# GHG ACCOUNTING METHODOLOGY

## FEBRUARY 2023

Our GHG emissions are calculated with reference to the GHG Protocol Corporate Standard (2015 revision) and Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Scope 1, 2 and 3 emissions are reported in tonnes of CO2 equivalent (CO2 eq) and include all gases in the GHG Protocol.

We take an operational control approach to defining our GHG and energy organisational boundary. This means our equity ownerships are excluded from our Scope 1+2 footprint but are included in Scope 3 Category 15 (Investments). This approach is consistent with our financial statements. Data from new facilities are included from the date we take control and the facility becomes operational.

### SCOPE 1

Our Scope 1 GHG emissions include emissions from combustion of fuels for energy, heat and vehicles, process emissions from our chemical manufacturing, and refrigerants. We use DEFRA emission factors for Scope 1 fuels globally.

CO<sub>2</sub> from biomass is reported outside of the Scopes. CH<sub>4</sub> and N<sub>2</sub>O emissions from biomass are included in our Scope 1. Our biomass CO<sub>2</sub> emissions include energy and chemical process-related emissions. We exclude biomass that may be present in vehicle fuels.

### SCOPE 2

Our Scope 2 emissions include all emissions caused by creating the electricity, steam, and hot water we purchase. We use IEA emissions factors for location-based Scope 2 emissions, except in the UK where we use DEFRA factors.

Scope 2 (market-based) emissions include power purchases associated with a Renewable Energy Certificate (REC) or Guarantee of Origin (GO). We use residual mix factors from the Association of Issuing Bodies (AIB) for European sites without an REC or GO, and use location-based factors for remaining sites market-based emissions.

We measure gross global scope 1 and 2 emissions in tonnes of CO2 eq per tonne of production output as this is a common intensity metric for our industry sector, and per million US dollars of revenue.

### SCOPE 3

Where possible, we use process-level data to calculate Scope 3, especially for raw materials and logistics. Where use of primary activity data is impractical, we utilise spend-based activity and other estimations, as detailed below.

**Category 1** uses life-cycle emission factors from Ecoinvent for specific raw materials (where available). We use a spend-based Environmentally Extended Input Output (EEIO) model for

raw materials we are not able to source a specific factor for, and for other goods and services we purchase.

Category 2 and 6 are calculated with reference to a spend-based EEIO.

**Category 3** is calculated from our energy consumption data using DEFRA and IEA emission factors.

**Category 4 and 9** are calculated with DEFRA emission factors for the mode of transport, mass moved and estimated distances. For a proportion of inbound material, we make assumptions about the origin location and transport mode of the material.

**Category 5** is calculated using DEFRA emission factors and the mass of waste generated in our operations.

**Category 7** is calculated based on number of employee days on site and at home, assuming private cars to travel to work (apart from for our London office where we assume public transportation is used).

Category 8, 13 and 15 are calculated with DEFRA and IEA emission factors, floor area and energy type used.

**Category 12** is calculated from DEFRA factors and the assumed end of life treatment of our products and packaging.

We apply the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain guidance to **Category 10**, meaning it is not relevant, not calculated due to lack of visibility for the chemicals industry.

**Category 11** is not relevant, not calculated due to our products not consuming energy and not emitting GHG in-use.

Category 14 is not applicable as we do not operate franchises.