

Applied Materials FY2022 Scope 3 Emissions Methodology

The table below describes the methodology employed by Applied Materials to calculate our Scope 3 emissions, calculated in accordance with the GHG Protocol. Applied will continue to review our Scope 3 methodology each year to continuously refine the calculations, emission factors, data, estimates and underlying assumptions. Updates to the methodology will be tracked and reported for subsequent years.

Applied accounts for the following greenhouse gases in our scope 3 calculation¹:

Scope 3 Category	Methodology Description
Category 1: Purchased Goods and Services	Spend-based analysis of total FY21 and FY22 direct and indirect spend using 2018 U.S. EPA EEIO detailed commodity factors with sector-specific deflators ² applied to get to equivalent 2021 and 2022 dollars. EEIO factors incorporate margins which include both direct and indirect emissions associated with production of commodity or industry from cradle to the point of sale.
Category 2: Capital Goods	Spend-based analysis of total FY21 and FY22 capital spend using 2018 U.S. EPA EEIO factors with sector-specific deflators ² applied to get to equivalent 2021 and 2022 dollars.
Category 3: Fuel- and Energy- Related Activities	Average-data method using total FY21 and FY22 electricity consumption by country converted using 2020 IEA country-level fuel mix factors (via Ecoinvent v3.9.1) and fuel consumption by source converted using 2021/2022 DEFRA fuels emissions factors.
Category 4: Upstream Transportation and Distribution	Spend-based analysis of total FY21 and FY22 transportation and distribution spend by mode (air, ocean, ground) using 2018 U.S. EPA EEIO factors with a deflator ² applied to get to equivalent 2021 and 2022 dollars.
Category 5: Waste Generated in Operations	FY21 and FY22 waste tonnage by disposal method using a combination of 2021/2022 DEFRA, EPA WARM v15.1, and Ecoinvent v3.9.1 (referencing IPCC 2021 GWP (AR6) waste disposal emission factors). The waste data represents over 80% of operations by square footage.
Category 6: Business Travel	<ul style="list-style-type: none"> Emissions from global air, hotel, rail, and majority of car rentals booked through Applied's travel platform are calculated using 3rd party, Advito's, detailed analytics methodology Remaining travel-related emissions from sources <i>not</i> booked in Applied's travel platform (e.g., additional car rentals, taxi/ride-share, fuel reimbursement) are calculated using 2018 US EPA EEIO factors with a deflator² applied to get to equivalent 2021 and 2022 dollars.

Category 7: Employee Commuting	<ul style="list-style-type: none"> Employee home city and primary office location are used to calculate round-trip commute distances <ul style="list-style-type: none"> In cases where home or office location is missing, assumptions are set on average commute distance based on location Where available, badge data is used to calculate frequency of commutes to the office <ul style="list-style-type: none"> Where badge data is unavailable assumptions are made on frequency of commutes based on worker type and location Assumptions are made on the modes of transportation used for commuting by country based on external research on transportation trends by country 2021/2022 DEFRA transportation emission factors are used to convert distances traveled by mode of transport to emissions, including WTT and tank-to-wheels (TTW) emissions. Employee home-working emissions are not included
Category 8: Upstream Leased Assets	<ul style="list-style-type: none"> Includes leased vehicles and equipment with total FY21 and FY22 fuel consumption or mileage using 2021/2022 DEFRA and 2020 IEA fuel and vehicle emission factors. Where fuel consumption or distance is not available, estimates are used based on number and type of vehicles. The calculation includes WTT emissions for vehicles
Category 9: Downstream Transportation and Distribution	<ul style="list-style-type: none"> Estimated using total shipped units for FY21 and FY22 with an average weight per unit and a breakdown of global receiving regions The average distance per unit was estimated using the most frequent shipping locations The mode of transport breakdown was based on available outbound data Calculated using the relevant 2022 U.S. EPA ton-mile factors
Category 10: Processing of Sold Products	Not applicable - Applied's products are not processed by customers
Category 11: Use of Sold Products	<ul style="list-style-type: none"> Calculated based on FY21 and FY22 shipped units using the SEMI S23 standard to model Applied semiconductor tools' annual energy consumption across product categories, multiplied by an average 10-year product lifespan. Emissions in this category include the energy, chemicals and gases used by Applied semiconductor tools as well as the ancillary equipment required to power the tools. Also includes emissions from the combustion of natural gas in point-of-use abatement systems where applicable.

	<ul style="list-style-type: none"> • 2020 and 2021 country-specific IEA electricity factors are applied based on the country tools were shipped to; IPCC semiconductor emission factors are used to calculate process gas-related emissions • Calculations do not include emissions from Applied's Display business (which represent 5% of total net sales in FY22) or from refurbished tools
Category 12: End- of- Life Treatment of Sold Products	<ul style="list-style-type: none"> • Based on total estimated weight of FY21 and FY22 shipped units • Uses an assumption on primary material composition of products • Calculated using relevant 2021/2022 DEFRA and EPA WARM v15.1 waste disposal factors
Category 13: Downstream Leased Assets	<ul style="list-style-type: none"> • Estimated based on the square footage of leased-out assets by building type, converted using EIA CBECS (2022) • Emissions are calculated using 2020 IEA and 2021 e-GRID GWP factors (via Ecoinvent v3.9.1) and 2021/2022 DEFRA factors • Includes WTT and T&D emissions from leased facilities
Category 14: Franchises	Not applicable – Applied does not have any franchises
Category 15: Investments	<ul style="list-style-type: none"> • Based on FY21 and FY22 annual investment value (\$) of holding within investee companies • Calculated using 2018 US EPA EEIO factors with a deflator² applied to get to equivalent 2021 and 2022 dollars mapped to the relevant investee sector • The calculation excludes project finance and debt investments; managed investments and client services are not applicable

¹ Some Scope 3 categories may exclude recent acquisitions that occurred in FY2022, which are estimated to have a nominal impact to the overall footprint and will be integrated in the following reporting year.

² The deflator is determined using producer price indices at the sector account level, mapped to the relevant NAICS code using IMPLAN (2022).