



Assurance brief

RISE has been contracted by Ardagh Group to perform a limited assurance of the data underpinning their 2023 sustainability report and CDP disclosure. In particular, the scope of the assurance provided is focused on the acquisition, processing and aggregation of the quantitative data necessary to calculate the principal environmental and health & safety key performance indicators (KPIs), namely:

- Production (tonnes, pieces)
- Raw materials (coils, alu and steel)
- Recycled metal (alu and steel)
- Energy consumption
- Scope 1 GHG emissions
- Scope 2 GHG emissions
- NOx emissions
- SOx emissions
- Particulate emissions
- VOCs emissions
- Process water
- Wastewater discharge
- Waste disposed
- Waste recycled
- Lost Time Accidents (LTAs)

In addition, RISE has also assured Ardagh Group's Scope 3 GHG inventory.

Independence of the assurance provider

RISE (Research Institutes of Sweden) is a research, technology and consulting organisation consisting of five divisions: RISE Bioeconomy & Health, RISE Built Environment, RISE Digital Systems, RISE Materials Production, and RISE Safety & Transport. With nearly 3,000 staff, between them, these divisions cover a diverse range of sectors and services.

RISE has worked with Ardagh Group on previous environment and sustainability projects but confirm their independence of the organisation for the purposes of providing the contracted assurance.

Approach

The work has been delivered in accordance with RISE's own methodology which is based on the international assurance and audit standard ISAE 3000. The following procedures were performed:

- A data review: an evaluation of the dataset for each site contained within the internal reporting system to appraise plausibility of the overall dataset and, through statistical analysis, combined with the assurance providers knowledge of the production processes, to identify any outlying data points. Any such outliers were subject to additional scrutiny to ascertain the validity of the data reported
- Production site visits: two sites were visited (one glass, one can manufacturing). Procedures included visual observation of environment and safety practices, looking for evidence that these support the reported environmental and safety data; review of source data and data trail through to data entry into the internal reporting system and subsequent aggregation of data to generate KPIs.

Only two sites were audited but assurances have been provided by Ardagh Group that procedures and practices are standardised across the group. Over several years of providing assurance services to Ardagh Group, the assurance practitioners have visited a number of sites across Europe, North America and South America and the insights gained validate these assurances.

In addition, RISE reviewed the Scope 3 GHG report and calculations provided Ardagh Group by the external consultants Ramboll.

Responsibilities

For clarity, Ardagh Group and its Directors are responsible for the preparation of their sustainability report in line with the GRI guidelines and for the completion of the CDP questionnaires. RISE's responsibility is solely in terms of providing limited assurance with respect to the process of gathering and processing the data that underpins the KPIs and data reported.

Assurance conclusion

RISE has undertaken a limited assurance of the acquisition, processing and aggregation of the quantitative data necessary to calculate the principal environmental and health & safety KPIs reported in Ardagh Group's 2023 Sustainability Report and CDP submissions. RISE has also undertaken limited assurance of Ardagh Group's Scope 3 GHG emissions calculations. Procedures performed in a limited assurance engagement are aimed at determining the plausibility of information and are less extensive than those employed for a reasonable assurance engagement. Nonetheless,

Based on the datasets and calculations reviewed and the evidence observed during site audits, nothing came to the practitioner's attention to cause belief that the KPI data or the Scope 3 GHG emissions are materially misstated.

Subsequently, the assurance provider verifies the following GHG emissions to be an appropriate estimate of the environmental interventions of Ardagh Group:

- Scope 1 GHG emissions = 3,022,258 tonnes CO₂e; Scope 2 GHG emissions (market-based) = 1,473,185 tonnes CO₂e; Scope 3 GHG emissions = 5,382,724 tonnes CO₂e; Total Scope 1,2 and 3 = 9,878,167 tonnes CO₂e

Signed and dated:

Michael Sturges, 28th July 2022
Assurance Consultant, RISE