

INDEPENDENT LIMITED ASSURANCE STATEMENT FOR GREENHOUSE GAS, ENVIRONMENTAL AND HEALTH & SAFETY DISCLOSURES 2020/21

Avieco Ltd has prepared this assurance statement for Johnson Matthey, through which it confirms that Johnson Matthey's global reported scope 1 and 2 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 31st March 2021, 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 statements, the internal management controls governing the data collection process and for production of the final data via EHS software and spreadsheets.

Avieco was 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 has 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 CO₂ and other GHGs from manufacturing). The fuels reported are from mobile combustion only and represent the majority of scope 1 emissions.
- **Scope 2:** Electricity usage and generation (including location and market-based emissions), steam
- **Intensity metrics and other indicators:**
 1. Scope 1 + 2 tCO₂e intensity per tonne of manufactured product sold
 2. Year on year % change in emissions (scope 1 and 2) and intensity
 3. Percentage of Scope 1 covered under emissions-limiting regulations

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), percentage of water withdrawn or consumed in regions with High or Extremely High Baseline Water Stress
- **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)), percentage of waste recycled
- **Emissions to air** and percentage coverage (NO_x, SO_x and VOC)

HEALTH AND SAFETY INDICATORS

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

JOHNSON MATTHEY'S ASSURED 2020/21 EHS ASSERTIONS

Greenhouse gas emissions (tCO₂e):

Year	Scope 1	Scope 2 (location-based)	Scope 2 (market-based)	Operational intensity S1+2 tCO ₂ e/tonne output
2017/18	215,113	278,507	230,396	3.4
2018/19	220,317	277,861	202,813	3.0
2019/20	199,125	252,757	192,334	3.2
2020/21	203,930	227,381	184,974	3.4
% change (19/20 to 20/21)	+2.4%	-10.0%	-3.8%	+7.0%
Percentage of Scope 1 covered under emissions-limiting regulations				24.97%

Energy (GJ)

Indicator	Total	UOM
1. Total energy consumption	4,723,502	GJ
2. Total natural gas consumption	2,416,909	GJ
3. Total electricity consumption	1,992,799	GJ
4. Total non-renewable energy consumption	4,107,694	GJ
a) Non-renewable fuels purchased and consumed	2,729,962	GJ
b) Non-renewable electricity purchased	1,250,156	GJ
c) Steam / heating / cooling and other energy (non-renewable) purchased	112,445	GJ
5. Total renewable electricity purchased or generated	615,809	GJ
6. Percentage renewable electricity consumed	30.9	percentage
7. Total self-generated electricity	126,834	GJ

Water (m³)

Indicator	Total	UOM
1. Water withdrawal	2,144,261	m ³
2. Total Net Fresh Water consumption (municipal supply and extraction)	2,038,871	m ³
a) Withdrawal: Total municipal water supplies	1,983,548	m ³
b) Withdrawal: Fresh surface water	47,064	m ³
c) Withdrawal: Fresh groundwater	113,638	m ³
d) Discharge: Water returned to the source of extraction at similar or higher quality as raw water extracted	105,378	m ³
3. Direct Chemical Oxygen Demand (wastewater) and coverage	103 72.5	Mg/L percentage
4. Percentage of water withdrawn and consumed in regions with High or Extremely High Baseline Water Stress	23.5	percentage

Waste (metric tonnes)

Indicator	Total	UOM
1. Total waste sent off site	87,546	tonnes
a) Total waste sent off site to reuse	1,895	tonnes
b) Total waste sent off site for recycling	25,845	tonnes
c) Total waste sent off site for incineration with energy recovery	3,314	tonnes
d) Total waste sent off site for incineration without energy recovery	52,891	tonnes
e) Total waste sent off site to landfill	3,601	tonnes

2. Total hazardous waste sent off site	57,213	tonnes
a) Total Hazardous waste sent offsite excluding hazardous waste to beneficial reuse	55,424	tonnes
3. Total solid waste generated	15,209	tonnes
a) Total solid waste disposed	3,877	tonnes
b) Total solid waste used/recycled/sold	11,332	tonnes
4. Percentage of waste recycled	29.5	percentage

Emissions to air (kg)

Indicator	Total	UOM	Percentage coverage
1. Nitrogen Oxides (NOx)	298,955	kg	58.2
2. Sulphur Oxides (SOx)	49,319	kg	27.3
3. Volatile Organic Compounds (VOC)	83,141	kg	51.0

Health & Safety indicators

Indicator	Total	UOM
1. Annual Total Recordable Injury and Illness Rate (TRIIR) – employees only	0.56	n/200,000 hrs worked
2. Annual Total Recordable Injury and Illness Rate (TRIIR) – employees and contractors	0.54	n/200,000 hrs worked
3. Annual Lost Time Injury and Illness Rate (LTIIR) employees	0.28	n/200,000 hrs worked
4. Lost Time Injury Frequency Rate (LTIFR) employees	1.39	n/million hrs worked
5. Lost Time Injury Frequency Rate (LTIFR) contractors	1.13	n/million hrs worked
6. Occupational Illness Frequency Rate (OIFR)	0.07	n/million hrs worked
7. Annual OSHA severity rate	15.74	n/200,000 hrs worked
8. Tier 1 Process Safety events	0.154	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 have 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 statements 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 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 in depth interviews with four of Johnson Matthey's material sites in Clitheroe, Savannah, Oberhausen, and Annan as well as the company's central group functions.

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 has 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 calculations.

LIMITED ASSURANCE CONCLUSION

Based on the assurance procedures followed by Avieco of Johnson Matthey's EHS data across the 2020/21 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

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

- Ensure that all sites are applying the same definition for contractors and temporary employees that are present on Johnson Matthey sites to ensure consistency in the reporting of contractor hours and associated health and safety KPIs.
- 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. Avieco noted improvements in this area this year – particularly around Group level guidance

provided to sites – but it was observed that there is still a lack of consistency between sites in the terms of the completeness and quality of the evidence packs provided.

- Encourage sites to more comprehensively document site-specific processes on data collection and calculations prior to upload to central data systems. This would support handovers when responsibilities for such processes are transitioned to other employees, as well as aiding any future verification audits.

ASSURANCE STATEMENT

Avieco declares that Johnson Matthey has received limited assurance for reporting years ending 31st March 2018, 2019, 2020 and 2021 for the following:

- Scope 1 and 2 emissions
- Year on year change in emissions (scope 1 and 2) and intensity metrics across all four years

Avieco also declares that Johnson Matthey has received limited assurance for the reporting year 1st April 2020 – 31st March 2021 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, LTIIR employees, TRIIR employees, OIFR, OSHA Severity Rate and Tier 1 process safety events rate



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Issued: 19 May 2021

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