

## **INDEPENDENT LIMITED ASSURANCE STATEMENT FOR GREENHOUSE GAS, ENVIRONMENTAL AND HEALTH & SAFETY DISCLOSURES 2019/20**

Avieco Ltd have prepared this assurance statement for Johnson Matthey, through which it is confirms that Johnson Matthey's global reported scope 1, 2 and 3 greenhouse gas (GHG) emissions, specified environmental performance indicators related to total energy consumption, waste disposed, water consumption, emissions to air; and specified health and safety indicators have received limited assurance. The engagement was performed 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 OSHA Regulations.

The assurance covers Johnson Matthey's stated historic emissions, energy, waste, water, emissions to air and key health and safety data in scope (hereafter called EHS data) for one reporting year – the 12 months ending 31<sup>st</sup> March 2020, and the restatement of emissions reported for year ending 31<sup>st</sup> March 2019 due to a number of data corrections, 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 AVIECO**

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 EHS software and spreadsheets.

Avieco 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.

### **AVIECO'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.

Avieco applies quality control and management approaches equivalent to ISO 9001 International Standard and as encompassed in the Avieco 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 72 global sites, on a financial control basis, for which the following EHS data have been included in scope:

### GHG SOURCES

- **Scope 1:** Natural gas, fuel oil, gasoline/petrol, diesel, LPG, refrigerants, emissions to air (direct CO<sub>2</sub> and other GHGs).
- **Scope 2:** Electricity usage and generation, steam (including location and market-based emissions)
- **Scope 3:** Electricity transmission and distribution losses
- **Intensity metric:** (Scope 1+2 market-based / tonne production output)
- **Year-on-year percentage change:** emissions and intensity metric

### ENVIRONMENTAL INDICATORS

- **Total energy consumption** (natural gas, electricity, non-renewable energy consumption (fuels purchased or consumed, electricity purchased, steam/heating/cooling and other non-renewable energy purchased), renewable energy purchased or generated, and percentage of renewable electricity consumed))
- **Total water** (withdrawal, net fresh water consumption (municipal and extracted), discharged, direct Chemical Oxygen Demand (waste water) and percentage coverage)
- **Total waste** (total sent off site, total sent to landfill, hazardous waste sent off site and total waste disposed (total generated and used/recycled/sold))
- **Emissions to air** and percentage coverage (NO<sub>x</sub>, SO<sub>x</sub> and VOC)

### HEALTH AND SAFETY INDICATORS

- Annual LTIIR (lost time injury and illness rate) employees
- Annual TRIIR (total recordable injury and illness rate) employees
- LTIFR (lost time injuries frequency rate) employees and contractors
- Annual OSHA severity rate
- OIFR (occupational illness frequency rate)
- Tier 1 Process Safety events rate

## JOHNSON MATTHEY'S ASSURED 2019/20 EHS ASSERTIONS

Greenhouse gas emissions (tCO<sub>2</sub>e):

Year	Scope 1	Scope 2 (location-based)	Scope 2 (market-based)	Scope 3	Operational intensity S1+2 tCO <sub>2</sub> e/tonne output
2017/18	215,113	278,507	230,396	20,401	3.4
2018/19	220,317	277,861	202,813	22,183	3.0
2019/20	199,125	252,757	192,334	20,461	3.2

Energy (GJ)

Indicator	Total	UOM
1. Total energy consumption	4,879,064	GJ
2. Total natural gas consumption	2,466,586	GJ
3. Total electricity consumption	2,104,324	GJ
4. Total non-renewable energy consumption	4,321,790	GJ

a) Non-renewable fuels purchased and consumed	2,763,835	GJ
b) Non-renewable electricity purchased	1,437,709	GJ
c) Steam / heating / cooling and other energy (non-renewable) purchased	120,246	GJ
5. Total renewable energy purchased or generated	557,273	GJ
6. Percentage renewable electricity consumed	26%	percentage

#### Water (m<sup>3</sup>)

Indicator	Total	UOM
1. Water withdrawal	2,429,517	m <sup>3</sup>
2. Total Net Fresh Water consumption (municipal supply and extraction)	2,311,569	m <sup>3</sup>
a) Withdrawal: Total municipal water supplies	2,258,205	m <sup>3</sup>
b) Withdrawal: Fresh surface water	63,024	m <sup>3</sup>
c) Withdrawal: Fresh groundwater	108,276	m <sup>3</sup>
d) Discharge: Water returned to the source of extraction at similar or higher quality as raw water extracted	117,936	m <sup>3</sup>
3. Direct Chemical Oxygen Demand (wastewater) and coverage	240 72%	Mg/L percentage

#### Waste (tonnes)

Indicator	Total	UOM
1. Total waste sent off site	84,710	tonnes
2. Total hazardous waste sent off site	53,957	tonnes
3. Total waste to landfill	3,407	tonnes
4. Total solid waste disposed	3,553	tonnes
a) Total waste generated	23,041	tonnes
b) Total waste used/recycled/sold	19,487	tonnes

#### Emissions to air (kg)

Indicator	Total	UOM	Percentage coverage
1. Nitrogen Oxides (NO <sub>x</sub> )	541,878	kg	44%
2. Sulphur Oxides (SO <sub>x</sub> )	27,740	kg	20%
3. Volatile Organic Compounds (VOC)	99,282	kg	50%

#### Health & Safety indicators

Indicator	Total	UOM
1. Annual Total Recordable Injury and Illness Rate (TRIIR) employees	0.78	n/200,000 hrs worked

2. Annual Lost Time Injury and Illness Rate (LTIIR) employees	0.35	n/200,000 hrs worked
3. Lost Time Injury Frequency Rate (LTIFR) employees	1.45	n/million hrs worked
4. Lost Time Injury Frequency Rate (LTIFR) contractors	1.33	n/million hrs worked
5. Occupational Illness Frequency Rate (OIFR)	0.45	n/million hrs worked
6. Annual OSHA severity rate	18.45	n/200,000 hrs worked
7. Tier 1 Process Safety events	0.11	n/million hrs worked

## 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.

## AVIECO'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 video conferencing
- 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 CO<sub>2</sub>e 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 in depth interviews with nine of Johnson Matthey's material sites in Royston, Brimsdown, Shanghai, West Deptford (Chemicals and Health), Smithfield, Taloja, Emmerich and Maastricht.

## LIMITATIONS AND EXCLUSIONS

Avieco 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.

Avieco 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 Avieco of Johnson Matthey's EHS data across the 2019/20 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:

- Encourage sites to maintain evidence packs for internal and external review in order to facilitate data investigations where required and improve the transparency of reporting.
- Improve documentation around significant changes that occur at the sites throughout the year to facilitate the data checking and validation process by Group.
- Improve the record keeping of hours worked by employees and contractors and the guidance around the calculation methodologies to be used by sites.

## ASSURANCE STATEMENT

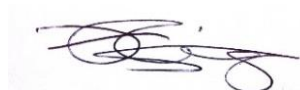
We declare that Johnson Matthey has received limited assurance for reporting years ending 31<sup>st</sup> March 2018, 2019 and 2020 for the following:

- Scope 1, 2 and 3 emissions
- Year-on-year change in emissions (scope 1, 2 and 3) and intensity metrics across three years

We also declare that Johnson Matthey has received limited assurance for the reporting year 1<sup>st</sup> April 2019 – 31<sup>st</sup> March 2020 for the following:

- Other environmental indicators: total energy, total water, total waste and emissions to air (as they appear listed within this statement)
- Health & safety indicators: LTIFR employees and contractors, LTIR employees, TRIR employees, OIFR, OSHA Severity Rate and Tier 1 process safety events rate

**Julie Craig, Director**



**Corina Radu, Project Lead**



Issued: 15<sup>th</sup> May 2020

Assuring organisation: Avieco Ltd, 3<sup>rd</sup> Fl Farringdon House, 105-107 Farringdon Rd, London, EC1R 3BU

Assured organisation: Johnson Matthey, 5<sup>th</sup> floor, 25 Farringdon Street, London, EC4A 4AB