

Verification Opinion

VS-3904000

The declaration about greenhouse gas emissions, water withdrawal and waste generation for the year 2023 (file name: "Environmental data 2023_V5b"), dated 26th Feb 2024, prepared by

Elementis plc

was verified in accordance with ISO 14064-03:2019 regarding the compliance with the requirements of ISO 14064-1:2018.

We hereby confirm for the **year 2023**:

Reported metric:		Total Elementis:
GHG emissions	Category 1:	39,218 t CO2-equ.
	Biomass (outside of scopes):	3,850 t CO2-equ.
	Category 2, location-based:	65,524 t CO2-equ.
	Category 2, market based:	44,296 t CO2-equ.
	Category 3:	108,358 t CO2-equ.
	Category 4:	406,117 t CO2-equ.
	Category 5:	32,112 t CO2-equ.
Water withdrawn:		1,310,825.5 m ³
Waste generated:		15,545 MT

Level of assurance: reasonable

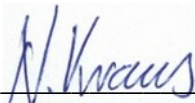
Level of materiality:

- 5% for GHG emissions
- 5% for water withdrawal
- 5% for waste generation

This verification statement is only valid for the mentioned scope of application and in combination with the objectives, explanations and criteria for evaluation specified in the following verification report.

TÜV SÜD Industrie Service GmbH
 Verification Body for Greenhouse Gases
 accredited according to ISO 17029
 Westendstrasse 199, 80686 Munich, Germany

Munich, 11th March 2024




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Explanation to the Verification Opinion

Brief description of the Verification process

Elementis plc has voluntarily entrusted TÜV SÜD Industrie Service GmbH (verification body) to carry out an independent (third party) verification of the declaration on greenhouse gas (GHG) emissions, water withdrawal and waste generation. The consulting company Accenture was instructed by Elementis to conduct the calculations of the GHG emissions in Category 3, 4 and 5 (Scope 3 acc. to GHG-Protocol).

This review is based on the intended area of application, the goals and criteria as agreed upon with the commissioning on 16th November 2023.

Roles and responsibilities

The determination and reporting of GHG emissions, water withdrawal and waste generation are the sole responsibility of our client.

Our role and responsibility as a verification body was to independently verify the adequacy of the metrics reported by our client, as well as the underlying systems and processes for data collection, analysis and control, in accordance with the requirements of ISO 14064-3.

Standard for GHG accounting and reporting

ISO 14064-1:2020 (“Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals”)

Scope of application / System boundaries

The declaration on GHG emissions, water withdrawal and waste generation was conducted for the calendar year 2023 for the business sectors “Performance Specialties” and “Personal Care” as well as one non-manufacturing sites and offices, with Elementis plc being the parent company. The reporting covers the following locations:

Performance Specialties and Minerals

- Livingston (UK)
- Newberry (CA, USA) incl. Mine
- St.Louis (MO, USA)
- Palmital (Brazil)
- Milwaukee (WI, USA)
- Anji (China)
- Songjiang (China)
- New Martinsville (WV, USA)
- Huguenot (NY, USA)
- Middletown (NY, USA)
- Taloja (India)
- Ludwigshafen (Germany)
- Sotkamo (Finland)
- Vuonos (Finland)
- Amsterdam (The Netherlands)
- Katwijk (The Netherlands)
- Hsinchu (Taiwan)

Non-Manufacturing Sites

- Eaglescliffe (UK)

Offices

- London (UK)
- East Windsor (NJ, USA)
- Shanghai (China)
- Cologne (Germany)

Greenhouse gases

Elementis plc accounts for all emissions according to the ISO 14064-1. The greenhouse gas inventory contains the specified greenhouse gases as CO₂ equivalents.

Category 1 and Category 2 emissions were calculated by Elementis directly using the information provided by the sites and the software tool Velocity. For Category 1 and Category 2 mostly directly measured data (e.g. meters) were used.

All emissions in the Category 3, 4 and 5 (Scope 3 acc. to GHG-Protocol) were calculated by Accenture. In Category 3, 4 and 5 a mix of consumption based approach (factors from DEFRA, CIBSE and IEA) and a spend-based approach with factors from EEIO was used.

Water withdrawal and waste generation

The quantities of water withdrawn were either provided by the respective supplier or recorded from meter readings done by local staff. The water is withdrawn either from municipal supply (towns water), boreholes/rivers/lakes (process water) or as hot water from external suppliers. For the Specialties sites, only one value for the total water withdrawn was reported, meaning that there is not differentiation in the water source.

Regarding the waste generation, Elementis plc distinguished between hazardous and non-hazardous waste. Further categorization was not done. The quantities of waste generated were provided by the respective waste disposal companies.

Specific Measures / Findings and Recommendations

Elementis plc aims to implement the following optimization measures to improve the quality in the accounting of the specified metrics:

- Using location-based or preferably market-based emission factors for natural gas. Currently, the DEFRA factor is used for all locations worldwide. However, there is a notable difference between countries in terms of quality and purity of natural gas depending on the natural gas fields, which results in different emission factors.
- Waste is only distinguished between “hazardous” and “non-hazardous” and “Office Waste” waste. However, there are significant differences within such general categories, which make a further sub-categorization necessary (e.g. in production wastes/paper/cardboard /pallets/plastics/organics, etc.) in order to better interpretate and work with the reported numbers.
- Diesel in Songjiang is currently only calculated and not measured on an annual basis. For data clarity in the future this value should be measured to avoid conservative estimations.
- Elementis is a complex, global cooperation with several manufacturing sites, laboratories and (virtual) offices. For clarity it should be in the future made more clear, which site is responsible for what. Furthermore, the sites São Paulo and Porto should be considered.

- Implementation of a systematic GHG management system according to ISO 14064-1 in an online platform to significantly improve the central monitoring, control and reporting of the GHG related processes and emissions for each site and to facilitate the auditing through third parties. The same systemic approach should be applied to water withdrawal and waste generation as well.

Intended use of this Verification Statement

- Annual sustainability reporting
- Internal management for creating strategies on reducing GHG emissions, water withdrawal and waste generation

Standard for the Verification

ISO 14064-3:2020 ("Specification with guidance for verification and validation of GHG statements"), applied analogously for the statement on water withdrawal and waste generation

Objectives of the Verification

The assessment was performed with due regard to our impartiality in a risk-based approach. Rational procedures were applied to reach reliable and reproducible conclusions. Within the scope of our audit, a sufficient amount of suitable evidence needed to be collected and explained in the audit by representatives of Elementis plc and persons appointed for this purpose. This was to enable sufficient traceability of the information presented with the declaration on GHG emissions, water withdrawal and waste generation.

Criteria

The data review was conducted according to the following criteria:
Relevance, completeness, accuracy, transparency of information and consistency.
The assessment of alternatives according to the quantification model used was carried out based on the principle of conservatism.

Agreed level of assurance

reasonable

Comment:

At a reasonable - but not absolute - level of assurance, we check that the declaration on GHG emissions, water withdrawal and waste generation is substantially correct. This includes a review of the processes, data and evidence on their correctness and accuracy with an appropriately adequate sample size.

Materiality threshold

- Level of materiality:
- 5% for GHG emissions
 - 5% for water withdrawal
 - 5% for waste generation

Comment:

The materiality threshold is a benchmark for our assessment of data gaps, misstatements and non-conformities remaining at the end of our review.

Gaps, omissions, inaccuracies identified during the review that result in quantities greater than the established thresholds constitute a "material deviation", i.e. non-conformity, that must be addressed before a verification statement can be issued.

Methods of Verification and site inspection

The staff deployed by the verification body carried out a document review at the client's premises and on-site audit of responsible and collaborating staff at the following sites:

- Amsterdam: 15th December 2023
- Songjiang: 26th February 2024

Additionally, virtual audits with staff of production sites were conducted for the following sites:

- Newberry: 06th February 2024
- Audit with Accenture of Category 3,4 and 5-Report: 15th February 2024

Further methods of verification were:

- Document review and reconciliation with documentation requirements
- Interviews of personnel of Elementis plc or subsidiaries within the scope of audit
- Random sample checks of supporting evidence and database values
- Review of data and information systems and methodology for collection, aggregation, analysis and verification of information used to determine GHG emissions, water withdrawal and waste generation
- Plausibility checks
- Strategic analysis and risk assessment based on the submitted declaration
- Independent review through an auditor that was not participating in the audits (four-eyes principle)

Conclusions

With our review of the declaration on greenhouse gas emissions, water withdrawal and waste generation of Elementis plc (file name: "Environmental data 2023_V5b"), dated 26th February 2024, we conclude that, in all material respects, the reported metrics are presented fairly and factually in accordance with the specifications and standards used as a basis here.

Based on the results of our verification process, we confirm the reported emissions and the achievement of the agreed level of assurance and compliance with materiality thresholds.

Our verification statement is only to be interpreted together with the declaration on greenhouse gas emissions, water withdrawal and waste generation of Elementis plc.

This statement is issued in accordance with the agreement reached with the client and within the framework of our validation and verification regulations. The results recorded here are based on our internal documentation dated 11th March 2024 for this verification with project no. 3904000.