

Climate action

Why is it important?

Tackling climate change has become more urgent than ever. It is an issue that requires international cooperation to achieve the objectives of the Paris Agreement – to limit the rise in global temperatures to well below 2°C above pre-industrial levels, and pursue efforts to limit the temperature increase even further to 1.5°C.

Climate change and its associated environmental impacts pose risks for all of us, but as a speciality chemicals business, it also brings opportunities for Synthomer.

Our commitments

As a responsible manufacturer, we wholly support the goals of the Paris Agreement and are committed to addressing the greenhouse gas (GHG) emissions associated with making and using our products. We are taking a phased approach to this, with two science-based targets in our Vision 2030 roadmap and short-term 2025 objectives to help us make progress. Together, they support our broader aim to reach net zero by 2050.

As part of Vision 2030, we have set near-term science-based targets to reduce our Scope 1 and 2 absolute GHG emissions by 47% and Scope 3 absolute GHG emissions by 28%, both from a 2019 baseline. These targets were approved by the Science Based Targets initiative (SBTi) in 2023, with the SBTi's target validation team determining that our Scope 1 and 2 target is in line with a 1.5°C trajectory, while our Scope 3 target is in line with a less than 2°C trajectory.

Since 2021, we have done a lot of work to understand, report on and manage the climate-related risks and opportunities we face, in line with the recommendations of the Taskforce for Climate-related Financial Disclosure (TCFD).

Our Vision 2030 targets

Reduce Scope 1 and 2 absolute GHG emissions by 47% (versus 2019 baseline)

Reduce Scope 3 absolute GHG emissions by 28% (versus 2019 baseline)

80% of our electricity will be from renewable sources

Additional short-term objectives for 2025

Reduce Scope 1 and 2 absolute GHG emissions by 30% (versus 2019 baseline)

Reduce energy intensity by 5% (versus 2022)

Associated policies

Our Environment Policy – [click here](#)

Our Risk Management Policy – [click here](#)

Our Water Management Policy – [click here](#)

Our approach

Our Board is ultimately responsible for overseeing the way we address the impact of climate change on our business, with our CEO responsible for delivering initiatives on the Board's behalf. In terms of day-to-day management, the Executive Sustainability Steering Committee, chaired by the CEO, and attended by the full Executive Committee and our Vice President of ESG, meets quarterly. The Committee's roles include:

- Overseeing work to deliver our Vision 2030 roadmap targets
- Ensuring that our plans for climate change are aligned across Synthomer, and are properly resourced and coordinated
- Ensuring that we effectively manage our climate-related metrics and targets.

The work we have done to understand our transition and physical risks and opportunities, in line with the TCFD recommendations (now part of IFRS Sustainability Disclosure Standards S1 and S2), also plays an important part in our strategic development.

As described in our 2022 Annual Report, we worked with third-party experts to help us carry out scenario analysis to assess the potential impact of these risks.

The three scenarios we analysed addressed three time horizons (short term to 2025, medium term to 2030 and long term 2030 to 2050) and covered all three of our key chemistries (acrylic emulsions, synthetic elastomer emulsions and hydrocarbon resins) in our three main regions (Europe, Asia, USA) covering more than 50% of our products by volume.

The third-party experts used a range of publicly available data sources, including those in relation to IPPC RCP1.9/SSP1, RCP2.6/SSP2 and RCP8.5/SSP3, underlying BEIS energy price forecast assumptions based on IEA data, SSP carbon price assumptions, inflation data from the US Federal Reserve Economic Data Depository and published academic studies to develop the scenario analyses.

In 2024, we engaged a third-party expert to build on that original work, helping us revise and expand our climate risk assessment and scenario analysis. This will support disclosure requirements and help us to further develop our strategic understanding of climate risk and its financial impacts for our business. We will complete this work in 2025.

Having reviewed the climate-related risks and opportunities, with input from the TCFD scenario analysis, we believe climate risk is best managed within our principal risks rather than as a separate, standalone principal risk.

So, as part of our Group risk review, we have integrated those climate-related risks into our principal risks, including both physical and transition risks. In 2023, the Financial Reporting Council (FRC)¹ noted our explanation on how we have integrated climate-related risks into our principal risks in our

¹ https://media.frc.org.uk/documents/TCFD_disclosures_and_climate_in_the_financial_statements.pdf

risk report, sharing our approach as an example of good practice in its thematic review of TCFD disclosures and climate in the financial statements.

To further support our carbon reduction projects, we use an internal carbon price of £85 per tonne of carbon dioxide equivalent (CO₂e) in our financial projections for every potential capital investment above £1 million.

Through our scenario analysis, we have identified five primary responses to reduce the risks and take advantage of the opportunities related to climate change. These responses highlight the need for us to take tangible action now to reduce the risks and take advantage of the opportunities related to climate change, whichever climate scenario ultimately plays out. These are, in order of priority:

1. **Procurement function working with selected suppliers** in the short term, to encourage them to improve energy efficiency and reduce their own emissions, thus maximising reductions in our own Scope 3 emissions. In the medium term, finding suppliers who can provide lower-carbon feedstocks, including those from bio-based or circular sources.
2. **Reducing our Scope 1 emissions** in the short term, by decarbonising our operations through process optimisation. In the medium term, through capital projects focused on electrification, heat pumps and solar power; and in the long term, using hydrogen where possible.
3. **Reducing our Scope 2 emissions** by reducing and optimising electricity and heat consumption in the short term, as well as by entering into, or expanding, power purchase agreements linked to clean-energy generation in the medium term.
4. **Innovating to decarbonise our products**, creating and answering demand from our customers for more sustainable alternatives. In the short term, we have revised our innovation scorecard to prioritise lower-carbon product development for commercialisation in the medium term.
5. **Enhancing our physical resilience** in the short term by assessing the water-related risks of our own operations and implementing improvement plans for those sites at high risk.

Our performance in 2024

We continue to make year-on-year progress to reduce our Scope 1 and 2 GHG emissions. In 2024, our absolute Scope 1 and 2 GHG emissions reduced by 7.2% compared to 2023, giving an overall reduction of 45% against our 2019 baseline year. This keeps us on the right trajectory to achieve our 47% reduction target by 2030.

Our Scope 1 emissions increased by 4% versus 2023. This was mainly due to an increase in reported process emissions from monomer production at our site in the Czech Republic. Additional emissions were also due to the rise in energy demand corresponding to increased sales volumes.

We continue to work on energy and process efficiency projects to tackle these emissions through our Manufacturing Excellence programme. For example, our site in Middelburg, the Netherlands, has saved an estimated 3kt of CO₂e. In Marl, Germany, one plant improved energy efficiency by around 6% through process changes and recipe optimisation. We are now sharing some of Marl's approaches with other sites.

Our Scope 2 emissions were 32% lower than in 2023, due primarily to the supplier of steam to our site in Marl moving away from coal-fired combined heat and power units to a lower-carbon energy supply.

Other projects, such as replacing and upgrading drying technology at one of our sites in the USA, optimising our waste gas system in Malaysia and evaluating opportunities to introduce heat pumps at certain sites, will all play an important part in helping us reach our 2030 targets.

Our short-term strategy is to optimise our utility systems, and in the short-to-medium term optimise our process operations, including improvements in process integration and heat recovery.

Given current capital expenditure constraints, we have focused our efforts on significant opportunities to address our GHG emissions through even greater energy efficiency.

In 2023, we introduced a new sustainability pillar into our Manufacturing Excellence programme. This aims to help each site develop – and act on – decarbonisation and resource-use roadmaps, with energy efficiency as an immediate focus. And while market challenges mean we have to be disciplined about investment in larger-scale energy efficiency projects, such as electrifying gas-fired boilers, this year we have allocated 9% of discretionary capital budget towards projects focused on sustainability.

We are also running a number of longer-term breakthrough technology projects to better understand options we hope will become viable in the future. For example, our CCS division is currently working on a heat pump feasibility study for sites in Europe and the USA. And we are exploring options to introduce lower-carbon hydrogen at Middelburg, including joining one of the Netherlands' new green hydrogen industrial clusters.

Like many businesses with ambitious growth plans, we will also have to stay vigilant as the market picks up, since higher production has historically led to higher absolute emissions. But this is where our strategy gives us a key advantage, as specialisation means focusing on quality rather than quantity.

We met our target to source 80% of our electricity (as a Group) from renewable sources for the fourth year in a row. This was due to a combination of green tariffs, purchasing energy attribute certificates (EACs) and some smaller onsite renewable power generation.

Our comprehensive assessment of Scope 3 GHG emissions inside our value chain completed in 2024 is having a significant impact on our innovation choices. In CCS for instance, we have sourced low-carbon impact butyl acrylate (BA) and butadiene (BD) (two key raw materials), which we will pilot at scale in 2025. This is a direct result of our carbon assessment, which identified fossil-based BA and BD as significant contributors to our Group-level upstream Scope 3 emissions. Our models suggest that switching could reduce those emissions by 2%.

Our new carbon transition plan

During 2023 and 2024, we carried out our most comprehensive assessment of Scope 3 GHG emissions inside our value chain, to find new ways to meet our science-based GHG emissions targets and identify the business opportunities to help us achieve our 2050 net zero ambition.

This year, we also developed a new carbon transition plan. The plan is set out across three time horizons (2025, 2026-2030 and 2030-2050) and focuses on four specific areas:

1. Integrating a GHG forecasting model into our business plans to identify the product innovation and market development options to reduce our GHG emissions over the next five+ years.
2. Reducing Scope 1 and 2 GHG emissions by continuing to deliver our five-year capital improvement plan, driving energy efficiency through our Manufacturing Excellence programme, sourcing 100% renewable electricity for all our sites and developing net-zero roadmaps for three pilot manufacturing sites.
3. Reducing Scope 3 GHG emissions by selectively sourcing lower-carbon, fossil-based feedstocks, sourcing certified sustainable feedstocks, developing value chain partnerships and innovating

novel (bio- and circular) feedstocks and products.

4. Risk assessment and scenario analysis to further develop our strategic understanding of climate risk and its financial impacts on our business.

The area where we can make the biggest, fastest impact between now and 2030 is sourcing lower-carbon, fossil-based feedstocks, though we need to be working on all areas in parallel to ensure we deliver the benefits in the medium and longer term.

Developing new products and partnerships

Eight of our sites are now ISCC PLUS certified, which allows us to offer customers our BIO and CIRCLE products using the mass balance approach. Our offer of products containing renewable/circular feedstock is made possible through value chain partnerships, both with customers and suppliers.

In Asia, we have teamed up with Neste and PCS to establish one of the first ISCC PLUS-certified value chains to manufacture bio-based nitrile butadiene latexes for the glove industry, using responsibly sourced bio-based feedstock. In 2025, our CCS coatings business launched Revacryl AE 3723 BIO, a 50% mass-balance bio-based emulsion that keeps all its properties, while adding biogenic carbon benefit to the value chain, from the supplier down to the disposal of the final goods.

In our 2030-2050 time horizon, we will need to adopt new, alternative, low-carbon raw materials and technologies. This is a complicated process that will take time, because any change made in the way a material is introduced into the value chain can have a knock-on effect on the processes and equipment that we – and our customers – use. We recognise that we need to start developing these alternatives today to meet that challenge in the longer term.

Understanding our customers' needs, and the technology options that are available to us, will be essential in making sure we select the right technology partners and suppliers in the future.

We have also spent time this year, through our new Sustainability Academy, educating our commercial, technical and procurement teams on the changing market landscape. And we have already started talking to customers, suppliers and potential future technology partners about our options for the longer term.

What has become clear is that tackling our Scope 3 emissions will take time; some solutions will become available more quickly than others, while taking a cross-business, whole value chain approach is a complex process. But we are committed to reducing these emissions – and we believe we have the building blocks in place to begin making real change in the coming years.

Climate change isn't just about emissions, of course. We also have to ensure that we manage other important resources that are affected by it, such as water. We use water in our operations and to make some of our products, and we continue to make good progress against our Vision 2030 water target. Further details are available [here](#).

	Unit	2024 ^a	2023 ^a	2022 ^a	2021 ^b	2020 ^b	2019 ^a	Variance 2024 vs 2023 ^{7,8}	Variance 2024 vs 2019 ^{7,8}
Energy consumption									
Absolute energy consumption¹									
Group	GJ	5,692,630	5,681,673	6,194,661	5,035,920	4,919,295	4,964,234	0.2%	14.7%
UK only	GJ	285,722	282,461	321,034	339,579	340,477	329,741	1.2%	-13.3%
Group energy consumption by source									
Natural gas	GJ	3,346,534	3,297,460	3,374,052	2,146,659	2,047,624	2,075,657	1.5%	61.2%
Light and heavy oils and GLP	GJ	297,937	278,152	336,728	24,782	28,310	32,997	7.1%	802.9%
Steam and hot water (metered)	GJ	726,932	835,579	873,923	892,030	883,941	999,288	-13.0%	-27.3%
Electricity (metered)	GJ	1,321,228	1,270,481	1,329,683	1,222,002	1,263,276	1,253,575	4.0%	5.4%
Coal	GJ	0	0	280,275	750,448	696,145	602,716	n/a	-100.0%
Specific energy consumption									
Group	GJ/tonne production	4.21	4.06	3.95	2.89	2.79	2.73	3.6%	54.0%
UK only	GJ/tonne production	3.85	4.64	5.05	4.32	3.95	4.22	-17.0%	-8.8%
Group refrigerant releases – HCFC and others									
Absolute	kg	1,682	3,099	2,442	1,783	1,670	2,000	-45.7%	-15.9%
Specific	kg/tonne production	0.0012	0.0022	0.0016	0.001	0.0009	0.0011	-45.5%	9.1%
Renewable energy consumption									
Total energy from renewable sources	GJ	1,009,610	966,265	997,727	1,094,871	452,067	170,519		
Total share of energy from renewables	%	18	17	17	22	8	3		
Total share of electricity from renewable	%	80	80	80	90	31	10		
Share of energy from renewable sources by region									
Americas	%	19	19	17	25	2	0		
Asia	%	33	51	48	45	0	0		
EMEA	%	15	11	11	15	12	4		
Greenhouse Gas (GHG) emissions^{2,3,4,5,6}									
Absolute Scope 1 GHG emissions									
Group	tonnes CO ₂ e	241,151	230,798	270,849	225,949	219,564	309,645	4.5%	-22.1%
UK only	tonnes CO ₂ e	10,389	10,223	11,963	12,721	12,867	12,429	1.6%	-16.4%
Absolute Scope 2 GHG emissions – market based									
Group	tonnes CO ₂ e	64,086	97,984	105,942	83,857	183,429	259,040	-34.6%	-75.3%
UK only	tonnes CO ₂ e	8,171	6,443	5,815	5,893	6,266	5,308	26.8%	53.9%
Absolute Scope 2 GHG emissions – location based									
Group	tonnes CO ₂ e	174,605	207,957	209,500	210,899	226,537	263,745	-16.0%	-33.8%
UK only	tonnes CO ₂ e	9,669	7,682	7,545	7,887	8,785	8,367	25.9%	15.6%
Absolute Scope 1 and 2 GHG emissions – market based									
Group	tonnes CO ₂ e	305,237	328,782	376,791	309,806	402,993	568,685	-7.2%	-46.3%
UK only	tonnes CO ₂ e	18,560	16,666	17,778	18,613	19,133	17,737	11.4%	4.6%
Specific Scope 1 and 2 GHG emissions									
Group	tonnes CO ₂ e/tonne production	0.23	0.24	0.24	0.178	0.228	0.289	-4.3%	-22.1%
UK only	tonnes CO ₂ e/tonne production	0.25	0.274	0.28	0.237	0.222	0.227	-8.8%	10.1%
Absolute Group Scope 1 and 2 GHG emissions by source									
From energy ³	tonnes CO ₂ e	252,599	289,190	326,992	270,097	362,222	513,994	-12.7%	-50.90%
From process emissions	tonnes CO ₂ e	50,195	41,454	43,807	34,724	35,916	47,164	21.1%	6.4%
From refrigerant releases	tonnes CO ₂ e	2,443	4,138	5,992	4,985	4,855	7,527	-41.0%	-67.5%

	Unit	2024	2023	2022	2021	2020	2019	Variance 2024 vs 2023 ^{7, 8}	Variance 2024 vs 2019 ^{7, 8}
Absolute Scope 3 GHG emissions⁷									
Group	tonnes CO ₂ e	2,629,696	2,568,929	2,550,967	2,318,828	n/a	3,204,702	2.4%	-17.96%
UK Only	tonnes CO ₂ e	250,130	119,876	102,624					
Specific Scope 3 GHG emissions⁷									
Group	tonnes CO ₂ e/tonne production	1.94	1.83	1.56	1.33	n/a	1.41	5.9%	37.6%
UK Only	tonnes CO ₂ e/tonne production	3.37	1.97	1.61					
Absolute Scope 3 GHG emissions breakdown by category (Group)⁷									
Upstream categories (Group)	tonnes CO ₂ e	2,551,806	2,483,681						
Category 1 – Purchase goods and services	tonnes CO ₂ e	2,321,758	2,222,660	2,323,984			2,993,462	4.5%	-22.4%
Category 2 – Capital goods	tonnes CO ₂ e	0					996		
Category 3 – Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	tonnes CO ₂ e	70,348	75,763	100,070			93,907		
Category 4 – Upstream transportation and distribution	tonnes CO ₂ e	129,745	163,075	38,803			27,848		
Category 5 – Waste generated in operations	tonnes CO ₂ e	5,971	8,938	2,008			4,351		
Category 6 – Business travel	tonnes CO ₂ e	15,819	10,607	542			788		
Category 7 – Employee commuting	tonnes CO ₂ e	8,166	8,610	6,211			6,225		
Category 8 – Upstream leased assets	tonnes CO ₂ e	Not relevant	Not relevant	Not relevant			Not relevant		
Downstream categories (Group)	tonnes CO ₂ e	77,890	79,276						
Category 9 – Downstream transportation and distribution	tonnes CO ₂ e	Relevant Not calculated	Relevant Not calculated	Relevant Not calculated			Relevant Not calculated		
Category 10 – Processing of sold products	tonnes CO ₂ e	Not relevant	Not relevant	Not relevant			Not relevant		
Category 11 – Use of sold products	tonnes CO ₂ e	Relevant Not calculated	Relevant Not calculated	Relevant Not calculated			Relevant Not calculated		
Category 12 – End-of-life treatment of sold products	tonnes CO ₂ e	3,751	12,363	16,069			8,653		
Category 13 – Downstream leased assets	tonnes CO ₂ e	62,536	55,444	56,257			44,371		
Category 14 – Franchises		Not relevant	Not relevant	Not relevant			Not relevant		
Category 15 – Investments		11,602	11,469	7,023			24,101		
Total Scope 3	tonnes CO₂e	2,629,696	2,562,957	2,550,967			3,204,702	2.4%	-17.9%

	Unit	2024	2023	2022	2021	2020	2019	Variance 2024 vs 2023 ^{7, 8}	Variance 2024 vs 2019 ^{7, 8}
Additional TCFD metrics⁸									
Financial intensity									
Scope 1 and 2 GHG emissions	tonnes CO ₂ e /£m	154	167	137	121	245	390	-7.8%	-60.5%
Scope 1 and 2 GHG emissions	tonnes CO ₂ e /£m EBITDA	2,076	2,314	1,421	593	1,554	3,197	-13.9%	-435.1%
Scope 3 GHG emissions	tonnes CO ₂ e /£m revenue	1,169	1,300	944	995	n/a	2,051	-7.8%	-43.0%
Scope 3 GHG emissions	tonnes CO ₂ e /£m	15,794	18,036	9,209	4,440	n/a	16,821	-14.3%	-6.1%
Scope 1, 2 and 3 GHG emissions	tonnes CO ₂ e /£m revenue	1,323	1,467	1,081	1,116	n/a	2,441	-7.7%	45.8%
Scope 1, 2 and 3 GHG emissions	tonnes CO ₂ e /£m EBITDA	17,871	20,350	10,543	4,979	n/a	20,017	-14.2%	-10.7%
Sites with an ETS or equivalent									
Proportion of Group Scope 1 GHG emissions	%	62.0	57.7	59.6	62.3	61.6	60.7	7.5%	2.14%
Proportion of Group production volume	%	15.0	13.6	n/a	n/a	n/a	n/a	10.3%	n/a
Proportion of Group revenue	%	16.0	19.2	n/a	n/a	n/a	n/a	-16.7%	n/a
Priority sites for action on water stress water stress⁹									
Number	#	3.	3	n/a	n/a	n/a	n/a	0.0%	n/a
Proportion of Group production volume	%	11.8	10.9	n/a	n/a	n/a	n/a	8.3%	n/a
Proportion of Group revenue	%	12.5	12.4	n/a	n/a	n/a	n/a	0.8%	n/a

All references in the performance data tables are explained in the 'Our methodologies' section below.

Our next steps

We will continue to work with our sites over the next year to help them develop and implement their decarbonisation and resource-use roadmaps.

Because we are likely to continue changing our manufacturing footprint, in line with our strategy, we have revised our approach to signing a European virtual power purchase agreement. This is due to the volume commitment that we would need to make. We will review other options in 2025, such as joining a consortium that aggregates our demand with other companies. We have also updated our renewable electricity procurement policy which, from 2025, requires that we only use green tariffs (where offered) when renewing supply agreements. We will also purchase EACs so that all our sites have at least 80% renewable electricity as a minimum (not just the Group).

Meanwhile, we will implement our GHG forecasting model this year to help us make progress on reducing our Scope 3 emissions in 2025 and beyond, and complete work with our third-party climate analytics expert to help revise and expand our climate risk assessment and scenario analysis.

Our methodologies

Environmental performance metrics and KPI data covers all manufacturing operations and major office/technical centres under Synthomer operational control for the calendar years stated. Data excludes all non-trading and office-/sales-related subsidiaries and joint ventures.

Synthomer's Scope 1 and 2 GHG emission calculations follow the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. Scope 1 and 2 reporting reflecting operational control boundaries.

Synthomer's Scope 3 emissions calculation is based on the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, as well as the WBCSD Guidance for Accounting and Reporting Corporate GHG Emissions in the Chemical Sector Value Chain. All emissions that the business does not have operational control over, but that are in the business's value chain, are included in the Scope 3 inventory. This includes the upstream emissions related to the extraction and production of materials and the downstream emission associated with the processing and use of products.

Synthomer uses a hybrid approach to calculate its Scope 3 emissions, using the following methods:

- Process-based method – using consumption-based data on a given activity and the associated emission factor to calculate the emissions.

- Extended Environmental Input-Output (EEIO) model method – using spend data and its emissions using EEIO models to quantify the emissions associated with a sector of the economy in a given geography.

Based on the type of activity data available for each Scope 3 category, a suitable method was chosen and utilised for the calculation. As such, where consumption-based data was available, the process-based method was applied. Emission factors were sourced from LCA databases such as GaBi (LCA for Expert) and official national emission factor databases such as IEA, DEFRA.

The EEIO method was applied for categories where spend data was more readily available. This method combines macroeconomic data and industry-level carbon emissions data to estimate the carbon associated with financial activity in a given sector and geography. This approach provides Synthomer with the tools to carry out a complete assessment as well as identify carbon hotspots across the value chain, ensuring the business focuses its attention where it matters the most. The limitations of the model are that supplier or customer-specific activities (e.g. use of renewables in manufacturing, routing in transport) are not taken into account. Furthermore, as the model accounts for the emissions of the sector as a whole, it will include different indirect emissions than a typical life cycle assessment (LCA).

Over time, as Synthomer can access consumption-based data across its value chain, Synthomer will make the transition from a hybrid approach to the process-based approach for better accuracy with Scope 3 reporting.

The environmental performance metrics for Scope 1, 2 and 3 have third-party independent verification at a limited level of assurance in accordance with the International Standard on Assurance (ISAE) 3000 for the reported period of 1 January 2024 to 31 December 2024.

References

- a) Data here refers to the Group composition as of end 2024. We have re-calculated our 2019 data for GHG emissions to reflect all acquisitions and divestments as this is the baseline year for our Scope 1 to 3 emissions reduction targets. We have rebaselined 2023, 2022 and 2019 data for updated GWP emission factors, which include methane leakages.
- b) Data here reflects the composition of the Group at the time.
1. Data relates to site usage of all fuels, excluding transport of goods to and from the site and the movement of these vehicles on site. Internal transport on site is included.
2. Scope 1 and 2 CO₂e emissions have been calculated from the usage of all fuels, excluding third-party transport fuel. They therefore include both direct emissions and indirect emissions related to imported electricity, steam, compressed air, cooling water, etc., with the exception of transmission and distribution losses for electricity, which are considered as Scope 3 and have not been estimated. As of this year, Scope 1 process emissions are now included for two specific processes on two sites.
3. CO₂e emissions include contributions from CH₄ and N₂O associated with combustion.
4. All direct energy production from fossil fuels has been aggregated on a Group-wide basis and converted to CO₂e by using the appropriate emissions factors. Scope 2 emissions associated with electricity have been calculated using two different methods as per GHG Protocol requirements:

Market base: using market-based emissions factors for electricity from suppliers of standard grid fuel mix tariffs, and emission factors of zero where verifiable renewable tariffs or renewable certificates with guarantees of origin have been purchased. In cases where supplier emissions factors were not available, the residual mix factor was used for EU and UK sites and the location-base approach for non-EU sites.

Location base: using emissions factors from DEFRA (dataset published in 2024) for UK grid electricity, US Environmental Protection Agency (EPA) Inventory eGRID sub-region factors for US sites (January 2024 dataset) and, for other countries, grid electricity from the relevant IEA (International Energy Authority) 'World CO₂ Emissions from Fuel Combustion' databases. In accordance with UK Government guidance, factors used for 2024 reporting are based on 2021 validated data.

Scope 2 emissions associated with imported steam have been estimated using verified emission factors provided by the suppliers where available. Where not available, the UK DEFRA heat and steam factor has been used.

5. The total Scope 1 and 2 CO₂e figure is the total of the CO₂ equivalent emissions associated with energy, refrigerant release and relevant process emission contributions.
6. Our Stallingborough site in the UK is supplied with most of its electricity from an adjacent municipal waste incinerator. But since the waste is both renewable and non-renewable, the site has some associated emissions. In 2024, the emissions from this electricity were 0.427kg CO₂e per kWh, based on our determination of the factors used for the Climate Change Agreement submission.
7. Scope 3 GHG emissions have been calculated following the GHG protocol. Details can be found on Synthomer's 2024 Scope 3 report.
8. TCFD metrics are calculated using GHG data stated in the table and revenue figures stated in the Annual Report 2024

9. Priority sites for water stress have been identified by combining local risk factors using the WRI Aqueduct tool and relative water demand.

Our Risk report – [click here](#).

Our Climate Action report – [click here](#).