

Independent limited assurance statement for greenhouse gas, environmental and health and safety disclosures 2017/18

Carbon Smart Ltd have prepared this assurance statement for Johnson Matthey, through which it confirms that Johnson Matthey's global reported scope 1, 2 and 3 greenhouse gas (GHG) emissions, total solid and hazardous waste, water consumption and specified health and safety indicators have received limited assurance in accordance with the requirements of the *ISAE 3000 (revised)* standard including the specificities of *ISAE 3410* for assuring GHG emissions data, and key health and safety definitions from the OHSA Regulations.

The assurance covers Johnson Matthey's stated historic emissions, waste, water and key health and safety data in scope (hereafter called EHS data) for one reporting year – the 12 months ending 31st March 2018, as will appear in Johnson Matthey's Annual Report, and in disclosures to both CDP and the Dow Jones Sustainability Index.

Responsibilities of Johnson Matthey and Carbon Smart

Johnson Matthey was responsible for the preparation of the GHG, environmental and health and safety assertions, the internal management controls governing the data collection process and for production of the final data via spreadsheets and EHS software.

Carbon Smart were responsible for carrying out the **limited assurance** engagement for the required scope of assurance in accordance with the *International Standard on Assurance Engagements (ISAE) 3000 (revised) 'Assurance Engagements other than the Audits or Reviews of Historical Financial Information'*, and for the GHG assessment applied the principles of the *ISAE 3410, Assurance Engagements on Greenhouse Gas Statements* standard.

Carbon Smart's independence, team competencies and quality control

We can confirm our independence, ethics and competence as follows:

- We are independently appointed by Johnson Matthey and no member of the assurance team has a business reason for bias with regard to the limited assurance engagement
- We have complied with the ethical requirements relevant for the performance of the ISAE 3000 engagement in respect of professional experience in environmental reporting and disclosure of limited health and safety indicators. We have acted with the integrity, objectivity, professional competence, due care and confidentiality to be expected of a professional services provider and the rigor of our work is sufficient to the level required by the ISAE 3000 standard
- Our team have extensive experience in GHG reporting to WRI / WBCSD GHG Corporate Accounting and Reporting Standard (revised) standard, use of EHS (environmental health and safety) software for sustainability index disclosures and the assurance and verification standards ISAE 3000, ISAE 3410 (GHGs) and ISO 14064:3.

Carbon Smart applies quality control and management approaches equivalent to ISO 9001 International Standard and as encompassed in the Carbon Smart Quality and Ethics Policies. Our commitment to ethical conduct is appropriate for that required for environmental and sustainability professionals in respect of conducting the ISAE 3000 engagement.

Organisational scope and subject matter

The boundary of the assurance process includes 70 global sites, on a financial control basis, for which the following EHS data have been included in scope:

GHG sources and energy

- Scope 1: Natural gas, fuel oil, gasoline/petrol, diesel, LPG, refrigerants, emissions to air (direct CO₂ and other GHGs)
- Scope 2: Electricity usage and generation, steam (including location and market-based emissions)
- Scope 3: Electricity transmission and distribution losses
- Energy: Total energy usage, total energy usage (non-renewable), total electricity, total gas

Other environmental indicators:

- Total water (withdrawal (municipal and extracted), net fresh water consumption)
- Total waste sent off site and total to landfill
- Total solid waste and total hazardous waste (in accordance with DJSI definitions)

Health and safety:

- LTIFR employees (lost time injuries frequency rate) / LTIIR employees (lost time injury and illness rate)
- LTIFR contractors / LTIIR contractors
- OIFR (occupational illness frequency rate)
- Tier 1 Process Safety events rate

Johnson Matthey’s assured 2017/18 EHS assertions

Greenhouse gas emissions (tCO₂e):

Scope 1	Scope 2 (location based)	Scope 2 (market based)	Scope 3	Operational intensity tCO ₂ e /tonne output
215,113	278,507	230,396	20,401	3.4 (S1+2 only)

Water (thousands m3):

Total water withdrawal	Net fresh water consumption
2,729	2,520

Waste (tonnes):

Total waste sent offsite	Total solid waste	Total hazardous waste	Landfill waste
71,787	5,057 ¹	44,020 ² / 1,822 ³	6,271

Health & safety indicators:

Indicator	Employees	Contractors
LTIFR n/million hrs	2.41	3.68
LTIIR n/200,000 hrs	0.48	0.74
OIFR n/million hrs	0.28 n/million hrs	
Tier 1 events n/million hrs	0.035 (1 event)	

Energy (GJ / MWh):

Unit	Total energy	Total non-renewable	Electricity	Gas
GJ	5,103,785	4,635,825	2,055,053	2,721,962
MWh	1,417,718	1,287,729	570,848	756,101

Assurance standards and methodologies

Johnson Matthey’s EHS disclosures have been assured using ISAE 3000 (including ISAE 3410 for GHGs) against its chosen GHG and environmental disclosure methodology the WRI/WBCSD GHG Corporate Accounting and Reporting Standard (Revised) and the key health and safety definitions from the OSHA Regulations. In addition, Johnson Matthey’s global data collection processes have also been evaluated against its own internal EHS procedures.

Johnson Matthey’s GHG inventory and quantification of environmental performance indicators has been completed in accordance with the WRI best practice reporting principles of relevance, completeness, consistency, transparency, accuracy and the subject matter adheres to the ISAE 3410 principles related to both the quantification of emissions and presentation of disclosures.

Objective

The objective of the engagement was to ensure the above Johnson Matthey GHG, environmental and health and safety assertions are free of material misstatements to an acceptable materiality threshold of 5% at an activity and organisational level; and to ensure the environmental data and health and safety incident rates provide the relevant, material information required by stakeholders for the purposes of decision making.

Carbon Smart’s assurance process

Our assurance conclusions are based on the following activities:

- Agreement on the assurance level, objectives, criteria, organisational scope, relevance and materiality thresholds
- Review of the processes and procedures for establishing the organisational and operational boundary, ensuring relevance to the EHS assertions
- Development of the assurance project plan and data sampling plan (based on risk and materiality)
- Assessment of the EHS data collection systems and controls through interviews by phone and face-to-face

1. Includes solid materials landfilled, subject to deep well injection or incinerated without energy recovery (on or off site). Materials sent off site for beneficial use are not included. This figure excludes DJSI defined extraordinary wastes
 2. Includes all hazardous waste (solid and liquid), excluding waste for re-use
 3. Includes all hazardous waste (solid only), excluding waste for re-use

- Assessment of the data collection process from raw data comparison with primary evidence, through to local and global collation in the central EHS tools and software
- Review of the appropriateness and application of the methodologies and calculations used for conversion of activity data or other GHGs to CO₂e emissions; and of the relevant and recognised health and safety incident rates
- Comparative assessment of year on year performance change
- Evaluation of the internal quality assurance procedures and results
- Our activities included two visits to Johnson Matthey's sites in Skopje, Macedonia and Clitheroe, UK.

Limitations and exclusions

Carbon Smart worked on the premise that Johnson Matthey has disclosed all the information available to the best of its knowledge and capability. We have excluded the assurance of other activities and emission sources outside of the reporting period and scope of work.

Carbon Smart have provided a limited level of assurance for Johnson Matthey – which in itself limits the level of review of procedures and information required to achieve assurance, as compared to the substantially greater rigor of 'reasonable' assurance. Readers should also recognise in this engagement that GHG quantification contains inherent uncertainty due to the application of average conversion factors, amongst other commonly acknowledged limitations of GHG calculation.

Limited assurance conclusion

Based on the assurance procedures followed by Carbon Smart of Johnson Matthey's EHS data across the 2017/18 reporting period, we have found no material evidence to suggest that the data is not:

- Prepared in accordance with the WRI / WBCSD GHG Corporate Accounting and Reporting Standard (revised) and OSHA Regulations as relevant
- Prepared in accordance with Johnson Matthey's relevant internal health and safety and environmental data guidelines
- Materially correct and a fair representation of Johnson Matthey's GHG emissions, specified environmental impacts and health and safety incident rates
- Worthy of the award of limited assurance

Recommendations for improvement

We have provided Johnson Matthey with a separate management report containing our specific findings, however (without limiting the above conclusion) we recommend that Johnson Matthey:

- Continue to provide training to site representatives and employees on how to record health and safety events efficiently and effectively given the large number of data fields available in the online health and safety software
- Encourage environmental data representatives to clearly record any estimations and calculations performed on their data and submit these recordings to the central team to further increase transparency within the reporting exercise

I declare that Johnson Matthey has received limited assurance for the reporting year 1st April 2017 - 31st March 2018 for the following:

- Scope 1, 2 and 3 emissions and underlying energy data
- Year on year change in emissions (scope 1, 2 and 3) and intensity metric compared to 2016/17 (Restated totals: Scope 1: 228,778 tCO₂e, Scope 2: 239,711 tCO₂e, Scope 3: 21,698 tCO₂e, Intensity S1+S2: 3.8 tCO₂e/tonne output)
- Total waste sent offsite, total solid waste, total hazardous waste, total landfill waste, total water consumption and net fresh water
- Health & safety indicators: LTIFR/LTIIR employees and contractors, OIFR and Tier 1 process safety events rate

Julie Craig, Director



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