

Emissions Calculation Methodology

Issued by: Group Head of Sustainability
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1. Introduction

1.1. Bodycote's emissions calculation methodology is based on well-established frameworks such as the UK Government's Environmental Reporting Guidelines and the WRI/WBCSD Greenhouse Gas Protocol (GHG Protocol Corporate Accounting and Reporting Standard). IPCC AR5 GWP factors are used in the calculation of Scope 1, 2 and 3 GHG emissions.

2. Scope 1 (direct) emissions

2.1. Scope 1 (direct) emissions are calculated from energy and process gases used in company-owned or controlled industrial plants, buildings and vehicles. This includes natural gas for industrial processes and buildings; diesel, gasoline and LPG for vehicles; acetylene, propane, carbon dioxide and methanol process gases; and refrigerants used for cooling. Consumption data is multiplied by appropriate available emissions and conversion factors from IPCC Guidelines for National Greenhouse Gas Inventories (2006), UK Government's Department for Food, Environment and Rural Affairs, 'DEFRA', or internally calculated emission factors based on the carbon content in feedstocks if appropriate emission factors are not available.

3. Scope 2 (indirect) emissions

3.1. Scope 2 (indirect) emissions arise from electricity used in the Group's industrial plants and buildings, and to charge its electric vehicles. Bodycote does not use any external sources of steam, heating and cooling for the Group's own use in sites. Electricity consumption data is multiplied by appropriate available emissions and conversion factors from the IEA Emission Factors 2024 and DEFRA for calculation of location-based Scope 2 GHG emissions.

4. Scope 2 market-based GHG emissions

4.1. Scope 2 market-based GHG emissions are calculated based on appropriate available emissions, electricity mix and conversion factors from supplier mix information collected from electricity invoices or electricity mix statements, Association of Issuing Bodies (AIB) - European Residual Mix report, EPA Emissions & Generation Resource Integrated Database (eGRID), IEA Emission Factors 2024, and DEFRA.



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5. Scope 3 emissions

5.1. Scope 3 emissions are calculated using average-data and spend-based methods for relevant categories. The spend-based method uses on Eurostat's Air Emissions Footprint data and National Supply, Use, and Input-Output tables.

6. GHG emissions

6.1. GHG emissions from the use of key process gases and water in our operations in Category 1:

Purchased Goods and Services are estimated using the average-data method with Ecoinvent and

DEFRA emission factors.

The spend-based method is applied to calculate GHG emissions for the following categories:

- Category 1: Purchased goods and services (excluding key process gases)
- Category 2: Capital goods
- Category 4: Upstream transportation and distribution
- Category 5: Waste generated in operations
- Category 6: Business travel
- Category 9: Downstream transportation and distribution
- Category 10: Processing of sold products

GHG emissions from Category 3: Fuel and energy-related activities are calculated by multiplying energy consumption data with emission factors from the JEC Well-to-Wheels report (v5) for the EMEA region and the GREET model 2024 for the North America region.

Category 7: Employee commuting emissions are determined based on internal employee commuting survey data and DEFRA emission factors.

Category 12: End-of-Life treatment of sold products, carbon emissions from steel recycling are calculated using the GREET model 2024 emission factors.