

Environment

Climate change is the biggest threat to the world's long-term future, and presents risks to every country, business and person on the planet. Tate & Lyle is no different, and given that nearly everything we make starts life in the natural world, whether it's a leaf of stevia, a kernel of corn, or a grain of tapioca, it's essential that we take care of the planet and all its biodiversity for its own health and for the future health of our business.

How our environment report is structured

This year, we have made some changes to how we are reporting on our environmental performance, impact and risks, to reflect how climate considerations are integrated into our business, and our increasing focus on our relationship with nature. Our report integrates the governance, metrics and some of the strategy disclosures required by the Task Force on Climate-related Financial Disclosures (TCFD). For details of climate-related risks and additional strategy disclosures for TCFD, see pages 73 to 77. We have also taken some early steps to report against the disclosures required for the new Task Force on Nature-related Financial Disclosures (TNFD).

Within this section	Page
Overview including targets and governance	52
Using less water	55
Climate and carbon emissions	56
Sustainable agriculture	58
Our pathway to net zero	60
Using waste beneficially	62

Overview

The food sector has a huge role to play in addressing climate change given that food systems are responsible for around one-third of global greenhouse gas (GHG) emissions. And yet those same food systems, based on agriculture, are particularly vulnerable to changing weather patterns as the world experiences more extreme events, including drought, heatwaves, flooding, wildfires and biodiversity loss.

That's why caring for our planet is one of the three pillars of our purpose, and why we have committed to becoming a net zero business by 2050. It's also why, in May 2024, we announced that we have significantly strengthened our targets to reduce our Scope 1 and 2 and Scope 3 GHG emissions. These new targets align with the most ambitious goal of the Paris Agreement – to limit global warming to 1.5°C above pre-industrial levels.

Climate-related events are already disrupting our operations and supply chain, and we are taking steps to mitigate their impacts and increase our resilience. We're investing in more renewable electricity, reducing water use, using our waste beneficially and, given our reliance on nature's raw materials, supporting sustainable agriculture.

As well as risks, climate change presents opportunities for businesses that can make their operations and products more sustainable. As a plant-based business with a deep understanding of the science of food, we're well-positioned to create the high-quality, low-carbon ingredients people want to live a more sustainable life. We're constantly adapting our approach to sustainability across every aspect of our business to make sure we embed it in all our plans and processes, from where and how we source our raw materials to how we develop, manufacture and distribute our products. It means designing sustainability into everything we do, so it becomes part of all our thinking, our investment decisions and our growth strategy. This includes building environmental improvements into our expansion projects and acquisitions, and making sustainability a core part of our innovation process.

We're committed to playing our part in tackling climate change, and to protecting and restoring our natural environment. But we know we can't do this alone. So, as we work to make our operations and products more resilient to the impacts of climate change, we will also continue to work closely with our customers, suppliers and other stakeholders across our value chain to help deliver each other's sustainability goals.



Our facility in Guarani, Brazil, is our first site to be entirely powered by renewable energy

Focusing on the areas of greatest materiality and impact

To ensure we are focusing on the areas that matter most to our stakeholders and where we can have the greatest impact, we periodically carry out materiality assessments. We conducted our last assessment in March 2023, looking at environmental, social and governance (ESG) issues, and drawing on interviews with a range of stakeholders. These included customers, investors, suppliers, non-governmental organisations, Board members, executive team members and key functions, such as procurement, operations, and ethics and compliance.

The assessment looked at two main areas. First, the areas we are expected to manage well, since they have significant potential for risks if managed poorly. These include, for example, product quality and safety, anti-bribery and corruption, and data management. Second, the areas where we could take a leading position and where we would benefit from ambition and strong performance. For the environment, the most highly ranked areas that came out of the materiality assessment confirmed that the areas we are currently focused on remain the right ones, namely:

- Reduction in Scope 1 and 2 and Scope 3 GHG emissions
- Sustainable agriculture
- Water supply and consumption
- Biodiversity (including using waste beneficially).

We report our progress and performance in each of these areas in the rest of this section. Our progress on the social issues that also scored highly in the assessment, including equity, diversity and inclusion, and access to nutrition, are discussed in other sections of this Annual Report.

Environment continued

Our targets

In 2020, we set targets to reduce our Scope 1 and 2 and Scope 3 GHG emissions, to reduce our use of water, and to use all the waste we generate beneficially. Each target was set to 2030 from a 2019 baseline. We also set a target to support sustainable agriculture equivalent to the volume of corn we buy globally each year. Then, in 2022, we added another 2030 target to purchase 100% of the electricity we use across our operations from renewable sources. To make our 2030 GHG emissions targets more meaningful, they were based on absolute reductions and were validated as science-based by the Science Based Targets initiative (SBTi) at the 'Well below 2°C' level.

Delivering larger, faster GHG emissions reductions

As caring for our planet is one of the three pillars of our purpose, we continually challenge ourselves to be more ambitious. As a result, in May 2024, we announced new targets to 2028 to reduce our GHG emissions in line with reductions required to limit global warming to 1.5°C above pre-industrial levels, the most ambitious goal of the Paris Agreement. These targets have been validated by the SBTi and will significantly accelerate the decarbonisation of Tate & Lyle and our supply chain. Under our new 2028 targets, from a 2019 baseline we're committing to reduce, in absolute terms:

Energy and Industrial

- Scope 1 and 2 GHG emissions by 38%¹
- Scope 3 GHG emissions by 38%

Forests, Land and Agriculture (FLAG)

- Scope 3 FLAG emissions by 23%²
- We have also committed to no deforestation across our primary deforestation-linked commodities by 31 December 2025.

The new targets replace our current targets for Scope 1 and 2 and Scope 3 GHG emissions to 2030. We set out progress against our 2030 targets in this section of the Annual Report, and will report progress against our new 2028 targets in next year's report.

We expect to meet these new targets mainly through an increase in the use of renewable electricity including via partnerships with utility providers to create renewable electricity, partnering with our suppliers and customers to reduce supply chain emissions, and through our sustainable agriculture programmes.

¹ The target boundary includes land-related emissions and removals from bioenergy feedstocks.

² The target includes FLAG emissions and removals.

'A' rating for supplier engagement on climate change



In 2023, Tate & Lyle earned an A rating from CDP, for supplier engagement. We were also named in CDP's 2023 Supplier Engagement Rating Leaderboard for the first time. CDP's Supplier Engagement Rating (SER) measures how effectively companies are engaging with their suppliers on climate change, and assesses their performance on governance, targets, Scope 3 emissions, and value chain engagement. CDP's SER Leaderboard recognises those organisations with the highest rating for engaging with suppliers on climate change, and the role they are playing in the transition towards a net zero economy. In 2023, around 460 organisations earned a place on this Leaderboard.

Continuing to adapt to changing regulation

As concern about the climate crisis grows, so do expectations of companies like ours to explain how we are addressing our environmental footprint. We've established several working groups to help us stay up-to-date in our reporting and we are providing our people with external training to strengthen their knowledge of this fast-moving landscape.

This year we started to look at how, over time, we can voluntarily report against the new framework from the Taskforce on Nature-related Financial Disclosures (TNFD), published in September 2023. We're also working to evolve our materiality approach in line with the EU's Corporate Sustainability Reporting Directive (CSRD), and the IFRS's International Sustainability Standards Board's (ISSB) first two standards.

Public reporting and assurance

We explain the scope, principles and methodologies we use to report our environmental performance in 'EHS Reporting Criteria' at www.tateandlyle.com/purpose. We report environmental data by calendar year.

Arcadis has independently verified selected environmental data on pages 52 and 53, 55 to 57 and 60 to 62. Their reasonable assurance statement is at www.tateandlyle.com/purpose



Our targets

At 31 March 2024

Climate and carbon emissions

By 2030:

- We'll deliver a 30% absolute reduction in our Scope 1 and 2 GHG emissions¹
- We'll deliver a 15% absolute reduction in our Scope 3 GHG emissions¹
- 100% of the electricity we purchase for our operations will come from renewable sources.

By 2025:

- We'll have eliminated coal from our operations (this target was achieved in 2021).

By 2050:

- We will reach net zero.

Sustainable agriculture

- We'll maintain sustainable acreage equivalent to the volume of corn we buy globally each year, and through partnerships we'll accelerate the adoption of regenerative agricultural practices.

Water

By 2030:

- We'll have reduced water use intensity by 15%.¹

Waste

By 2030:

- 100% of our waste will be beneficially used.¹

¹ Baseline of 31 December 2019. Our Scope 1 and 2 and Scope 3 GHG emissions targets to 2030 will be replaced by our new targets to 2028 announced in May 2024.

Environment continued

Governance

Our governance framework, which has been in place since the beginning of the 2023 financial year, ensures that sustainability-related matters are appropriately reviewed and managed across the business. Sustainability-related matters include climate, water, waste, deforestation and nature; the latter two are currently reviewed largely in the context of our sustainable agriculture programme, but we are looking to expand how we look at nature-related matters in the coming year. There is a separate governance process to oversee environmental compliance in our plants as described on pages 41 to 43 (part of our J2E).

The Board is responsible for overseeing our sustainability strategy including climate change, and progress against our commitments and targets, including our impact on nature. It has a number of non-executive directors with experience of climate-related matters within the food industry as well as other sectors. In particular, Kim Nelson has recent and relevant experience since sustainability was one of her primary responsibilities in her former role as Senior Vice President, External Relations at General Mills.

We have a dedicated sustainability team which develops our sustainability strategy and manages delivery of our programmes, working with stakeholders throughout our value chain. The team reports to our Executive Vice President, Corporate Affairs, and works closely with other teams, such as Global Operations and Finance.

Our sustainability strategy, the development and delivery of our programmes, and the management of our sustainability-related risks and opportunities, including climate change, are overseen through the following governance structure.

Board of Directors

- Considers sustainability-related matters when reviewing and guiding core components of our commercial strategy and business development, such as business plans, annual budgets and major capital expenditure.
- Receives updates on the progress of our sustainability programme and our targets and commitments at least twice a year.

Audit Committee

- Considers reporting disclosures and assurance in relation to sustainability, including TCFD and new frameworks such as ISSB.

Executive Committee

- Our Chief Executive, Nick Hampton, is responsible for the Group's preparedness and response to climate-related and wider sustainability risks and opportunities. He is supported in that task by the Executive Committee with executive responsibility shared jointly by the Executive Vice President, Corporate Affairs (Rowan Adams) and President, Global Operations (Melissa Law).
- The Executive Vice President, General Counsel (Lindsay Beardsell) is responsible for risk management, including the assessment of climate-related and wider sustainability risks.
- Receives quarterly updates on sustainability-related matters.

Risk Committee

- A sub-committee of the Executive Committee, it oversees the operation of our enterprise risk framework, including risk management policies and practices for climate-related and wider sustainability risks.
- The Committee reviews updates from the sustainability, risk and finance teams, as necessary, and updates the Board on its work at least annually.

Sustainability Committee

- A sub-committee of the Executive Committee, chaired by the Chief Executive. It meets at least twice a year (met three times in the 2024 financial year) to review the delivery of our sustainability programme, to consider key projects, and to track progress against our commitments and targets.

Sustainability Working Group

- A cross-functional group, chaired jointly by our Executive Vice President, Corporate Affairs and President, Global Operations, and which includes internal experts from areas such as sustainability, engineering, energy and finance.
- Meets at least monthly to discuss key projects and detailed aspects of our approach to sustainability-related matters.

Sustainability as part of remuneration

Given the importance we place on sustainability-related matters, progress against our targets for Scope 1 and 2 absolute GHG emissions reduction, for beneficial use of waste and for water use intensity are all elements of the performance criteria for our long-term incentive plan. More information can be found in the Directors' Remuneration Report.

Governance of sustainability



Environment continued

Using less water

Tate & Lyle relies on water for its operations and supply chain. We're mindful that water is a shared resource and that we must use it in a way that's sustainable for us and for the communities we live and work in. That's why we set a 2030 target to reduce our water use intensity by 15%.

Reducing water use intensity within our operations is challenging given that, as a producer of ingredients for the food industry, we quite rightly work to strict constraints on how we can recycle and reuse water. Developing plans to achieve our target means our teams are having to push themselves further, understanding the ways our sites use water and the scope for using it more efficiently.

Progress in 2023

In the 2023 calendar year, we saw a 4% increase in our water use intensity from a 2019 baseline. Absolute water consumption in 2023, however, was 7,668,683 m³, or 8% lower than in 2019. So while we are using less water overall, our water use intensity (on a per unit of production basis) has increased. In the 2023 calendar year, this was mainly due to lower production volumes.

Every Tate & Lyle site is set a water-related target each year and, with the support of our engineering team, many of our production facilities were successful in improving their water use intensity in 2023. For example, our McIntosh, Alabama, US, facility decreased water use intensity by 10% by upgrading equipment and making operational changes to reduce the steam they need. Our Van Buren, Arkansas, US, facility also enhanced their steam system, delivering a 14% reduction in water use intensity. In Thailand, we invested in our Chaodee Modified Starch facility to enhance its wastewater treatment system, and the wastewater produced will be used to irrigate local farmers' land.

We recognise that we need to increase momentum if we are to meet our target. Over the next year, our engineering team will continue to work with our sites to identify and assess the feasibility of projects that will help them meet their site-specific goals.

Updating our water risk assessment

In 2023, we worked with sustainability experts, AECOM, to carry out a water risk assessment of our main production facilities (18 in total) and our corn and stevia supply chain, updating 2019's assessment. Using WWF's Global Water Tool and WRI's Aqueduct Water Risk Atlas, we screened our major production facilities' current and future levels of water stress and associated issues. We then carried out a more detailed assessment of those sites identified as high risk for water-related physical risks such as water scarcity, quality issues, freshwater ecosystem impacts and flooding. We also carried out a detailed assessment of the businesses we have acquired since 2019. Given our significant dependence on agriculture, the assessment also looked at the water-related risks of our corn and stevia supply chains.

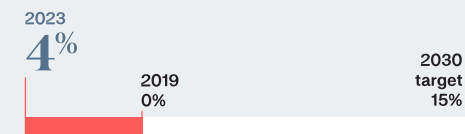
The assessment found that, both currently and over the longer term (to 2050), risk of water scarcity was low at our five sites with the largest use of water – our three corn wet mills in Sagamore, Indiana, US; Boleráz, Slovakia; and Koog, the Netherlands; our sucralose facility in McIntosh, Alabama, US, and our stevia facility in Anji, China. However, these sites still faced potential water-related risks, such as increased rainfall or flooding, and water quality issues. It also found that our small, locust bean gum facility in Noto, Italy, is located in the area of highest risk for water stress.

Our dietary fibre plant in Nantong, China, is a good example of the value of our water risk assessment. In 2019, it was identified as being in a high-risk area for water stress. The team used insights from that assessment to lower their risk of water-related issues by taking steps to improve piping, reduce water consumption and increase their water-treatment capacity.

Turning to our supply chain, water risk in our main corn growing regions was seen as low to medium over the timeframes analysed (current, 2030 and 2050). The main area of risk for corn, in particular waxy corn, was in northern France, reflecting droughts over the last two years. For stevia, the water risk was also generally low to medium, although some regions of China where we source stevia leaf are seeing some disruption from increasing seasonal variability, (ie they are experiencing flooding and drought at different times of the year).

Progress against our 2030 target

By 2030, we'll have reduced water use intensity by 15%¹



¹ The 2019 baseline has been updated to reflect Tate & Lyle's continuing operations after taking into account the acquisition of Quantum Hi-Tech in June 2022.



Our McIntosh, Alabama, US, facility reduced water use intensity by 10% in 2023

Looking ahead

In the coming year, we will continue work to reduce water use intensity and identify projects that can help us make progress against our 2030 target. We will also look to implement the findings of our 2023 water risk assessment to increase the resilience of our business and supply chain, including by ensuring water risk is fully integrated into our enterprise risk management and procurement planning systems.

Environment continued

Climate and carbon emissions

We are committed to playing our part in addressing the impacts of climate change. To do that, we have set ambitious science-based targets to significantly reduce our GHG emissions, and support sustainable agricultural practices. Our aim is to become a net zero business by 2050.

Scope 1 and 2 emissions

Our Scope 1 and 2 GHG emissions collectively accounted for 16% of our total carbon footprint in the 2023 calendar year. Reducing this means making changes to the way we run our plants, through more efficient processes and switching to lower-carbon sources of energy. Our target for 100% of the electricity we purchase for our operations to come from renewable sources is an important part of this work.

Progress in 2023

By the end of the 2023 calendar year, we had reduced our Scope 1 and 2 absolute GHG emissions by 11% from a 2019 baseline. This compares to a 6% reduction at the end of the 2022 calendar year. There are three reasons for this improvement: first, the volume of products we made during the year was lower, meaning our absolute GHG emissions were lower as a result; second, our productivity programme resulted in incremental improvements in GHG emissions at our manufacturing facilities; third, an increase in the use of electricity from renewable sources in our manufacturing facilities.

In August 2023, our facility in Guarani, Brazil, became our first site to be powered entirely by renewable energy. Alongside renewable electricity, operations at the Guarani site are being powered using locally sourced biomass. In the same month, our

manufacturing facilities in Noto, Italy, and Mold, UK, joined our Guarani facility and our corn wet mill in Koog aan de Zaan, the Netherlands, in purchasing 100% of their electricity from renewable sources. In early 2024, our blending facilities in Ossona, Italy, and Kya Sands, Johannesburg, South Africa, both installed solar panels on their sites so that all the electricity they use now comes from renewable sources.

Programmes that focus on other environmental impacts can also have beneficial effects on our GHG emissions. For example, projects to optimise and reduce water use at our facilities in McIntosh, Alabama, US, and Van Buren, Arkansas, US, also resulted in Scope 1 and 2 emissions reductions because they led to us needing less steam and, therefore, less energy to heat the water.

Scope 3 emissions

Scope 3 emissions made up 84% of our total carbon footprint in the 2023 calendar year, and we account for more than 95% of those emissions in our reporting. Understanding where our Scope 3 emissions come from helps us target our reduction activities in areas where they are most needed and can have the greatest impact. In 2023, the majority of our Scope 3 emissions came from purchased goods and services from our suppliers, customers using our ingredients in their final products, and our investment in Primient. That's why it's critical that we work with our customers and suppliers, not only to help us achieve our own targets but also to help them achieve theirs.

June 2023 report

In June 2023, we published a report titled 'Protecting planet and people through ingredient innovation', which set out how ingredient companies like Tate & Lyle can help food and beverage customers play their part in tackling the climate crisis.

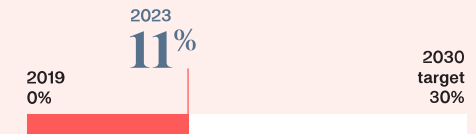
 **This report is available on our website at**
www.tateandlyle.com/purpose/caring-for-our-planet



Progress against our 2030 targets

Scope 1 and 2 GHG emissions

By 2030, we'll have delivered a 30% absolute reduction in our Scope 1 and 2 GHG emissions.¹



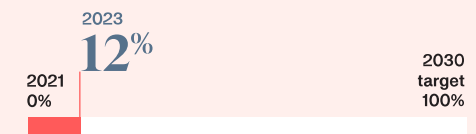
Scope 3 GHG emissions

By 2030, we'll have delivered a 15% absolute reduction in our Scope 3 GHG emissions.¹



Renewable electricity

By 2030, 100% of the electricity we purchase for our operations will come from renewable sources.



¹ Approved as science-based by the Science Based Targets initiative on a 'Well Below 2°C' level, meaning they are in line with the goals of the Paris Agreement.

Environment continued

Progress in 2023

By the end of the 2023 calendar year, we had reduced our Scope 3 absolute GHG emissions by 20% from our 2019 baseline. This compares to a 13% reduction at the end of the 2022 calendar year. This means we have exceeded our target of a 15% reduction by 2030, seven years ahead of schedule. There are three reasons for this.

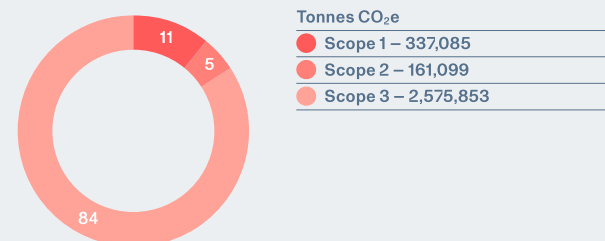
- With production lower this year, our use of purchased goods and services, such as ingredients and packaging, was also lower.
- Having invested US\$150 million to reduce GHG emissions, including eliminating the use of coal, at three large US corn wet mills that are now part of Primient (sold in 2022 and in which we were a 49.7% shareholder at the end of the 2023 calendar year), the benefit of those investments are reflected in our Scope 3 emissions (see table opposite). A proportion of Primient's emissions are included in the 'investments' category of our Scope 3 emissions and, since Primient remains a supplier to Tate & Lyle, we include emissions from the products we purchase from Primient in the 'purchased goods and services' category.
- Our sustainable agriculture programmes, which promote regenerative agricultural practices for corn in the US and for stevia in China, have continued to perform well (this improvement is reflected in the Scope 3 emissions 'purchased goods and services' category in the table opposite). More information about these programmes can be found on pages 58 and 59.

Energy use^{1,2,3} (Gigajoules)

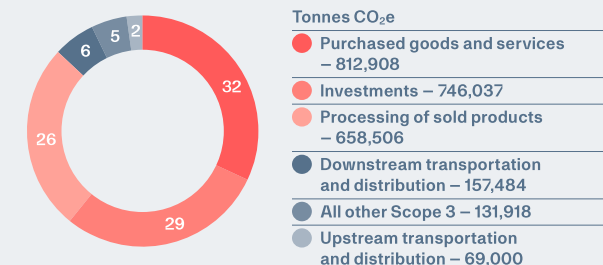
2023	8,417,076
2022⁴	8,983,582
2021⁵	9,055,871
2020⁶	8,919,467
2019⁷	9,077,926

Our carbon footprint

Carbon footprint at 31 December 2023 (%)



Scope 3 breakdown at 31 December 2023 (%)



Carbon footprint for the year ended 31 December 2023^{1,2,3} (tonnes of CO₂e)

All scopes

	2023	2022	2021	2020	2019 (baseline)
Scope 1 (direct emissions from our sites)	337 085	364 920	363 079	366 218	379 510
Scope 2 (indirect emissions from the energy we buy)	161 099	163 565	175 159	176 799	179 255
Scope 3 (all other emissions associated with our activities)	2 575 853	2 873 167	3 011 586	3 099 198	3 200 930
Total	3 074 037	3 401 652	3 549 824	3 642 215	3 759 695

Scope 3 breakdown

	2023	2022	2021	2020	2019 (baseline)
Purchased goods and services	812 908	940 282	1 085 269	1 078 782	1 086 845
Investments	746 037	748 359	781 363	876 593	955 867
Processing of sold products	658 506	825 389	798 370	798 370	798 370
Downstream transportation and distribution	157 484	157 779	157 779	157 779	157 779
All other Scope 3	131 918	130 918	106 023	106 023	119 305
Upstream transportation and distribution	69 000	70 441	82 783	81 651	82 766
Total	2 575 853	2 873 168	3 011 587	3 099 198	3 200 932

- Baselines have been updated to reflect Tate & Lyle's continuing operations after taking into account the acquisition of Quantum Hi-Tech.
- The scope, principles and reporting methodologies used to calculate our environmental data can be found in 'EHS Reporting Criteria' at www.tateandlyle.com/purpose. For GHG emissions, reporting methodologies used include the Greenhouse Gas Protocols, Environmental Reporting Guidelines: HM Government, 40 CFR Part 98 US EPA, and SBTi Criteria and Recommendations.
- Global GHG emissions figures include our UK operations. In accordance with the UK's Streamlined Energy and Carbon Reporting (SECR) requirements, in the year ended 31 December 2023: total global energy consumption was 2,338,077 MWh and energy consumption for UK operations was 894 MWh; the global intensity ratio was 0.43 tonnes of Scope 1 and 2 CO₂e per tonne of production and for UK operations was 0.05 tonnes of Scope 1 and 2 CO₂e per tonne of production; Scope 1 and 2 GHG emissions for UK operations were 172 tonnes of CO₂e.
- UK operations use (996 MWh) represents 0.04%.
- UK operations use (1,361 MWh) represents 0.09%.
- UK operations use (1,235 MWh) represents 0.05%.
- UK operations use (1,257 MWh) represents 0.04%.

Environment continued

Sustainable agriculture

Through our sustainable agriculture programmes we work with suppliers, customers and external partners to accelerate the adoption of regenerative farming practices, focusing on the agricultural raw materials where we have the biggest opportunity to make a positive impact: corn and stevia.

Sustainable agriculture is at the heart of solving the challenge of feeding a growing population accessibly and nutritiously while relieving the pressure on natural resources already under threat from climate change. Through our sustainable agriculture programmes, we work with suppliers, customers and external partners to expand and accelerate the use of regenerative agricultural practices, while ensuring the changes are financially sustainable for our participating farmers in our corn and stevia supply chains. This approach to farming is essential for combating climate change because healthier soil increases the amount of carbon captured from the atmosphere and improves the resilience of crops; it also contributes to the overall health of local ecosystems by improving watershed quality and supporting greater biodiversity. Our programmes have a social dimension as well: improving the personal and economic wellbeing of the farmers and local communities that make up our corn and stevia supply chains. Our sustainable agriculture programmes are therefore at the heart of two pillars of our purpose: caring for the planet and building thriving communities.

What we mean by sustainable agriculture

Protecting the planet through regenerative agriculture practices while improving the social and economic wellbeing of the farmers and local communities that make up our supply chain.

Our corn programme

Launched in 2018 in partnership with Truterra LLC, a leading US resource stewardship solutions provider, our corn programme is our most mature sustainable agriculture programme. Our corn supplier, Primient, manages the overall programme and we continue to partner with them, our customers and Truterra to advance regenerative agricultural practices.

We remain committed to supporting sustainable acreage equivalent to the volume of corn we buy each year, which in the 2023 calendar year was 367,000 acres. Our sustainable corn acreage was lower than last year, primarily due to improvements in corn yields in the US, which meant more of our corn came from fewer acres. We also saw a small decrease due to reduced production in our corn wet mills.

The corn used at our Sagamore facility in Lafayette, Indiana, US, and the corn-based ingredients supplied by Primient are all enrolled in the Truterra programme. We continue to invest in broadening the programme, this year piloting a nitrogen management project with our US-based waxy corn suppliers (see opposite).

In Europe, we completed our second year of work to transition to sustainably sourced corn for our facilities in Koog, the Netherlands, and Boleráz, Slovakia. In 2023, 60% of our corn in Europe was verified as sustainable either through the Sustainable Agriculture Initiative (SAI) or ISCC PLUS, up from 48% in 2022.



We supported 367,000 acres of sustainable corn in 2023



Progress against our commitment

367,000

acres of sustainable corn maintained, equivalent to the volume of corn we purchased in the 2023 calendar year

Intervention programmes

Our sustainable agriculture programmes aim to help farmers understand the impact agricultural practice change and the adoption of regenerative agricultural practices have on their fields and their profitability, and to support farmers in adopting them. We do this largely through intervention programmes.

For example, in 2023, we piloted a nitrogen management programme on more than 2,000 acres with our waxy corn suppliers in Indiana, US. In its first year, this programme resulted in a reduction in CO₂e per acre.

Nitrogen is an essential nutrient and also a key component of fertiliser. Reducing the amount of nitrogen used has a direct link to the reduction of GHG emissions as well as decreased run-off into watersheds and improvements in soil health and biodiversity.

European corn

60%

We procured 60% of the corn we used in our European facilities from sustainable suppliers in the 2023 calendar year.

Environment continued

Our stevia programme

We launched our sustainable agriculture programme for stevia in China in 2021, in partnership with Earthwatch Europe and with support from Nanjing Agricultural University.

Used to make low-calorie sweeteners, stevia is an increasingly important part of our raw material supply chain. Our sustainable agriculture programme for stevia, which we operate with a number of smallholder farmers in Dongtai, Jiangsu Province, helps them to understand better their environmental impact through sampling, assessments and participation in workshops. It has clear goals: reducing growers' environmental impact; improving productivity; and supporting their livelihoods through greater profitability. The programme also includes a voluntary agreement to sign up to Tate & Lyle's Stevia Supplier Sustainability Commitment, a pledge to reduce the environmental impact of stevia farming.

Progress in 2023

Now in its third full year, the programme continues to focus on optimising the use of fertiliser, due to its significant environmental impact, particularly on GHG emissions and watershed quality.

The 2023 stevia growing season marked the first year in which all participating farmers used organic fertiliser in place of urea and, on average, this meant they used 74% less fertiliser overall. This had a very positive environmental impact, as can be seen from the figures in the column opposite, with our 2023 updated lifecycle analysis showing significant reductions in GHG emissions, soil acidity and ecotoxicity.

The programme, with its focus on regenerative agriculture farming practices, is helping to build a more resilient supply chain by mitigating the potential impacts of increasing seasonal variability in weather in China (as highlighted in the water risk assessment described on page 55). It's been really positive to see the cultural shift among the local farming community in recognising its benefits.

Looking ahead

Our sustainable stevia programme continues to balance improved agricultural practices by truly partnering with our farmer suppliers to enable an economically viable crop and livelihood. The programme and our farmers' agricultural practices continue to mature each year, building on successes and lessons learned and sharing them with the local farming community.



Our sustainable agriculture programme for stevia supports smallholder farmers in China

Results from our stevia programme's 2023 growing season¹

74%

reduction in the use of fertiliser by farmers

56%

reduction in GHG emissions

90%

decrease in terrestrial acidification (this shows significantly improved soil health and biodiversity, and improved availability of nutrients to the stevia plant)

76%

decrease in terrestrial ecotoxicity (measures the impact that farming inputs, such as fertiliser, have on land-dependent organisms and their environment)

77%

decrease in freshwater ecotoxicity (measures the impact that farming inputs, such as fertiliser, have on freshwater-dependent organisms and their environment)

¹ Per pound of stevia rebaudioside A produced, compared to a 2019 baseline.

Environment continued

Our pathway to net zero

In June 2022, we committed to becoming a net zero business by 2050, and to accelerate our environmental ambition and performance.

How we made our commitment to net zero

We analysed in detail what a net zero pathway by 2050 would look like for our Scope 1 and 2 and Scope 3 GHG emissions. As part of this work, we carried out comprehensive Scope 1 and 2 decarbonisation assessments at our four largest production facilities, which together generate the vast majority of these emissions. We then looked at the impact on our footprint of changes in policies by governments or other organisations, and decarbonisation commitments in our value chain including those of our customers. We also considered other issues outside our control that would affect our decarbonisation plans, such as the decarbonisation of electricity from the grid and the electrification of different types of transport, such as trucks and trains.

These assessments showed we could achieve net zero by 2050 in terms of Scope 1 and 2 GHG emissions through a combination of electrifying our production facilities, using more efficient steam generation, buying more renewable electricity, building partnerships with utility providers to create renewable electricity, and benefiting from the development of new technologies like energy storage. We expect to largely eliminate our Scope 2 GHG emissions by 2030 given our target to purchase 100% of the electricity we use in our operations by then from renewable sources.

Overall, our analysis identified a pathway to reduce our total carbon footprint by around two-thirds by 2050 from our 2019 baseline. The emissions making up the remaining third, where we're working to identify a pathway, are nearly all in Scope 3 and are mostly from agriculture. That's why sustainable agriculture is so important for us, and partnerships to advance it will continue to be so in the years ahead. More information on our sustainable agriculture programmes are on pages 58 and 59.



Promoting sustainable agriculture will play an important role in our work to reach net zero

Investing to accelerate our environmental performance

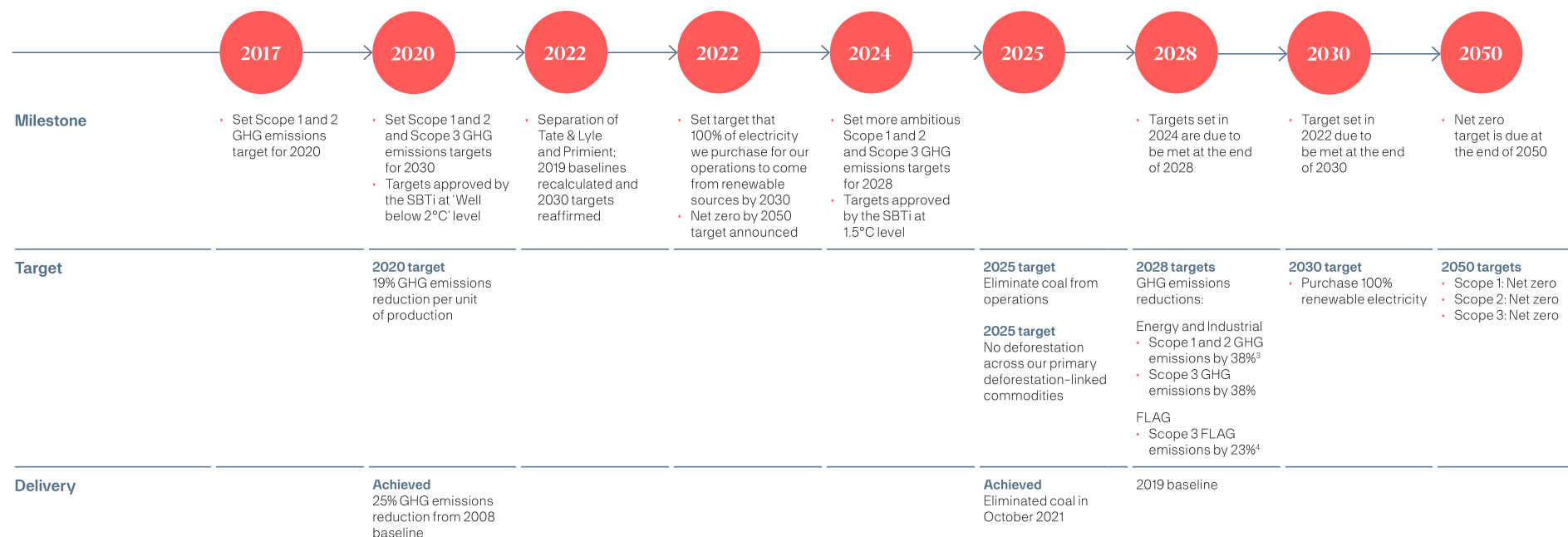
We expect the investments needed to meet our new 2028 Scope 1 and 2 GHG emissions reduction targets (see page 53 for more details), as well as our other 2030 environmental targets, to be within our annual capital and other expenditure programmes. Beyond that, we expect our plans to evolve as new technologies for low- or zero-carbon energy develop. Therefore, the investments required to deliver net zero Scope 1 and 2 GHG emissions after 2028 will depend on the speed of development, and cost, of these technologies. In that context, it is not yet feasible to put meaningful costs on our plans beyond 2028, although we will do so as soon as we can. Similarly, for Scope 3 emissions, the cost of our corn and stevia sustainable agriculture programmes are currently included in our operating costs. Over time, we expect costs for these programmes to increase, although at this stage it's difficult to know by how much.

Evolving our plan with changing circumstances

We are committed to reaching net zero by 2050 by reducing our Scope 1, 2 and 3 GHG emissions to as close to zero as possible and neutralising residual emissions through limited external carbon offset purchases. But we cannot do this alone. Much of what is needed will depend on stakeholders across our value chain, including our customers and suppliers delivering on their sustainability ambitions. We'll also need structural changes near our facilities and at multiple points of our value chain to ensure the infrastructure is in place both for us and for the organisations we work with, to access enough low- or zero-carbon energy to run our operations. While changes in policy, advances in technology and many other factors will mean that our decarbonisation trajectory will change as we move towards 2050, what won't change is our determination to deliver on our targets by 2028 and 2030, and to reach net zero by 2050.

Environment continued

Our pathway to net zero by 2050¹



We expect to deliver our pathway by a combination of:

Scope 1 (11% of our footprint)²

- Electrifying our production facilities
- Use of more efficient steam generation
- More use of renewable electricity
- Benefiting from the development of new technologies such as energy storage

Scope 2 (5% of our footprint)²

- Purchase 100% of the electricity we use across our operations from renewable sources
- Investments and partnerships with utilities and utility developers to use existing and generate new renewable electricity

Scope 3 (84% of our footprint)²

- Sustainable agriculture programmes (to be scaled up)
- Customers, suppliers and investments achieving their carbon reduction targets
- Decarbonisation of logistics and transportation supply chains

¹ Based on current expectations (assumptions subject to change based on future developments).

² Percentage of total carbon footprint at 31 December 2023.

³ The target boundary includes land-related emissions and removals from bioenergy feedstocks.

⁴ The target includes FLAG emissions and removals. FLAG means forests, land and agriculture.

Environment continued

Using waste beneficially

Our target is to beneficially use 100% of the waste we generate by 2030. By that we mean putting all the waste we generate to a positive use for society or local communities, or recycling it.

The plant-based ingredients we make in our manufacturing facilities generate a significant amount of organic waste. This waste is applied to land on local farms or used as compost to provide nutrients that help enrich the soil, restore biodiversity and improve plant growth. Waste that cannot be used on local farms is either used for energy recovery, or is recycled.

Progress in 2023

In the 2023 calendar year, 90% of the waste we generated globally was beneficially used. This is slightly lower than the previous year (92%), mainly due to a reduction in beneficial use at one of our larger sites, and the inclusion in our figures for the first time of our Quantum Hi-Tech business, which we acquired in 2022. This follows a period of rapid improvement, with our beneficial use rising from 65% since 2019, and we always knew that our progress would slow as we moved closer to our 100% target.

Every site has an annual target for beneficially using its waste, and our people continue to do a great job of keeping waste front-of-mind in their day-to-day work, and coming up with ideas to improve waste performance. Our Ossona, Italy, and Mold, UK, sites are already using 100% of their waste beneficially, and two of our largest facilities, our corn wet mills in Koog, the Netherlands, and Boleráz, Slovakia, are at 99% and 97%, respectively. A number of our smaller sites also made strong progress in 2023 including:

- Guarani, Brazil, increased their beneficial use of waste from 63% to 97% through a local partner using wastewater treatment sludge as compost.
- Van Buren, Arkansas, US, diverted starch waste from landfill increasing their beneficial use of waste from 19% to 48%.
- Our newly acquired Quantum Hi-Tech site in China made a good start to their waste improvement programme with 44% of its waste beneficially used in its first year of reporting.

Looking ahead

We remain focused on taking the steps required to achieve our 100% target by 2030. In some areas, external factors present a challenge to making progress, such as a lack of local recycling infrastructure for plastic waste for a few of our sites in the US. We are looking at ways to solve this issue, as we have in Brisbane, Australia, where a new partnership with a plastic recycler has resulted in a material increase in the site's beneficial use of waste.

We are pleased with our progress to date, but recognise we have more to do to reach our target. We remain committed to building partnerships that enable our waste to be beneficially used, and our employees continue to be highly engaged in waste management, with many of our local teams getting involved in projects to clean up their local areas.

Progress against our 2030 target

By 2030, 100% of our waste will be beneficially used



Our top five sites for beneficial use of waste

Ossona, Italy

100%

Mold, UK

100%

Koog, the Netherlands

99%

Guarani, Brazil

97%

Boleráz, Slovakia

97%

¹ The 2019 baseline has been updated to reflect Tate & Lyle's continuing operations after taking into account the acquisition of Quantum High-Tech.



Organic waste from our plants are used as nutrients on local farms in the US