

Independent Assurance Statement to The Celanese Corporation

ERM Certification and Verification Services, Inc. ('ERM CVS') was engaged by The Celanese Corporation ('Celanese') to provide assurance in relation to the indicators set out below and presented in its 2022 CDP Climate Change Questionnaire (the 'Questionnaire').

Engagement summary	
Scope of our assurance engagement	<p>Whether the 2021 data and information for the following selected indicators are fairly presented in the Questionnaire, in all material respects, with the reporting criteria:</p> <ul style="list-style-type: none">• Total Scope 1 GHG emissions [metric tons CO₂e]• Total Scope 2 GHG emissions (market-based approach) [metric tons CO₂e]• Total Scope 1 and 2 GHG emissions intensity based per unit of production [metric tons CO₂e / metric tons of production]• Total energy consumption [MWh]• Total energy consumption intensity based per unit of production [MWh / metric tons of production]
Reporting period	1 st January 2021 – 31 st December 2021
Reporting criteria	Greenhouse Gas Protocol standards, SASB Chemicals Sustainability Accounting Standard and Celanese internal reporting guidelines
Assurance standard	International Standard on Assurance Engagements ISAE 3000 (Revised)
Assurance level	Limited assurance
Respective responsibilities	<p>Celanese is responsible for preparing the Questionnaire and for the collection and presentation of the information within it.</p> <p>ERM CVS' responsibility is to provide a conclusion on the agreed scope based on the assurance activities performed and exercising our professional judgement.</p>

Our conclusion

Based on our activities, as described below, nothing has come to our attention to indicate that the 2021 data for the selected indicators as shown below are not fairly presented the Questionnaire, in all material respects, with the reporting criteria:

- **Total Scope 1 GHG emissions:** 2,375,026 [metric tons CO₂e]
- **Total Scope 2 GHG emissions (market-based):** 1,417,089 [metric tons CO₂e]
- **Total Scope 1 and 2 GHG emissions intensity based per unit of production:** 0.405 [metric tons CO₂e/metric tons of production]
- **Total energy consumption:** 15,140,271 [MWh]
- **Total energy consumption intensity based per unit of production:** 1.62 [MWh/metric tons of production]

Our assurance activities

A multi-disciplinary team of sustainability and assurance specialists performed a range of assurance procedures which varied across the disclosures covered by our assurance engagement, as follows:

- Virtual interviews with relevant corporate and site-level energy and GHG, EHS, Utilities Technology leads and other subject matter experts, including Operation Technology Systems Managers to understand the energy model calculations that detail steam basis allocations, co-generation specifics and evaluate the relevant data collection and reporting processes, as well as internal review procedures used for the selected disclosures;
- Walkthrough of the data management systems with relevant personnel for each of the metrics in scope;
- A review at corporate level for energy and emissions data on the reporting system, including validation of emissions factors and conversion factors used;
- An analytical review of the 2021 data for the metrics in scope for all sites and an assessment of the completeness and accuracy of the data consolidation at the Celanese corporate level; \
- In-person site visits to 3 locations, Clear Lake (Texas, USA), Jurong (Singapore) and Frankfurt (Germany), to conduct a site tour of operations and interviews with site-level data owners and for a review of data consolidation, calculation processes and QA/QC procedures;
- Virtual site visits with 2 locations (Bishop, USA and Cangrejera, Mexico) with the objective of understanding uses of water and operational processes, to evaluate the consistency of reported annual data through interviews with site-specific contacts and a detailed review of evidence for the activity data underlying the calculations for water consumption;
- Desk-based review of source data, as well as assessment of renewable energy credit documentation for a sample of facilities; and
- Reviewing the presentation of information relevant to the scope of our work in the Questionnaire to assess consistency with our findings.

The limitations of our engagement

The reliability of the assured information is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context. We do not, in giving this opinion, accept or assume responsibility for any third party using or placing reliance on our opinion in order to make a decisions related to Celanese.

Our independence

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS staff that have undertaken this engagement work have provided no consultancy related services to Celanese in any respect.

**Gareth Manning**

Partner, Corporate Assurance

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