chapter 4 Metal Industry Emissions, Volume 3, 2019 refinement to the IPCC Guidelines

7.11 Use of Sold Products

Kestrel also periodically produces thermal coal sold for thermal energy purposes as part of the mining operations. This is primarily used for electricity generation.

As all of Kestrel's coal is exported, the emissions factors from the 2006 IPCC Guidelines for stationary combustion in the energy industries. The default emissions factor for "Other bituminous coal" was taken for each of CO_2, CH_4 and N_2O from Table 2.2 with Kestrel's specific calorific value of the coal used to convert to an energy content basis.

Table 11: Emissions calculations key variables for use of sold products

Data	Value in this reporting period
Activity Data	Consistent with the NGER reporting method
Activity Data Key Assumptions	All bituminous coal sold is used for Power Generation
Emissions Factors	94,902 $kgCO_2$-e/TJ
Emissions Factor Key Assumptions	N/A
Emissions Factor Data Source	Table 2.2, Volume 2, 2006 IPCC Guidelines

7.12 End-of-life Treatment of Sold Products

The end-of-life treatment of metallurgical and thermal coal are unlikely to result in significant emissions. Each of these products is valuable for their respective energy and carbon contents which incentivises our clients to minimise waste. There is also no established common approach, nor an emissions factor for our clients management of the waste from their facilities. This is reflected in the ICMM categorisation of this emissions source as "Low" for relevancy and as such no further work has been performed on this category of emissions.

7.13 Downstream Leased Assets

Kestrel leases a portion of our landholdings for the purposes of agisting an estimated average of 5,700 head of cattle. To calculate the emissions associated with these beef cattle, the Beef and Sheep Greenhouse Accounting Tool v2.3 developed by Meat and Livestock Australia was utilised (Meat and Livestock Australia, 2023).

Table 12 Emissions calculations key variables for downstream leased assets

Data	Value in this reporting period
Activity Data	Assumed at 5,700 head on average
Activity Data Key Assumptions	
Emissions Factors	Consistent with Beef and Sheep Greenhouse Accounting Tool v2.3
Emissions Factor Key Assumptions	
Emissions Factor Data Source	

7.14 Franchises

In applying the entity boundary outlined in Section 5, this category of emissions is not relevant for the Kestrel Coal Group.

7.15 Investments

In applying the entity boundary outlined in Section 5, all material investments for Kestrel Coal Group have been included in the prepared FY23/24 inventory.

8. Total Scope 3 Emissions

8.1 Total Calculated Scope 3 Emissions

The total calculated emissions for each source for the FY23/24 are summarised in Table 13. This demonstrates that Categories 1, 9, 10 and 11 are material for Kestrel, with all other categories for which emissions were able to be calculated immaterial.

Table 13: Kestrel's FY23/24 Calculated Scope 3 Emissions

Scope 3 Emissions Category	Emissions Source	Total Calculated Emissions (tCO_2-e)	% of Total Calculated Scope 3 Emissions
1. Purchased Goods	Top Ten Category of Spend, by industry type	47,450	1%
3. Fuel- and energy-related activities (not included in scope 1 or scope 2)	All Hydrocarbons and Electricity Transmission and Distribution	28,961	0%
5. Waste generated in operations	Waste to Landfill	2,301	0%
6. Business travel	All Air Travel	317	0%
7. Employee Commuting	Employee Commuting	2,824	0%
9. Downstream Transport	Rail and Shipping of Product Coal	1,490,560	20%
10. Processing of sold products	Metallurgical coal to coke oven coke	4,567,112	61%
11. Use of sold products	Thermal Coal for power generation	1,335,905	18%
15. Downstream leased assets	Emissions associated with beef cattle agisted	1,929	0%
Total		**7,477,761**	**100%**

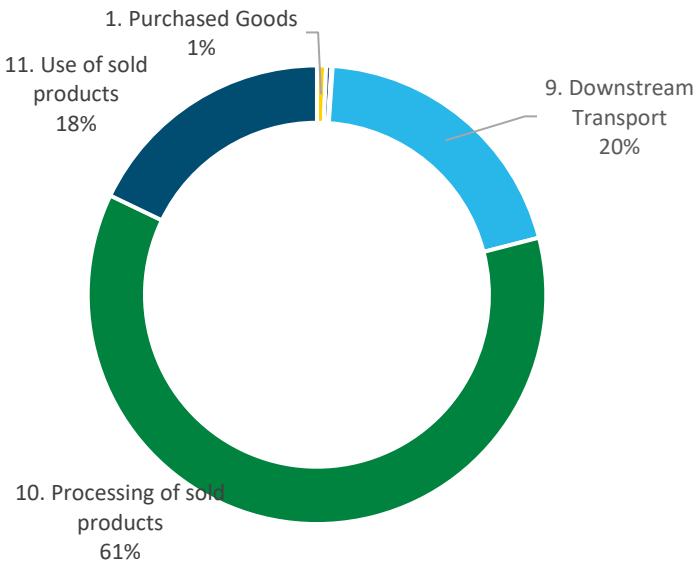

Figure 4: Kestrel's FY23/24 Calculated Scope 3 Emissions

8.2 Total Calculated Emissions

The table and figure below compares the calculated emissions scopes for Kestrel in FY23/24. This demonstrates, as expected, that the Scope 3 emissions in FY23/24 are greater than 80% of all emissions reported for Kestrel.

Table 14: Kestrel's FY23/24 All Emissions Scopes

Emissions Scope	Total Reported (tCO_2-e)
Scope 1 Emissions	1,223,730
Scope 2 Emissions	160,284
Scope 3 Emissions	7,477,761
Total All Scopes	8,861,775

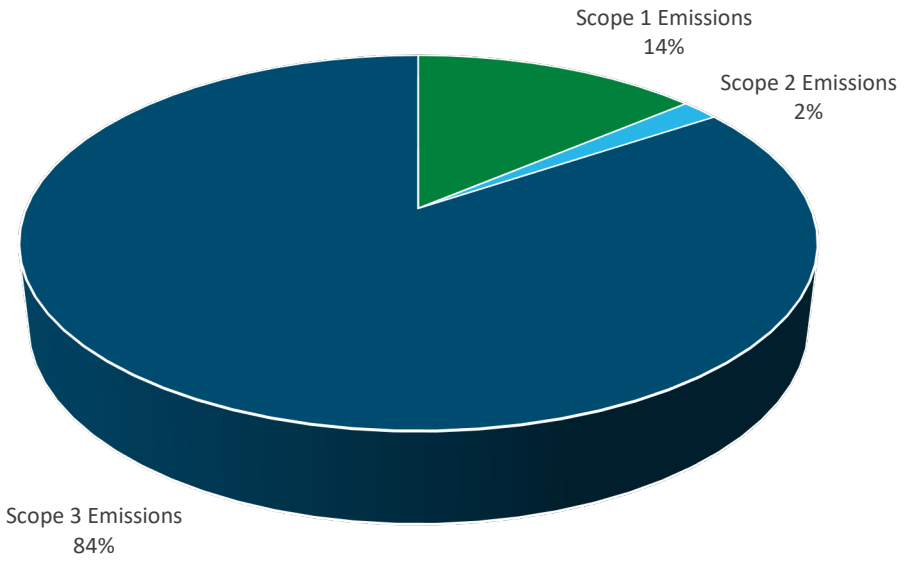

Figure 5: Kestrel's FY23/24 Emissions by Scope

9. Terms and Definitions

All definitions are consistent with those set out in the Corporate Value Chain Accounting Reporting Standard (GHG Protocol).

Term	Definition
CO_2 equivalent (CO_2-e)	The universal unit of measurement to indicate the global warming potential (GWP) of each greenhouse gas, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis.
Control	The ability of a company to direct the policies of another operation. More specifically, it is defined as either operational control (the organization or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation) or financial control (the organization has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities).
Downstream emissions	Indirect GHG emissions from sold goods and services. Downstream emissions also include emissions from products that are distributed but not sold (i.e., without receiving payment).
Emission factor	A factor that converts activity data into GHG emissions data (e.g., kg CO_2-e emitted per litre of fuel consumed, kg CO_2-e emitted per kilometre travelled, etc.).
Global Warming Potential (GWP)	A factor describing the radiative forcing impact (degree of harm to the atmosphere) of one unit of a given GHG relative to one unit of CO_2.
Materiality	Concept that individual or the aggregation of errors, omissions and misrepresentations could affect the GHG inventory and could influence the intended users' decisions.
NGER	National Greenhouse and Energy Reporting Act 2007 and it's subordinate legislation
Scope 1 emissions	Emissions from operations that are owned or controlled by the reporting company.
Scope 2 emissions	Emissions from the generation of purchased or acquired electricity, steam, heating or cooling consumed by the reporting company.
Scope 3 emissions	All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.
Upstream emissions	Indirect GHG emissions from purchased or acquired goods and services.

10. Accountabilities

Where the source data aligns with the NGERs report, please see the Basis of Preparation for this report.

Title	Definition
Chief Executive Officer	Executive Officer responsibility for National Greenhouse and Energy Reporting
Strategic Sourcing Manager	Responsible for certain categories of spend, resulting in Scope 3 emissions.
Manager Commercial and Services	Responsible for fuel, oils and consumables use tracking and reporting.
Manager Accounting & Finance	Responsible for provision of general ledger spend.
Manager Technical Marketing & Logistics	Responsible for the provision of shipped tonnages
General Manger Planning and Strategy	Responsible for life of mine planning including carbon profile, and development of carbon management strategy.
Superintendent Environment	Responsible for collation and supply of waste invoices.
Manager Sustainability	Responsible for sustainable business policy and strategy.
Principal Carbon Transition	Responsible for the preparation and maintenance of this document and the Scope 3 emissions inventory each year.

11. Related Documents

Reference	Title	Link/Doc ID
Legislative requirements		
NGER	National Greenhouse and Energy Reporting Act 2007	https://www.legislation.gov.au/C2007A00175/latest/text
NGER Regulations	National Greenhouse and Energy Reporting Regulations 2008	https://www.legislation.gov.au/F2008L02230/latest/text
NGER Measurement Determination	National Greenhouse and Energy Reporting (Measurement Determination)	https://www.legislation.gov.au/F2008L02309/latest/text
Standards & practices		
UNFCCC 2019	Chapter 4, Metal Industry Emissions, from the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories	https://www.ipcc-nggip.iges.or.jp/public/2019rf/index.html

Reference	Title	Link/Doc ID
UNFCCC 2006	Chapter 2, Stationary Combustion, 2006 IPCC Guidelines for National Greenhouse Gas Inventories	https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf
N/A	GHG Corporate Value Chain (Scope 3) Accounting and Reporting Standard	https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporing-Standard_041613_2.pdf
N/A	CDP Technical Note: Relevance of Scope 3 Categories by Sector	https://cdn.cdp.net/cdp-production/cms/guidance_docs/pdfs/000/003/504/original/CDP-technical-note-scope-3-relevance-by-sector.pdf
N/A	ICMM Scope 3 Emissions Accounting and Reporting Guidance	https://www.icmm.com/website/publications/pdfs/environmental-stewardship/2023/guidance_scope-3-reporting.pdf?cb=69120
N/A	National Greenhouse Accounts Factors: 2024	https://www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-account-factors-2024.pdf
N/A	Supply Chain Greenhouse Gas Emission Factors v1.2 by NAICS-6	https://catalog.data.gov/dataset/supply-chain-greenhouse-gas-emission-factors-v1-2-by-naics-6
N/A	September 2022 Carbon Dioxide Emissions Intensity for New Australian Light Vehicles 2021	https://www.ntc.gov.au/search?keyword=carbon%20dioxide%20emissions%20intensity
N/A	Carbon Neutral Organisations: Climate Active Carbon Neutral Standard for Organisations	https://www.climateactive.org.au/sites/default/files/2023-04/Standards_Organisation.pdf
N/A	Climate Active TECHNICAL GUIDANCE MANUAL	https://www.climateactive.org.au/sites/default/files/2024-02/Technical%20Guidance%20Manual_February%202024_PDF_0.pdf
N/A	Pacific National ESG Report FY2024	https://pacificnational.com.au/wp-content/uploads/2024/09/PCN13271_ESG_Report_2024_V10_WEB.pdf
N/A	Meat & Livestock Australia Sheep and Beef GHG Accounting framework	https://carbon-calculator.mla.com.au/dashboard/calculations
Kestrel documents & records		

12. Revision History

Rev	Date	Reason for Issue	Originator	Checked	Approved
0	02/07/2025	Approved and authorised for use	Helen McCarthy	Fergus Lee	Peter Manton
A	07/02/2025	Issued for full review- new procedure - this document sets out the assumptions and calculations for a Scope 3 Emissions Inventory associated with Kestrel's reporting in the FY 2023-2024		Helen McCarthy Fergus Lee Peter Manton	