

INDEPENDENT VERIFICATION OPINION OF GHG EMISSIONS DATA

Avieco Ltd has prepared this verification opinion for Elementis plc (Elementis), through which it is confirmed that Elementis' global reported scope 1 and 2 greenhouse gas (GHG) emissions for the year 2019 have received **reasonable verification** in accordance with the requirements of the ISO 14064 – part 3: 2019 standard.

Reasonable verification is distinguished from limited verification as it provides a high degree of confidence that the information disclosed is accurate and complete compared to the limited level. This is because the verification procedures for reasonable verification employ a lower risk threshold and a higher level of data testing and review compared to limited verification, to reduce the risk of material misstatements to an acceptably low level.

The verification covers Elementis' stated historic emissions and intensity metrics for one reporting year – the 12 months starting 1st January 2019 and ending 31st December 2019 (FY19).

RESPONSIBILITIES OF ELEMENTIS AND AVIECO

Elementis was responsible for the preparation of the GHG emission statements and the internal management controls governing the data collection, collation and GHG calculations performed.

Avieco was responsible for carrying out a reasonable verification assessment in accordance with ISO 14064-3: 2019 'Greenhouse gases - Part 3: Specification with guidance for the verification and validation of greenhouse gas statements', and providing an independently expressed opinion to a **reasonable level** on the reported GHG emissions totals and intensity metrics, for each of the data sources included in the scope of this verification exercise.

VERIFICATION SCOPE AND SUBJECT MATTER

The boundary of the verification process included 22 manufacturing and 2 non-manufacturing sites globally.

GHG sources included in the reasonable verification process:

- **Scope 1:** Operational fuel (natural gas, fuel oils, coal, biomass, and other material combusted on site).
- **Scope 2:** Electricity, heat, steam, or cooling

Types of GHGs output verified: CO₂e

Elementis' GHG statements and associated intensity metrics verified by Avieco cover 100% of emissions by scope (in tCO₂e) as follows:

- The global carbon footprint is **293,534** metric tonnes of CO₂e (**181,345** tCO₂e in scope 1, **112,189** tCO₂e in scope 2 – no emissions reported for scope 3)
- The total carbon emissions by turnover from all sites is **442.34** tCO₂e/£1M turnover
- The total carbon emissions by production mass from all sites is **0.354** tCO₂e/tonne production

REPORTING METHODOLOGIES AND VERIFICATION CRITERIA

Elementis' GHG inventory has been completed in accordance with the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol, Corporate Accounting and Reporting Standard, Revised Edition (for Scope 1 and 2) and WRI/WBCSD Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (for Scope 3). The verification criteria assessed the adherence of Elementis' GHG statements and

procedures to the best practice reporting principles of relevance, completeness, consistency, transparency and accuracy.

Avieco conducted the verification engagement throughout October - December 2020. We used the appropriate verification planning, validation, GHG assessment and evaluation steps in accordance with the requirements of ISO 14064-3: 2019, and in adherence to the standard's principles of independence, ethical conduct, fair presentation, and due professional care.

OBJECTIVES

The objectives of the verification engagement were firstly, to ensure Elementis' GHG statements and associated intensity metrics are materially correct to an acceptable materiality threshold of 2% (appropriate for reasonable verification) at the GHG source level and organisational level, and to ensure the GHG inventory provides the relevant material information required by stakeholders for the purpose of decision making.

AVIECO'S VERIFICATION PROCESS

Our verification conclusions are based on the following activities:

- Agreement on the levels of verification, objectives, criteria, organisational scope and materiality thresholds
- Review of the processes and procedures for establishing the organisational and operational boundary across scope 1 and 2 emissions sources and associated intensity metrics
- Development of the verification project plan and data sampling plan (based on risk and materiality appropriate for reasonable verification in relation to GHG emissions)
- Assessment of the GHG data collection system and controls through online interviews
- Assessment of the data collection process from raw data comparison with primary evidence, through to local and global collation in GHG aggregation worksheets. This step included assessment of estimations and extrapolation systems in place and their underlying assumptions used.
- Review of the appropriateness and application of the methodologies and calculations used for conversion of activity data to CO₂e emissions
- Evaluation of the internal quality assurance procedures and results
- Our evidence gathering procedures included, but were not limited to:
 - In depth online/telephone interviews with the global representatives to confirm operational behaviour and standard operating procedures
 - Desktop study of data and evidence to confirm accuracy of source data into calculations.
 - In depth online/telephone interviews with representatives covering six manufacturing sites to confirm operational behaviour and standard operating procedures
 - Virtual site video tours of selected manufacturing sites
 - Desktop study of data and evidence of further three sites to confirm accuracy of source data into calculations

VERIFICATION OPINION

Based on the verification procedures for **reasonable verification**, Avieco declares that Elementis' scope 1 and 2 emissions and intensity metrics across the 2019 reporting period are:

- Prepared in accordance with:
 - World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol, Corporate Accounting and Reporting Standard, Revised Edition (for Scope 1 and 2)
 - WRI/WBCSD Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (for Scope 3)
 - WRI/WBCSD GHG Protocol Scope 2 Guidance (for market-based reporting)
- Materially correct and a fair representation of Elementis' GHG emissions and intensity metrics within the established scope of reporting
- Prepared in adherence to the best practice reporting principles of relevance, completeness, consistency, transparency and accuracy
- Worthy of the award of reasonable verification

AVIECO'S INDEPENDENCE AND TEAM COMPETENCIES

We can confirm our independence and objectivity as follows:

- We are independently appointed by Elementis - no member of the verification team has a business reason for bias in regard to Elementis
- We have complied with the ethical requirements relevant for the performance of the ISO14064:3 engagement in respect of professional experience in environmental reporting and assurance. 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 ISO 14064:3 standard
- Our team is experienced in GHG reporting to WRI GHG protocol and ISO 14064:1 standards; and have extensive experience of verification using ISO 14064-3: 2019

RECOMMENDATIONS FOR IMPROVEMENT

In future Elementis should:

1. Consider undertaking dual reporting of scope 2 emissions to include market-based emissions from electricity purchased. This will show stakeholders any voluntary procurement of low carbon electricity and support tracking of emissions reductions from this source
2. Review and update its internal 'Corporate Procedure for Sustainability Metric Reporting' protocol to ensure that it is fit for purpose, kept up to date year on year, and consistently applied to all sites as well as Elementis' central data and systems
3. Should provide all sites with a standardised unit conversion factor table, as part of the reporting protocol, for sites to apply consistently. This will ensure that the most up to date and accurate factors are used and will avoid any rounding discrepancies
4. Continue to use suitable global emissions factors sets (e.g. IEA) or geographically-specific (e.g. eGRID) when calculating electricity-related Scope 2 emissions for all non-UK sites

Avieco declares that Elementis has received **reasonable verification** for the reporting year 1st January 2019 – 31st December 2019 for the following:

- Scope 1 and 2 emissions
- Intensity metrics (tCO₂e/£1M and tCO₂e/tonne production)

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Avieco

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