

Greenhouse Gas Emissions statement

Xaar plc has calculated its global greenhouse gas (GHG) emissions statement using an operational control consolidation approach

Scope 1 emissions

Scope 1 emissions occur from sources that are owned or where Xaar plc has operational control. This includes direct emissions from gas combustion in our buildings, fuel used in leased Company vehicles and for the first time we have chosen to include impacts from refrigerant leaks (not currently required).

Actual and estimated gas consumption data has been collected from each of the leased properties under the control of the Xaar Group, from data sources including direct meter readings, meter readings from suppliers included on invoices and estimations where required based on available information from property management suppliers and other sources. Actual mileage data has been collected from the leased Company vehicle fleet.

Scope 2 emissions

Scope 2 refers to indirect emissions from the consumption of purchased electricity (also including any purchased heat, steam or cooling) from facilities owned or under the operational control of Xaar plc. Actual and estimated data has been collected from each of the leased properties under the control of the Xaar Group, from data sources including direct meter readings, meter readings from suppliers included on invoices and estimations where required based on available information from property management suppliers and other sources.

Scope 3 emissions

Scope 3 emissions are all indirect emissions – not included in Scope 2 – that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Scope 3 CO₂ emissions currently represent calculated and estimated CO₂ emissions from travel and employee commuting as well as modelled totals from our upstream emissions. Our financial records were reviewed to extract purchased product data which was then used to calculate the carbon footprint of the matched products using MRIO data from CenSA (now University of Leeds as used by DEFRA). As the Group's Sustainability Roadmap progresses, we aim to collaborate with the supply chain to validate our upstream model data and reduce CO₂ emissions. We will continue to disclose ongoing progress in our Annual Report. Activities on downstream Scope 3 have not yet been initiated, but plans are in place to understand these in the future.

 Please refer to page 32 for actions that Xaar is undertaking to offset its carbon emissions

Assessment parameters	
Baseline year	1 January 2013 to 31 December 2013
Consolidated approach	Operational control
Boundary summary	All entities and all facilities under operational control included subject to the materiality threshold applied
Consistency with the financial statements	The only variation is that leased properties deemed to be under operational control have been included in Scope 1 and 2 emissions
Materiality threshold	Materiality has been set at Group level at 5%*
Assessment methodology	Greenhouse Gas Protocol and ISO 14064-1 (2006)
Intensity ratio	Emissions per £'000 turnover exc. royalties

* The total of any excluded emission sources is estimated to be less than 5% of Xaar plc's total reported emissions.

Greenhouse gas emissions		Renewable	Non-renewable	2022 Total	Renewable	Non-renewable	2021 Total (restated)
Global energy use	KWh	10,525,987	1,022,484	11,548,472	10,610,069	1,741,835	12,351,905
	%	91.1%	8.9%		85.9%	14.1%	
UK	KWh	10,292,374	509,164	10,801,538	10,205,766	962,135	11,167,901
Non-UK	KWh	233,613	513,321	746,934	404,303	779,701	1,184,004
Absolute values							
Scope 1	tCO ₂ e	–	220	220	–	98	98
Scope 2	tCO ₂ e	–	21	21	–	116	116
Scope 3	tCO ₂ e	–	479	479	–	150	150
Total	tCO ₂ e	–	720	720	–	364	364
– Scope 1 & 2 emissions of which UK	tCO ₂ e	–	156	156	–	198	198
Normalised values							
Scope 1	tCO ₂ e/£'000	–	302	302	–	165	165
Scope 2	tCO ₂ e/£'000	–	29	29	–	198	198
Scope 3	tCO ₂ e/£'000	–	658	658	–	254	254
Total	tCO ₂ e/£'000	–	989	989	–	617	617

* UK energy certified by EON, by Guarantees of Origin from renewable wind sources. US energy (Green Mountain) 100% carbon free, 68% renewable (balance being nuclear). Significant site based emissions improvements since 2021. The Nottingham site (carbon impact of 35 tCO₂e) was sold in 2021. A 45 tCO₂e reduction as FFEI moved to a green electricity source. Our 2022 figures show an emissions increase because we have chosen to disclose refrigerant leaks across the Group. The leaks generated a total Scope 1 impact of 124 tCO₂e (2021 0). 2021 energy figures have been updated to include gas kWh.

Historic greenhouse gas emissions	2020	2019	2018	2017	2016	2015
Scope 1 – tCO ₂ e	75.0	108.3	124.8	147.7	167.0	162.2
Scope 2 – tCO ₂ e	1,741.0	2,622.8	3,128.1	4,088.0	4,432.0	4,475.2
Total – tCO₂e	1,816.0	2,731.1	3,252.9	4,235.7	4,599.0	4,637.4