

National Greenhouse and Energy Reporting audit report (reasonable assurance) of the Section 19 energy and emissions report

Audit report coversheet

Audited body

Name of audited body	Fortescue Metals Group Limited
Name of contact person for audited body	Christopher Cutress
Contact person phone number	+61 (8) 6218 8583
Contact person email address	ccutress@fmgl.com.au

Reporting requirements

Total scope 1 emissions for audited body	1,910,727 tonnes CO ₂ -e
Total scope 2 emissions for audited body	363,525 tonnes CO ₂ -e
Total energy consumption for audited body	32,867,500 GJ
Total energy production for audited body	1,547,789 GJ

Audit description

Kind of audit	Reasonable assurance under section 74 of the National Greenhouse and Energy Reporting Act 2007 (NGER Act).
Objective of the assurance engagement	Assurance on scope 1 emissions, scope 2 emissions, energy production and energy consumption in Fortescue Metals Group Limited's energy and emissions report under s19 of the NGER Act.
Reporting period covered by audit	1 July 2022 to 30 June 2023
Audit fee (excluding GST)	\$59,000
Total hours spent on the audit by audit team	441



Non-audit fees paid to the audit team leader and audit firm for services and activities excluding this audit over the past 12 months (excluding GST) ¹	\$3,594,997
Why did the provision of non-Part 6 services or activities not result in a conflict of interest situation?	The provision of non-Part 6 services did not relate to the subject matter of this audit. Therefore, no conflict of interest was identified.
Date terms of engagement signed	24 March 2023
Date audit report signed	11 August 2023

Auditor details

Name of audit team leader Nick Moffatt **GEA** registration number 0198/2013 Organisation **KPMG Phone number** +61 (8) 9263 4833 **Address** 235 St Georges Terrace, Perth WA 6000 Australia Names and contact details of other audit team Jason Naidoo (Engagement Manager) members jnaidoo3@kpmg.com.au Damini Kamerkar (Senior Consultant) dkamerkar@kpmg.com.au Nitesh Ratnani (Senior Consultant) nratnani@kpmg.com.au Tom Evans (Senior Consultant) – tevans5@kpmg.com.au Dikshant Mehta (Consultant) - dmehta5@kpmg.com.au Isaac Livingston (Consultant) ilivingston1@kpmg.com.au

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¹Value of invoices raised by KPMG Australia to the audited body (as indicated in Part A of this report) for services that do not relate to an NGER assurance engagement, ERF audit or safeguard mechanism audit for the 12 months prior to the audit team leader signing the terms of engagement and ending when the team leader signed Part A of the assurance report.



Details of exemptions under 6.71 of the NGER Regulations for the audit team leader or professional member of the audit team.

No exemptions noted.

These may include:

- conflict of interest and details of the procedures for managing conflict of interest
- relevant relationships, and
- exemptions for an audit team leader to carry out more than five consecutive greenhouse and energy audits in relation to the audited body.

Peer reviewer details

Name of peer reviewer	Graham Hogg
Organisation	KPMG
Phone number	+61 (2) 9263 7226
Address	235 St Georges Terrace, Perth WA 6000 Australia



Part A—Auditor's report

To: the Directors of Fortescue Metals Group Limited; and the Clean Energy Regulator

We have conducted a reasonable assurance engagement, being an audit pursuant to section 74 of the *National Greenhouse and Energy Reporting Act 2008* (NGER Act), of whether Fortescue Metals Group Limited's energy and emissions report for the period 1 July 2022 to 30 June 2023 has been prepared in accordance with section 19 of the NGER Act.

The energy and emissions report being audited, consists of the following:

- scope 1 greenhouse gas emissions 1,910,727 tonnes of CO₂-e;
- scope 2 greenhouse gas emissions 363,525 tonnes of CO₂-e;
- energy production 1,547,789 GJ; and
- energy consumption 32,867,500 GJ.

Details of audited body

Name of audited body	Fortescue Metals Group Limited
Address	Level 2, 87 Adelaide Terrace, East Perth, WA 6004
ABN	57 002 594 872

Responsibility of Fortescue Metals Group Limited's management

Management of Fortescue Metals Group Limited are responsible for preparation and presentation of the energy and emissions report in accordance with section 19 of the NGER Act, in all material respects. This responsibility includes design, implementation and maintenance of internal control relevant to the preparation and presentation of the energy and emissions report that is free from material misstatement, whether due to fraud or error.

Management of Fortescue Metals Group Limited is responsible for the interpretation and application of the requirements of the NGER Act and the NGER Measurement Determination in determining operational control and quantifying emissions and energy, which are reflected in a Basis of Preparation which has been provided to us.

Emissions quantification is subject to inherent uncertainty because incomplete scientific knowledge has been used to determine emissions factors and the values needed to combine emissions due to different gases.

Our independence and quality management

We have complied with the relevant ethical requirements relating to assurance engagements, which include independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence, due care, confidentiality and professional behaviour. These include all of the requirements defined in the *National Greenhouse and Energy Reporting Regulations 2008* (NGER Regulations) regarding the Code of Conduct, independence and quality management.

Furthermore, KPMG maintains:



• In accordance with Australian Standard on Quality Management 1 Quality Management for Firms that Perform Audits or Reviews of Financial Reports and Other Financial Information, or Other Assurance or Related Services Engagements, we are required to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our responsibility

Our responsibility is to express a conclusion on Fortescue Metals Group Limited's scope 1 emissions, scope 2 emissions, energy production and energy consumption in the energy and emissions report, based on the procedures we have performed and the evidence we have obtained.

We have conducted our reasonable assurance engagement in accordance with the *National Greenhouse and Energy Reporting (Audit) Determination 2009* (NGER Audit Determination) and relevant national and international standards, as listed below.

- Australian Standard on Assurance Engagements ASAE 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information
- Australian Standard on Assurance Engagements ASAE 3100 Compliance Engagements
- Australian Standard on Assurance Engagements ASAE 3410 Assurance Engagements on Greenhouse Gas Statements, and
- ASQM 1 Quality Management for Firms that Perform Audits or Reviews of Financial Reports and Other Financial Information, or Other Assurance or Related Services Engagements.

The NGER Audit Determination and relevant national and international standards require that we plan and perform this engagement to obtain reasonable assurance about whether the energy and emissions report is free from material misstatement.

A reasonable assurance engagement in accordance with the NGER Audit Determination and relevant national and international standards involves performing procedures to obtain evidence about the application of operational control requirements and the quantification of scope 1 emissions, scope 2 emissions, energy production and energy consumption in the energy and emissions report in accordance with the requirements of the NGER Act. The nature, timing and extent of procedures selected depend on the assurance practitioner's judgement, including the assessment of the risks of material misstatement, whether due to fraud or error. In making those risk assessments, we considered internal control relevant to Fortescue Metals Group Limited's preparation of the energy and emissions report.

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusion.

Summary of procedures undertaken

The procedures we conducted in our reasonable assurance engagement included:

- KPMG performed an in-person site visit to the Christmas Creek mine from 6th to 7th June 2023;
- In-person interviews held with data owners and senior management at Christmas Creek mine for Fortescue Metals Group Limited to gather evidence and confirm current processes;
- Understand the control environment relating to emissions and energy reporting, including controls
 related to information systems used to correlate data. Performed walkthroughs of the reported GHG
 emissions and energy sources to confirm our understanding of the measurement and reporting



processes and obtain evidence of the operating effectiveness of the key controls implemented by management;

- Testing of the annual reporting process undertaken during the year and ensuring that reports agreed with the figures reported for NGERs, including the processes for review of emissions and energy data by Management;
- Reviewing the operational control procedures performed by Fortescue Metals Group Limited and assessing if it is sufficient and robust to define and identify operational control for the appropriate sites;
- Testing the treatment of contractors by reviewing the process of the use of contractors at site, remotely
 through discussion with Management; and comparing this with the definition of Operational Control per
 the NGER legislation;
- Observation of processes performed;
- Evaluation of management's interpretation of the NGER legislation;
- Inspection of documents, and examination, on a test basis, of evidence supporting underlying calculations;
- Assessment of the completeness of boundaries and governance over boundary determination decisions;
- Testing of calculations that the audited body performed, including recalculation of emissions and energy;
- Evaluation of the appropriateness of quantification methods and reporting policies;
- Analytical reviews and trend analysis of the GHG emissions and energy data;
- Identifying and testing assumptions supporting the calculations, including the use offactors;
- Re-performance of key relevant calculations, and evaluation of the appropriateness of the conversion and emission factors used;
- Assessment of the accuracy of key meter devices used to record the GHG emissions and energy data;
- Assessment of the frequency and calibration results of key metering devices used to record the GHG emissions and energy data;
- Testing of processes for identifying and allocating fuel consumption to the relevant activities within the facility, including inspection of documents documenting allocation between stationery energy, transport and electricity production;
- Testing for materiality of electricity production from small generating units, and for consistency with guidance on reporting of production and consumption of electricity; and
- Review of documents and reports supporting electricity production, including electrical schematic diagrams and generation reports.

Use of our reasonable assurance engagement report

This report has been prepared for the use of Fortescue Metals Group Limited and the Clean Energy Regulator for the sole purpose of reporting on Fortescue Metals Group Limited's energy and emissions report and their compliance with the NGER Act. Accordingly, we expressly disclaim and do not accept any responsibility or liability to any party other than the Clean Energy Regulator and Fortescue Metals Group Limited for any consequences of reliance on this report for any purpose.



Inherent limitations

There are inherent limitations in performing assurance—for example, assurance engagements are based on selective testing of the information being examined—and because of this, it is possible that fraud, error or non-compliance may occur and not be detected. An assurance engagement is not designed to detect all misstatements, as an assurance engagement is not performed continuously throughout the period that is the subject of the engagement and the procedures performed on a test basis. The conclusion expressed in this report has been formed on the above basis.

Additionally, non-financial data may be subject to more inherent limitations than financial data, given both its nature and the methods used for determining, calculating and sampling or estimating such data. We specifically note that Fortescue Metals Group Limited has used estimates or extrapolated underlying information to calculate certain amounts included within the greenhouse and energy information.

Our conclusion

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In our opinion the energy and emissions report of Fortescue Metals Group Limited for the period 1 July 2022 to 30 June 2023 is prepared in accordance with section 19 of the NGER Act, in all material respects.

Nick Moffatt

KPMG

Perth

11 August 2023



Part B—Detailed findings

As required under section 3.23 of the NGER Audit Determination, audit team leaders must outline the following:

Issues requiring particular attention

Refer to the Audit Findings and Conclusions Table below for details of the items that required particular attention during the assurance engagement.

Aspects impacting on assurance engagement

There were no issues that impacted on the carrying out of the assurance engagement.

Contraventions of NGER legislation

During the carrying out of the assurance engagement, except for those matters identified in Part A and Part B of this report, the audit team leader did not identify any issue that he believes may lead to a contravention of the NGER Act or the NGER Regulations or applicable determinations.

Matters corrected during the course of the audit

Refer to Audit Findings and Conclusions Table below for details of the items that required correction during the assurance engagement.

Other matters

There are no other items that the audit team leader believes should be mentioned in the assurance report.



Audit findings and conclusions table

The results that are provided in the table below should not be construed as providing an opinion or conclusion on the matter being audited as a whole; instead, they should be read as providing evidence to support the conclusion.

These findings, conclusions and recommendations are designed to inform the audited body and the Clean Energy Regulator of any compliance issues and will be used, in part, to better inform regulatory decisions and broader advice to the regulated community.

Issue/Risk area investigated	Testing conducted	Findings	Conclusion
Reporting boundary risks			
Whether the controlling corporation and facilities identified by Fortescue Metals Group Limited are in compliance with the NGER Act	 Enquiries with Management to understand and assess reporting boundary considerations and decisions, including application of the operational control definition. Review of the entity's structure and other relevant documentation, including legal advice on the assessment of reporting boundaries. Review of internal procedures and policy documents regarding facilities' compliance with the NGER Act. 	Reviewed the operational control assessment performed by the Company. The Basis of Preparation and legal documentation supplied by the Company was considered in conjunction with reviewing the aggregate GHG emissions and energy data. KPMG performed an in-person site visit to Christmas Creek from 6th to 7th June 2023. During the in-person site review, KPMG completed a number of procedures, including boundary review and review of the use of and process for capturing contractor greenhouse gas emission and energy data. This was compared with the definition of Operational Control per the NGER legislation, and it was assessed that the process for capturing contractor data was aligned to the NGER requirements.	We note that the update to the NGER reporting structure has resulted in a minor change (i.e. the inclusion of the newly created Concentrate Handling Facility, under the operational control of IB Operations Pty Ltd.) to the reporting facilities under which particular emissions and energy values are captured but does not impact overall emissions or energy values reported for the Group. We have reviewed this change and consider that this is reasonable and reflective of the current corporate structure and operational boundaries. No other significant findings



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	Whether the facilities included in the energy and emissions report are complete	Assessment of the entity's operating structure/production units and other relevant documentation.	The Basis of Preparation and legal documentation supplied by the Company was considered in conjunction with reviewing the aggregate GHG emissions and energy data, corroborated with discussions held with management and with site personnel.	No significant findings
	GHG emissions and energy r	neasurement and reporting		
	Completeness of GHG emissions and energy data	 Through enquiry with management obtained an understanding of the following: GHG emission and energy sources relevant to the entity's facilities; and GHG emissions, energy production and energy consumption sources relevant to the NGER report. Analytical review and trend analysis of the GHG emissions and energy data. Comparison of raw data invoice listings to the NGER data on a sample basis. 	Performed analytical review procedures and trend analysis over the GHG emissions and energy data. KPMG has conducted a walkthrough of the Anaplan system, which FMG uses to collect and calculate Emissions and Energy data. KPMG performed an in-person site visit to Christmas Creek from 6th to 7th June 2023. During the site review, we completed a number of procedures, including a walkthrough with key management personnel and data owners, review of the electricity generators, and review of points of diesel consumption to confirm no greenhouse gas emission or energy sources (including generators which meet the NGER reporting threshold) were being inappropriately excluded from reporting.	No significant findings



Accuracy of GHG emissions and energy sources

- Through enquiry with site and Head Office management obtained an understanding of the measurement and reporting of the GHG emissions and energy data, including use of estimation techniques and assumptions.
- Walkthroughs of the GHG emissions and energy data preparation process and relevant controls through remote review and at selected sites.
- Analytical review of the GHG emissions and energy data.
- Re-performance of key relevant calculations, evaluation of the appropriateness of the conversion and emissions factors used.
- Through enquiry with management and review of measurement methodologies, confirmed the GHG emissions and energy data is measured in accordance with the Measurement Determination.

Reconciled the diesel fuel received at each site, with the fuel dispatched from the central fuel depot at Kanyirri and fuel usage recorded by the Fortescue Metals Group Limited's BanLaw diesel tracking system. A sample of fuel deliveries to Kanyirri was selected and agreed back to diesel invoices and credit notes. Reconciled values tested to total values submitted per EERS, presenting no issues.

Performed analytical review procedures over the GHG emissions and energy data, including analysis of generator efficiency percentages over time against manufacturer specifications.

Conversion and emissions factors were checked to source documentation (where applicable on a sample basis) and the NGER legislation and the resultant calculations checked to reported figures.

No significant findings



Existence of GHG emissions and energy data

- Tested design and implementation of real time monitoring systems including processes and controls for collation of GHG emissions and energy data.
- For a sample of key meter sources,
 KPMG assessed the following:
 - Manufacturer determined operating accuracy;
 - Frequency of calibrations performed;
 - Calibration results.

KPMG performed an in-person site visit to Christmas Creek from 6th to 7th June 2023. During the site visit, we completed a number of procedures, including for a sample of key meters, confirming their existence and function, and obtaining and reviewing meter calibration certificates. Real time monitoring systems and processes for collation of GHG emissions and energy data at a site level to corporate were also assessed during our site review.

During the in-person site visit to Christmas Creek from 6th to 7th June 2023, KPMG performed a walkthrough with key management and personnel of the processes and documentation for diesel off-loading operations (by train) allowing the accuracy of key meters to be established by comparing train delivery documentation with various site diesel meters including off-loading meters and storage tank level meters (via change in measured inventory). KPMG confirmed with the Company that processes identified have remained consistent with prior years.

For key GHG emission and energy sources, a sample of invoices was obtained and checked against reported figures.

No significant findings



Risk area investigated	Testing conducted	Findings	Conclusion
The aggregate GHG emissions and energy data may be incomplete due to the omission of certain sites Emissions estimation – Meti	 Through enquiry with management, KPMG obtained an understanding of key processes and controls over the reporting of the GHG emissions and energy data. Analytical review of the GHG emissions and energy data. 	Performed analytical review procedures over the GHG emissions and energy data provided by the Company, including analysis of generator efficiency percentages over time against manufacturer specifications. The Basis of Preparation and legal documentation supplied by the Company was read in conjunction with reviewing the aggregate GHG emissions and energy data.	No significant findings
The use of Method 2 for estimation of emissions may be inaccurate or inappropriate	 For Solomon Power Station, assessed the methodology and assumptions used by Management for compliance with the Measurement Determination. Tested on a sample basis, the accuracy and logic of the scientific and mathematical calculations applied and accuracy of the transposition of the data into the final reporting. 	Reviewed the requirements of Method 2 and Criterion AAA per the NGER legislation against supporting information to confirm reporting in accordance with these criteria. Obtained a sample of underlying documents supporting monthly gas composition data and reported gas quantities and agreed back to reported figures. On a sample basis, re-calculated the method 2 site specific emissions factor and resulting combustion emissions using the Methodology as defined in the NGER Determination.	No significant findings



Peer reviewer conclusion

Name of the peer reviewer	Graham Hogg
Peer reviewer's credentials	GEA registration number: 0157/2012
Peer reviewer contact details	grahamhogg@kpmg.com.au +61 (8) 9263 7226
Outcome of the evaluation undertaken by the peer reviewer	I concur with the conclusions reached by the Auditor and the detailed findings as set out in this document.

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Nick Moffatt

KPMG

Perth

11 August 2023