



# Managing climate risks and opportunities *by pioneering grain-to-glass sustainability*

Our business depends on natural resources and we are directly affected by changes in climate and the related challenges of nature and biodiversity loss. While we already feel the effects of climate change in our global operations, there are also opportunities for companies that develop credible plans to adapt to changing circumstances.

A changing climate has implications across our end-to-end operations. It can affect crops like barley and wheat, and natural resources like water that we rely on to make our products. It can cause disruption to our manufacturing sites and supply chain through extreme weather. And it can affect the communities we work with by threatening their livelihoods. But there are also opportunities for companies that innovate to make their operations and the products they sell more sustainable.

These issues intersect and converge. A changing climate can threaten our key commodities and our communities, while production, agriculture and packaging produce carbon which can accelerate climate change. Just as these issues are connected, our response and actions are too. We are working hard to reduce carbon emissions from our sites, for example by introducing renewable energy in our operations. Preserving water and promoting sustainable farming protects our commodities. And by reusing waste co-products from production, we help sustain the agricultural system that underpins what we do.

We are committed to acting responsibly to mitigate our contribution to global warming and conserve the environment in which we operate, while simultaneously adapting to the effects of a changing climate to keep our business resilient. We look to achieve this through our strategic priority to 'pioneer grain-to-glass sustainability', which focuses on three areas: 'preserve water for life', 'accelerate to a low-carbon world' and 'become sustainable by design'. Actions we take across these priorities are transforming our business to thrive in the longer term.

## Focussing on grain-to-glass sustainability


Pioneering grain-to-glass sustainability is how we manage our environmental and climate challenges, and how we help preserve the scarce natural resources the world depends on. It is also how we adapt to climate change throughout our supply chain, and mitigate its effects. By managing our environmental impacts and the impact of the environment on us, we support our business and the communities we work alongside to be resilient for the long term. This is good for the planet and also good for our business. By investing in renewable energy, for instance, we lower carbon emissions by depending less on fossil fuels. We also manage risk and build resilience as the world moves towards a low-carbon economy.

## Our action plan – 'Society 2030: Spirit of Progress'

Pioneering grain-to-glass sustainability includes ambitious targets, such as achieving net zero carbon emissions from our direct operations (Scopes 1 and 2) by 2030, and across our full value chain (Scope 3) by 2050 or earlier, using water more efficiently and taking action to replenish water in water-stressed areas. Our 'Society 2030: Spirit of Progress' targets reflect our most material ESG issues, and they align to the UN Sustainable Development Goals. We are also proud to be a signatory to the UN's Race to Zero and Race to Resilience campaigns reflecting our commitment to climate change mitigation and adaptation.

The issues are complex, which makes progress against our ambitious targets challenging. As we become more sophisticated in understanding our impacts and taking action to address them, we will also evolve our practices and metrics to make sure we strive to focus on and communicate the right things effectively.



 We are committed to acting responsibly to mitigate our contribution to global warming and conserve the environment in which we operate.

### Making climate change part of our strategy

To understand, quantify and mitigate climate risks and adapt to their impact, we partner with climate resilience experts to assess them, model their possible financial impact, and develop strategies to adapt and remain resilient over the long-term.

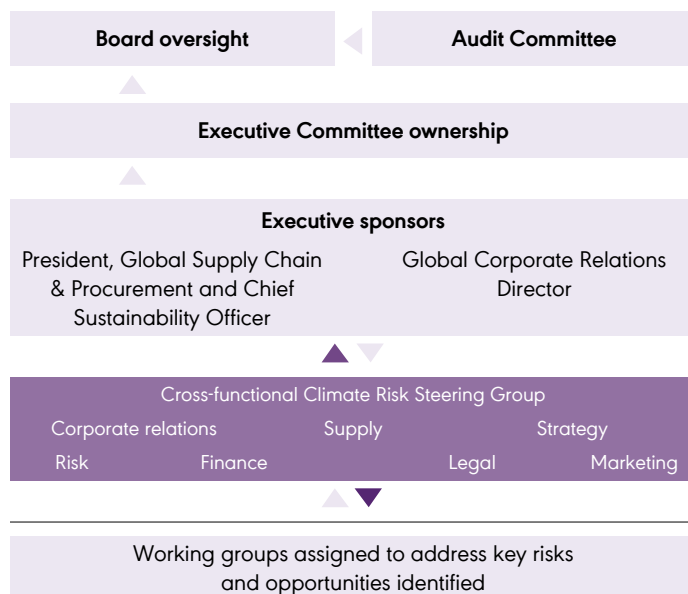
Many complex factors determine how climate change creates risks and opportunities for our business, which makes it harder to quantify how big an impact they'll have, and when. Even so, scenario analysis helps us test how various assumptions related to climate change could affect our business. This year we've once again modelled with climate resilience experts the impacts of climate change under transition risk and physical risk scenarios.

We have incorporated the guidance of the Task Force on Climate-related Financial Disclosures (TCFD) framework into our reporting since 2020. It's helped us describe how we're decarbonising our value chain, mitigating and adapting to climate risks and impacts, and spotting opportunities for transitioning to a low-carbon future. Through scenario analysis, we've also learned the range of possible financial impacts of various climate scenarios in our business. We started our carbon reduction efforts in 2008, as well as championing water stewardship around the world to combat water stress. In 2022 we published our Net Zero Carbon Strategy, which outlines how we will achieve our decarbonisation vision in direct operations. We intend to build on this with our net zero transition plan, taking into account the final guidance of the UK Transition Plan Taskforce when it's published.

### Governance

Given its importance, we have governance processes in place intended to ensure that we consider and factor climate risk into our business operations and planning processes. To supplement our 'Society 2030: Spirit of Progress' governance summarised on page 57, our sustainability teams hold monthly sustainability performance reviews, track priority water efficiency and carbon reduction projects, and hold quarterly sustainability business reviews that focus on multi-year progress and plans leading up to 2030. We oversee climate risk specifically at the highest level of the company, and manage it through these governance structures and processes:

- Executive sponsorship and responsibility is shared jointly between the President, Global Supply Chain & Procurement and Chief Sustainability Officer (Ewan Andrew) and the Global Corporate Relations Director (Daniel Mobley).
- At an operational level, they are supported by our cross-functional Climate Risk Steering Group, which meets up to twice a month. Within this, a sub-group from Supply Chain & Procurement oversees physical risks, with other cross-functional working groups responsible for addressing transition risks and opportunities, for example market and reputation, policy and legal, and technology.
- The Climate Risk Steering Group updates executive sponsors monthly on progress and issues relating to climate risk, and quarterly updates are provided to the Board, making sure that potential risks and opportunities and their impact are part of decision-making.
- Any potential financial implications of climate risk and potential impacts on our consolidated financial statements, including performance and progress against non-financial metrics, are also shared with and considered by the Audit Committee annually.



### Climate change and remuneration

The performance element of the long-term incentive plan (LTIP) for our senior leaders encourages and rewards performance against certain ESG measures (introduced in 2020, for fiscal 21 to 23). Some 10% of the performance share award, which is granted to the Executive Committee as well as other senior leaders, targets carbon emissions and water efficiency, which directly support mitigation of, and adaptation to, climate risk (see the Directors' remuneration report on pages 126-153).

### Identifying climate risks and opportunities

Climate risk is generally divided into physical and transition risk. Physical risks include chronic changes like sea level rises and temperature changes, and acute events like floods, droughts and heatwaves. Transition risks arise from actions to mitigate climate change, such as policy and legal changes like carbon taxes; technology changes, like renewable energy; or market changes, like growing consumer demand for more sustainable products.

Both categories of risk are already materialising in everyday life, and both are likely to increase. As the world continues to warm while we intensify efforts to mitigate climate change, we need to assess and prepare for both physical and transition risks. Opportunities, meanwhile, could arise from us mitigating risks more effectively than our competitors, or creating competitive advantage, for instance by meeting consumer demand for more sustainable products.

### Climate change resilience

Our experience in managing the impact of normal variations in climatic conditions, water availability and agricultural yields has made us more resilient and adaptable. We adapt through careful planning in our supply chain and procurement organisation, by partnering to develop high-yield, drought-resistant crops, and by managing water in a way that makes our operations more resilient and helps our local communities and agricultural sourcing areas to adapt, with specific focus in water-stressed areas. We have integrated climate risk into our enterprise risk management processes since first referencing it within our principal risk factors in 2010. It is also part of our strategic and business continuity plans.

## Identifying and assessing our physical risks

To assess the physical risks we are exposed to, and how they could develop under various scenarios, we worked with climate resilience experts from 2021 to 2023 to look at our full global supply chain. This table shows how we have phased the work:

Fiscal year	2021	2022	2023
Markets/ regions assessed for physical risks	Largest supply centres • Scotland • North America	Highest water risk • Africa • Mexico • India • Turkey	Remaining locations • Asia Pacific • Latin America and Caribbean • Europe

This scope covers all our wholly owned sites (except acquisitions completed after the start of the 2023 evaluation) and key third-party operations. We also included some sites that are planned or under construction to make sure we understand their exposure and build their resilience.

Our physical risk assessments measured how exposed and vulnerable activities at our sites and key third-party operations and suppliers are to 19 climate-related hazards. We reviewed the vulnerability of the main agricultural materials we procure in each region, and also ran a high-level analysis of our key distribution routes (road, rail and ports). We did this under two scenarios (IPCC scenario RCP4.5 - medium warming of 2-3°C, and IPCC scenario RCP8.5 - severe warming of 4-5°C) and two timeframes (to 2030 and to 2050).

- Production sites: For our own sites and many of our third-party operator sites that produce beverages on our behalf, we analysed at a high level the risks they are likely to be exposed to. For those that are most strategically important or at greatest risk, we carried out more detailed assessments. At each location, we looked at a combination of the different activities (e.g. malting, distilling and packaging), the part of the process that might be affected (e.g. infrastructure, water supply and energy sources) and the 19 physical risks that might occur.
- Supply chain and logistics: for all markets assessed, we analysed our key suppliers' factories and warehouses, for example those handling our most critical or specialised ingredients and components, key agricultural commodities, and our most critical distribution routes (road, rail, and ports), to identify which might be exposed to physical risk in the future.

## Our physical risks – results

Our assessment confirmed three key points:

1. Water scarcity is our most significant climate-related physical risk in terms of prevalence, trajectory and potential financial impact. It affects our ability to produce our products, and the access to agricultural ingredients that we need.
2. All agricultural ingredients are at risk, and we see that risk increasing under the timeframes and scenarios we analysed. Our models suggest that costs of most commodities will increase as a result of climate change, although estimates of the precise impact vary significantly depending on the model used, underscoring the difficulty of such projections.
3. Acute weather events, including floods, winds and storms, are projected to increase and to cause interruption to operations; however, they are unlikely to have a significant financial impact on us, under the scenarios analysed.

## Physical risks in our supply chain

Our assessment of supply chain risk explored three areas: agricultural commodities, supplier assets and distribution routes.

In previous years we had covered a wide range of agricultural commodities used in the regions analysed, and this year we expanded our analysis to include hops and dairy. This highlighted the particular vulnerabilities of each crop type, how their exposure was likely to increase in the growing regions of interest over time, and possible adaptation and mitigation responses. The diagram on page 74 sums up the main risks that the most important commodities are exposed to by region.

As well as the bulk commodities outlined in the diagram, we also did a high-level analysis of ingredients included in our products that are critical to particular categories for the characteristics they impart – juniper, angelica and liquorice, for example. The results of the agricultural commodity assessments have and will continue to inform our strategy. This includes working with farmers to increase their crops' resilience to climate change, and developing contingencies where this isn't possible.



📷 Preserving water and promoting sustainable farming protects our commodities and communities.

### Key climate risks to agricultural ingredients by region

#### North America

Maize	T W
Barley	T P
Rye	T W
Sugar beet	T W P
American white oak	T W
Hops	T Fi W Di

#### Europe

Barley	W D P
Wheat	W P
Rye	T W
Sugar beet	T
Dairy	W T
Hops	W D T

#### Turkey

Anise	T D P F
Grapes	T W F Fi
Sugar beet	T W F Fi
Wheat	T W D

#### Latin America and Caribbean

Sugar cane	T W H F P S
Agave	T

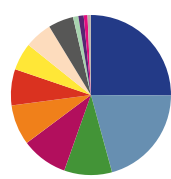
#### Africa

Barley	T D P
Maize	T D F
Sorghum	T P
Sugar beet	T W
Sugar cane	T W P
Cassava	T D P
Vanilla	T S

#### Asia Pacific

Barley	T W D P
Grapes	T W D P
Rice	T P F
Molasses (sugar cane)	T W D P H

### Priority raw materials by volume



Barley	Sorghum
Agave	Dairy
Wheat	Rye
Maize	Raisins
Molasses	Others (including hops, anise and vanilla)
Rice	
Grapes	
Sugar	

### Climate risks likely to affect agricultural commodities

T	Temperature	P	Precipitation (variability/extremes)	Fi	Fires
D	Drought	W	Water stress	H	Hurricane/storm
F	Flood	Di	Disease	S	Sea level

### Geographical scope of our physical risk assessments

Region	Owned/key third-party sites assessed	Detailed assessments	Agricultural commodities	Supplier assets (factories, warehouses)	Ports
North America	12	4	8	86	6
Europe	76	13	18	262	27
Asia Pacific	63	11	6	281	9
Latin America and Caribbean	46	6	2	251	13
Africa	48	5	6	366	14
<b>Total</b>	<b>245</b>	<b>39</b>	<b>n/a<sup>(1)</sup></b>	<b>1,246</b>	<b>69</b>

(1) Some commodities were analysed in more than one location.

For more details on our scenario analysis approach, see the Non-financial reporting boundaries and methodologies section on pages 242-245

We assessed more than 1,200 suppliers' assets and found the most common risks were water stress and higher temperatures, with humidity and wildfire risks also intensifying in some locations. We use this information to work with suppliers on future adaptations and contingencies. We discuss this further in the Strategy section on page 78.

Our analysis of distribution routes included key ports, roads and rail networks identified in our supply chain in each of the markets we assessed. The analysis showed that, in general, the risks to ports come from water stress and changing temperatures, while the risks to road networks are broader, including chronic risks, like temperature increases and sea level rises, and acute risks, such as storms, floods or wildfires. We assessed both acute and chronic risks to be higher in warmer countries (e.g. India, Mexico and Turkey). These insights help us plan effectively for additional future contingencies we may require in our distribution routes.

### Physical risks by region – Diageo and key third-party supply sites

The most common physical hazards projected to intensify are water-related risks (water availability, water temperature and flooding) and high temperature. High temperatures might affect employees' health and productivity, and processes such as fermentation and maturation, which are sensitive to temperature variations. There's also increased cost associated with process and facility cooling. Cold temperature risks are projected to decline in all regions we analysed.

#### Water risk

Given the importance of water to our operations and producing our products, we focus particularly on understanding water-related risks so we can mitigate and adapt to them. As well as our physical climate risk assessments looking at the risks from water availability, water temperature, water quality and flooding, we conduct water-stress analysis at our sites every two to three years, using site surveys and World Resources Institute (WRI) Aqueduct data. In fiscal 23, we enhanced our water risk assessment by completing water source vulnerability assessments at 22 of our sites located in water-stressed areas, with the help of expert partners.

The water stress, climate risk and source vulnerability assessments give us comprehensive insights into how this profile might change due to climate change. They also show the degree of vulnerability of our operations and supply chains to water stress, bearing in mind various contributing factors in these sites' catchment areas. Climate risk assessment tells us the number of our current sites exposed to high water stress isn't projected to increase significantly in the foreseeable future. But water stress is likely to become more severe at some sites, making the detailed understanding of source vulnerability particularly valuable. The figure on page 76 shows our water-stressed sites and those that have had source vulnerability assessments completed, as well as those that are in our priority water basins.

### Quantitative impact of physical risk

Our assessment shows that generally our sites are likely to be exposed to more frequent acute weather events like floods and storms, but financial impacts are unlikely to be significant. We are more exposed to the acute risk of drought, and to chronic changes like water scarcity. Water scarcity is the biggest climate-related risk to our operations, since we have many sites in water-stressed areas that might face interruption to operations if the warming temperature scenarios play out. Through our scenario analysis we have estimated the impact on our operations and financial condition to 2030, concluding that it is unlikely to be significant by that date. This is largely due to the adaptation actions we are taking (detailed below) and our contingencies to deal with short-term disruptions to our operations. This is reflected in our assessment of viability and impairment (see page 94).

#### Water stress

Under the warming scenarios we modelled, the proportion of our sales exposed to 'extremely high' water stress is likely to increase by 2030 and again by 2050, with the sites most likely to be affected in India, Mexico, Turkey and North America. Under these warming scenarios, even though the number of sites affected may not change substantially, those that are affected are likely to suffer even greater shortages of water, under both timeframes, which could have an impact on our operations, and on the health and wellbeing of employees at those sites.

#### Drought

Drought is the only physical risk likely to affect our operations or financial condition in any material way, because we rely on water to make our products. Analysing the financial impact of drought is particularly difficult because there are many factors involved, including the probability of drought, how long operations would have to be suspended and the impact of any adaptation or contingency measures.

Even so, we have modelled what we can, using scenario analysis and our own assessment of vulnerability, and considering highly conservative assumptions (e.g. some downtime in all sites due to drought). We concluded that, by 2030, we don't expect drought to have a significant impact on our operations or on our financial condition. Beyond 2030 it is much harder to analyse, given the lengthy timeframe. But our models do show that if we don't take mitigating action by 2050, drought could have the potential to interrupt operations and, as a result, potential lost sales. We discuss how we plan to deal with this risk in the Strategy section on page 78.

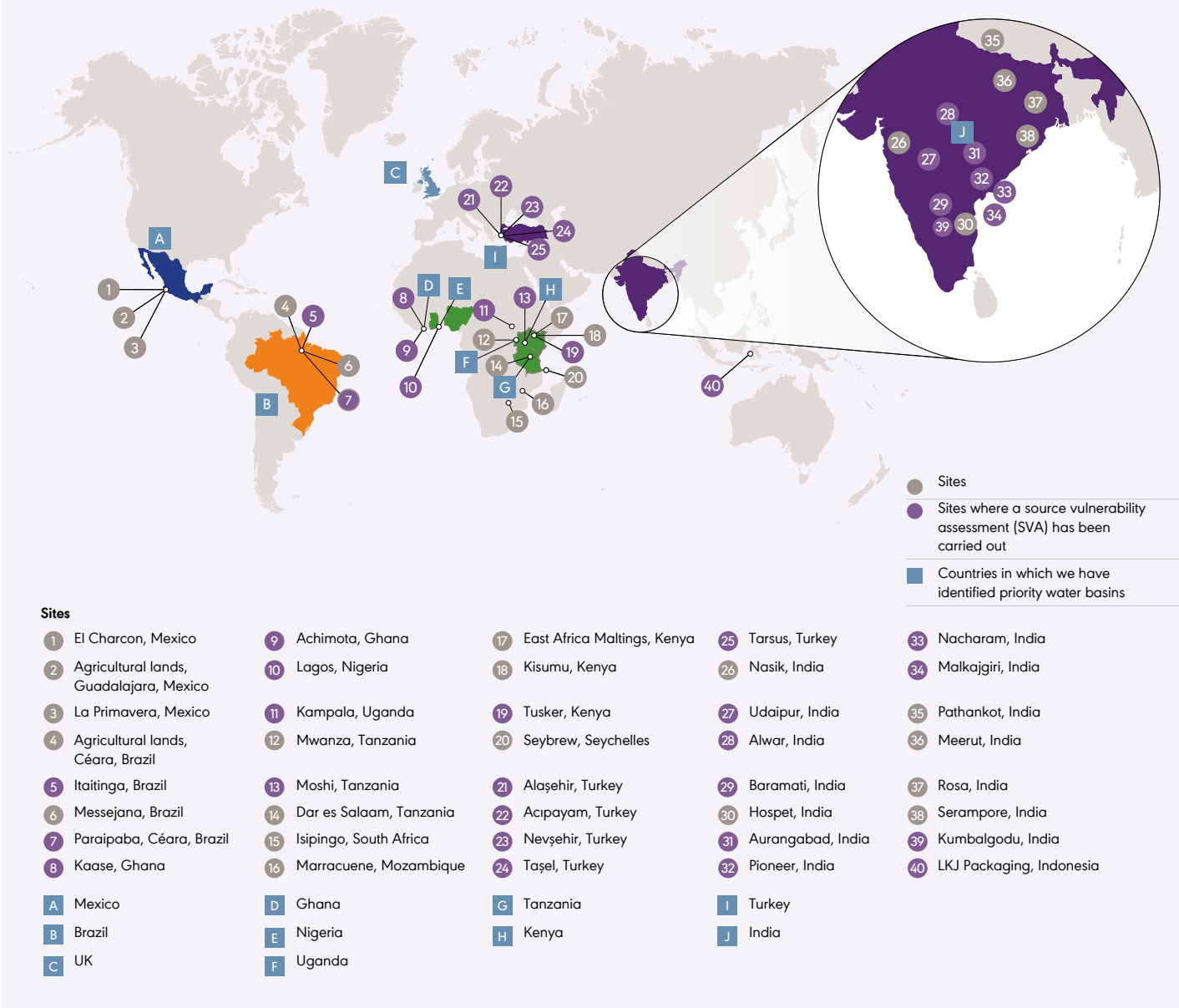
#### Commodity pricing

Commodity pricing is more difficult to estimate in these scenarios, with the models we used producing highly varied estimates. Prices were projected to increase for the majority of our commodities. The scenario analysis helps us build commodity price risk into our raw material procurement strategies, particularly for crops with unique provenance (e.g. agave and vanilla) or high sensitivity to growing conditions (e.g. hops). Our modelling suggested the biggest risks of higher prices in 2050 were to agave, sorghum, rice, dairy and hops. There are significant differences between models, but the impacts in 2050 could be significant.

### Focus on water stress

Because we rely so greatly on water, we have been assessing our wholly owned production sites for water stress regularly since 2008. The most recent assessment, in 2021, was updated in fiscal 23 to reflect changes in our operations due to disposals. The assessment – and our classification of a site as ‘water-stressed’ – is based on external (WRI Aqueduct databases for watersheds around the world) and internal site surveys covering physical, regulatory, social and reputational considerations. It will be updated again in fiscal 24. Shown below are the sites for which we have conducted source vulnerability assessments, and those countries in which we have identified priority water basins.

### Diageo sites located in water-stressed areas, and priority water basins in 2023



## Flooding and storms

Flooding and storms are the next most likely physical risks to affect our financial performance, since they might damage our sites or disrupt our supply of agricultural commodities, and the price of most of the commodities we analysed is set to increase under the scenarios developed. Although the risk to our sites from acute physical events will increase, it is unlikely to be significant in the scenarios and timeframes we analysed.

## Identifying and assessing our transition risks and opportunities

To assess transition risks and opportunities, and to estimate their financial impact under a Paris-aligned emissions scenario, we worked with climate resilience experts. The work performed deepened our understanding of our risks and opportunities which led to refined financial estimation of the risks and opportunities along with further clarity on how to respond to them.

In fiscal 21 to 23 we analysed, as defined by TCFD, the risks and opportunities associated with transitioning to a low-carbon economy. We identified the risks with the most potential impact by looking at our agricultural inputs, production and packaging, distribution and sales channels arriving at these most important transition risks and opportunities to monitor:

1. Decarbonisation costs: Changes to our production costs associated with moving to a low-carbon economy, including carbon taxes and related changes to input costs (risk and opportunity).
2. Consumer behaviour: Changes in consumer behaviour to become more sustainable, e.g. choosing circular (reusable) products or locally produced brands (risk and opportunity).
3. Regulatory changes: For example, restrictions on packaging, water use, agricultural materials or land that affect our ability to make our products (risk).
4. Technology changes: Shifting to low-carbon production of our products and packaging, and the associated risk of not doing this fast enough (risk and opportunity).

The next table on page 78 summarises the physical and transition risks and opportunities we consider most important to manage overall.

## Quantitative impact of transition risks and opportunities

Transitioning to a low-carbon economy creates both risks and opportunities for us. Through our scenario analysis we have estimated the impact on our operations and financial condition to 2030, concluding that it is unlikely to be significant by that date, even assuming that we bear all changes in production costs.

We found the key driver of transition risk was glass and, to a lesser extent, aluminium packaging, which would contribute to an overall production cost increase. We also saw that lower transport and energy costs would partially mitigate this impact. The categories and markets most affected in this scenario were those where glass constitutes a relatively higher proportion of overall cost, particularly tequila, cream liqueurs and the Indian market. Lower future transport costs meant that categories where transport costs were relatively higher as a proportion of total cost were less affected, relatively, by increased glass cost.

Extending the analysis to 2050 is subject to many variables and unknowns and therefore significant uncertainty. But it lets us estimate what a 'worst case scenario' could look like based on our best available modelling of cost trajectories, and understand what's driving risk so that we can develop plans to mitigate it. Based on this modelling we could make the estimated impact on our operations and financial condition not significant through pricing and/or our planned improvements in energy use, producing lightweight glass, reducing the carbon intensity of glass production, and using returnable or reusable packaging where possible.

The results of our scenario analysis of both physical and transition risks are reflected in our assessment of viability and impairment (see page 94).

Summary of our most important climate risks and opportunities

Risks		
<b>Risk description</b>	<b>Water scarcity</b> Increasing water scarcity and water stress affects our ability to continue to produce in water-stressed areas	<b>Agricultural raw material availability</b> Climate-related impacts on agricultural material availability cause scarcity or price increases
<b>Category</b>	Physical - chronic	Physical - chronic
<b>Timeframe</b>	Short-term (one to five years), medium-term (five to 10 years) and long-term (10 to 30 years)	Medium-, long-term
<b>Impact (if not mitigated)</b>	Moderate <sup>(1)</sup>	Moderate <sup>(1)</sup>
<b>Response examples</b>	<ul style="list-style-type: none"> <li>• Improvements in water use efficiency</li> <li>• Water replenishment plans in 100% of water-stressed areas</li> <li>• Collective action programme to improve water security in Diageo's 'priority water basins'</li> </ul>	<ul style="list-style-type: none"> <li>• Regenerative agriculture adaptations</li> <li>• Smallholder farmer support</li> <li>• Development of drought-resistant crops</li> <li>• Alternative sourcing locations</li> <li>• Substitution with alternative crops</li> <li>• Improved water management</li> </ul>

<b>Risk description</b>	<b>Input costs</b> Policy changes (carbon taxation, shift to renewables) cause increases in input costs	<b>Consumer behaviour</b> Consumers prioritise purchasing more sustainable products, rejecting those perceived to have a negative environmental impact
<b>Category</b>	Transition - policy/legal	Transition - market
<b>Timeframe</b>	Short-, medium- term	Short-, medium-, long-term
<b>Impact (if not mitigated)</b>	Moderate <sup>(1)</sup>	Moderate <sup>(1)</sup>
<b>Response examples</b>	<ul style="list-style-type: none"> <li>• Supply chain decarbonisation</li> <li>• Engaging suppliers in low-carbon technology development for their operations</li> <li>• Packaging weight reduction technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Packaging weight reduction</li> <li>• Increased recycled content in packaging</li> <li>• Developing circular (refill, reuse) product offerings</li> </ul>

Opportunities

<b>Opportunity description</b>	<b>Supply chain decarbonisation</b> Reducing our Scope 1, 2 and 3 emissions lowers our exposure to carbon taxes and related costs, and improves our reputation with customers and consumers	<b>Innovation in sustainable products and packaging</b> Developing more sustainable products (e.g. lighter-weight, higher-recycled content, more refillable and reusable containers) meets consumers increasing demands
<b>Category</b>	Transition - policy/legal	Transition - market
<b>Timeframe</b>	Short-, medium-term	Short-, medium-term
<b>Impact (if not realised)</b>	Moderate <sup>(1)</sup>	Moderate <sup>(1)</sup>
<b>Response examples</b>	<ul style="list-style-type: none"> <li>• Decarbonisation programme and capital investment</li> <li>• Renewable energy and regenerative agriculture</li> </ul>	<ul style="list-style-type: none"> <li>• Innovation to deliver more sustainable products (e.g. refillable and reusable packaging, alternative packaging materials)</li> </ul>

(1) 'Low' impact is defined as having a negligible impact on customer service, or an absorbable disruptive impact on one or more brands. 'Moderate' impact is defined as disruption to production/supply chain creating an inability to service a small portion of our customer base, the impact of which is manageable; or a significant short-term impact on one or more of our core or local priority brands that is absorbable by the business. 'High' impact is defined as an inability to service a significant portion of our customer base, or major reputational damage.

Our strategy for grain-to-glass sustainability

Our strategic priority to 'Pioneer grain-to-glass sustainability' acknowledges the breadth of the environmental and social consequences of climate change. It also reflects how interlinked they are and that our value chain is a series of interdependent parts. Our targets reflect the complexity of the risks and opportunities we face and are mapped to our most material issues: water, carbon and the sustainability of our packaging.

By setting challenging targets, 'Society 2030: Spirit of Progress' looks to manage the potential impact of climate risks on our business, as well as minimising our impact on the environment and supporting communities we work with.

We cannot meet our target without investment. We expect to invest around £1 billion (\$1.2 billion) to drive improvements in environmental sustainability by 2030. By doing this, we will strengthen our business by strengthening our communities and making our value chain more resilient. In the process, we can manage our climate risks and act on opportunities we find. Much of the focus to date has been on our sites in Africa, where we have invested in biomass and solar energy, energy efficiency and water recovery initiatives. We plan to increase

investment for fiscal 24 to 26 to continue our progress towards our 2030 goals.

Our carbon and water roadmaps outline the projects needed to deliver our 2030 goals. These plans are backed by capital investment and undergo regular stress testing to help us in our efforts to meet our targets. Enhancing and digitising our sustainability data and reporting framework has given us more detailed insight into the progress in delivering our strategy. This lets us see where we need to optimise innovation opportunities or overcome project delivery challenges.

Responding to risks and opportunities

The next sections outline our targets and the progress we have made against those targets. We define our targets carefully, along with clear non-financial reporting boundaries and methodologies for each. For more details, see pages 242-262.

Preserving water

Our 'Preserve Water for Life' strategy is context-based and recognises the connections between how we use water and the impact on communities, supply chains and the environment. It is a 'grain-to-glass' approach that aims to replenish water in water-stressed catchments, supports farmers (especially smallholders) and regenerative



agriculture, and improves how we use water in our operations. It also prioritises providing clean water to the communities we work in, and strongly advocates and drives more collective action to contribute to a net positive water impact in water-stressed basins.

Our work on water has earned us a place on the CDP Water Security 'A List' for the seventh year in a row, placing us in the top tier of participating companies for sustainable water management.

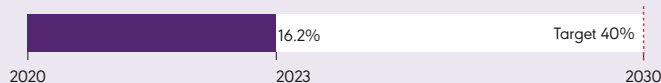
## Water efficiency

### Target by 2030

Reduce water use in our operations with a 40% improvement in water use efficiency in water-stressed areas and a 30% improvement across the company

**Percentage improvement in litres of water used per litre of product packaged from the prior year – in water-stressed areas**

**2.6%**



**Percentage improvement in litres of water used per litre of product packaged from the prior year – across the company**

**(1.2)%<sup>Δ</sup>**



Our water strategy aims to improve water security, especially in water-stressed areas. This is achieved through both projects to improve our operational efficiency and our replenishment programme, which works with local communities to replenish more water than we consume in water-stressed areas. Across our business, we're proud to have improved water efficiency by 51.1% since we started measuring performance against this metric in 2007 and by 9.4% since our 2020 baseline. In water-stressed areas, efficiency has improved even further, by 16.2% against the 2020 baseline.

While our ongoing focus on water-stressed areas continued to deliver efficiency improvements of 2.6% vs fiscal 22, fiscal 23 saw changes to our production profile that drove a 1.2% reduction in water use efficiency per litre of product packaged (4.09 litres/litre to 4.14 litres/litre). This was despite the implementation of a number of water efficiency projects across our production portfolio.

Our production footprint is complex; it includes distillation, brewing and packaging, and uses water in related but different ways. While we saw efficiency improvements across our distillation sites of 3.5% compared to fiscal 22, the increasing proportion of distillation in our portfolio produced an overall decline in performance according to the way we currently measure water efficiency – litres of water used per litre of packaged product. The reason for the decline under this combined metric is that most distilled products need to be matured for a number of years before bottling, so much of the water used in fiscal 23 went into distilling product that won't be packaged for years to come.

For this reason, in fiscal 23, we reviewed our water efficiency methodology, so that it better reflects our progress and challenges on water efficiency against the background of our business model. Following a detailed review, we defined a new methodology that uses an index approach to show the aggregated change in water efficiency across our different production pillars weighted by their proportional water use. This methodology better represents underlying year-on-year site-level efficiency performance and, critically, addresses the timing difference between distillation and packaging, due to maturation requirements. We will change our measurement approach in fiscal 24.

In fiscal 23, we completed water efficiency projects that will deliver benefits in several water-stressed areas. In Kenya, Uganda and Nigeria we have installed or increased the capacity of water recovery plants. The volume of water recovered has now reached 530,850m<sup>3</sup>, equivalent to around 12% of total water withdrawals avoided across our African sites. This has helped to mitigate some of the obstacles to water efficiency created by lower production volume in Africa.

We are also building for the future. In fiscal 23, we broke ground on a wastewater treatment plant at our El Charcón site in Mexico. This will enable the construction of a water recovery plant in fiscal 24, which we expect to start delivering water efficiency improvements from fiscal 25. We are also partnering with innovators to embed new technologies identified through our Diageo Sustainable Solutions (DSS) programme into our site roadmaps. One example is our partnership with 4T2 sensors on sensor technologies, which we expect will reduce the amount of water required to clean equipment between production runs.

Thirteen of our distilleries have now achieved Alliance for Water Stewardship certification (the internationally recognised, auditable standard for responsible water use), including Cameronbridge, Scotland, 11 Speyside distilleries and the Alwar distillery in India, making us the first distiller to be certified against this leading standard in Asia.

Climate, water and regenerative agriculture are strongly connected. This is why we continue our work to influence indirect water use in our agricultural supply chains. This means mapping our water use and continuing to run water improvement projects with farmers, especially smallholders. This helps us make our overall supply chain more resilient and support vulnerable communities, particularly in water-stressed areas.

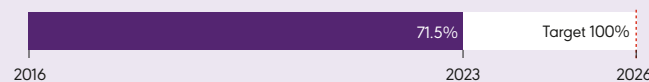
## Water replenishment

### Target by 2026

Replenish more water than we use for operations in water-stressed areas

**Percentage of water replenished in water-stressed areas in fiscal 23**

**22%**



Our water replenishment programme, an important contribution to supporting the climate resilience of our communities and supply chains, has had another strong year, putting us firmly on track to reach our 2026 target. In fiscal 23, our projects developed the annual volumetric replenishment capacity of 1,311,010 m<sup>3</sup> water. This represents 22% of our target for 2026, and cumulatively (fiscal 16 to fiscal 23) we have replenished 71.5% of our estimated fiscal 26 volume. In India, Nigeria, Seychelles and South Africa we have achieved our 2026 replenishment target three years early. For 13 sites in these countries, we are now replenishing all the water we directly consume in the local water basin or the basin where we source the raw materials for the site.

Overall, in fiscal 23 we have completed 35 replenishment projects in 11 countries. Highlights include nature-based projects improving water quality and availability in priority catchments. In Jalisco, Mexico, we have worked with government, NGOs and local stakeholders to restore a wetland treating wastewater in a project that's the first of its kind for us. Other ambitious replenishment projects include improving irrigation with farmers in Turkey, de-silting dams to increase water infiltration in India, and providing access to water for many smallholder farming communities in Tanzania, Ghana, Brazil, Mexico, Uganda, Kenya and India.

(Δ) Within the scope of PricewaterhouseCoopers LLP's (PwC) independent limited assurance reported to the Directors. For further detail and the reporting methodologies, see pages 242-266.

### Water for communities

#### Target by 2030

Invest in improving access to clean water, sanitation and hygiene (WASH) in communities near our sites and local sourcing areas in all our water-stressed markets

**Percentage of water-stressed markets with investment in WASH** **100%**<sup>Δ</sup>



An important part of our approach to water is providing access to clean water, sanitation and hygiene (WASH) in water-stressed communities near our sites and in water-stressed areas that supply our raw materials.

We reached our 2030 target in fiscal 23, launching a project in Mexico to harvest rainwater in 37 schools and provide drinking water in Jalisco, home of our tequila distilleries. This means all nine of the markets included in our target have invested in WASH projects since 2020. In fiscal 23, we invested in 17 WASH projects in seven countries bringing safe water and sanitation to 71,655 people.

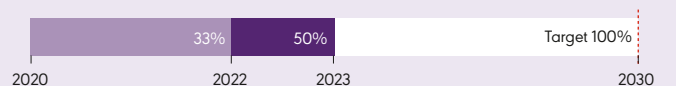
In fiscal 23, we have also helped ensure more female representation in WASH programmes, which makes it more likely that everyone will benefit equally from access to water. For more about this, see the section on championing inclusion and diversity (page 70). In fiscal 24, we'll consider how best to bring WASH projects to more communities in our supply chains.

### Water collective action

#### Target by 2030

Engage in collective action in all priority water basins to improve water accessibility, availability and quality and contribute to net positive water impact

**Percentage of priority water basins with collective action participation** **50%**



We don't tackle water stress alone. We launched the Diageo Collective Action Programme in 2020, recognising that we need to collaborate with multiple stakeholders to create solutions and interventions that improve the water security across entire water-stressed catchments. Through this, we are now active in six out of our 12 'priority water basins' - strategically important areas suffering particular water stress in 10 countries. In fiscal 23, with support through our partnership with The Nature Conservancy, we began two initiatives - one with the International Union for Conservation of Nature in Uganda's Victoria Nile basin where we source sorghum and barley for our brewery in Kampala, and another in the Godavari 3 basin in India. We have also agreed to be a basin champion for the Water Resilience Coalition in Kenya's Upper Tana basin, partnering with the Upper Tana-Nairobi Water Fund, increasing the commitment and investment we have already made there to improving the water security of the whole basin, which feeds Nairobi, home of our Tusker brewery.

#### Advocacy

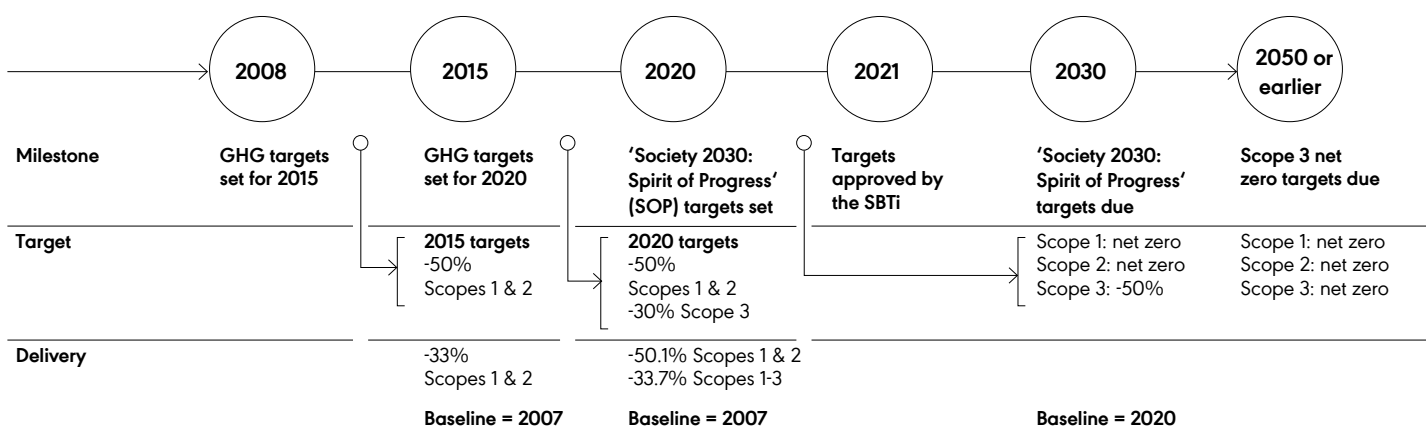
Water is under pressure around the world, and the issues around preserving it are complex. So it will take multilateral action to address the challenge of responsible stewardship and scarcity. At the COP27 climate change conference, we were among businesses calling for more action on water and climate resilience. We also attended the UN Water Conference in New York in March 2023 and were among the first businesses to sign a declaration calling for accelerated action on water stewardship. Our partnerships with leading international organisations, such as Water Resilience Coalition, Alliance for Water Stewardship and WaterAid, are fundamental to our ambition to support the climate resilience of our business and communities. They also help us advocate for more global action to address the water and nature crisis. Continuing this important advocacy, we plan to attend World Water Week in Stockholm in August 2023, UN SDG Summit in September and COP28 in December.

(Δ) Within the scope of PricewaterhouseCoopers LLP's (PwC) independent limited assurance reported to the Directors. For further detail and the reporting methodologies, see pages 242-266.

## Limiting carbon emissions

The planet needs significant science-based action to create a sustainable, low-carbon future and to mitigate the risk from climate change. We aim to reach net zero across our direct operations by 2030. We have also stated our ambition to being net zero across our value chain by 2050, and halving these emissions by 2030. We have detailed plans for reducing emissions across our existing sites and we are also investing in carbon-neutral production<sup>(2)</sup> sites to add to those we already have.

### Pathway to net zero<sup>(1)</sup>



#### Pathway to delivery

<b>Scope 1</b>	Decarbonisation of direct operations by embedding energy efficiency and energy recovery into our processes and working towards using 100% renewable fuel and heat. Exploring innovations, partnerships and renewable energy certification.	Continue to explore innovations, partnerships and carbon removals to maintain compliance with our SBTi-aligned net zero commitment.
<b>Scope 2</b>	Continue switch to renewable electricity. Create additional renewable energy capacity to power our sites through on-site developments and using power purchase agreements (PPA).	Once we have achieved 100% renewable electricity by 2030 we will focus on moving towards more on-site/near-site generation.
<b>Scope 3</b>	<p><b>Packaging:</b> For example: low-carbon glass and aluminium manufacturing; packaging reduction; innovative glass coatings that support light-weighting, and moving towards circular packaging solutions.</p> <p><b>Agriculture:</b> Regenerative agriculture programmes scale-up to reduce the emissions associated with crop growth.</p> <p><b>Partnerships:</b> Mobilising the value chain by engaging, inspiring and activating our supplier and customer network to jointly decarbonise e.g. through the development of renewable energy solutions and increased carbon emission understanding and transparency.</p> <p><b>Collaborating across the business:</b> Cross-functional governance structure in place creating shared Scope 3 delivery responsibility.</p>	

**Focus on progress:** We continually test our decarbonisation progress through reports that assess the sufficiency of our plans to deliver our in-year, 2030 and 2050 targets. Decarbonisation plans are in place across our site footprint and we monitor them through performance management and strategic business reviews. Through Diageo Sustainable Solutions (DSS) and supplier collaboration, we identify opportunities to partner and innovate, driving systems change within the beverage industry. We may need to use high-quality certified carbon offsets to neutralise hard-to-abate residual emissions, though we anticipate these being no more than 5-10% of our baseline.

(1) This is an estimate based on current management expectations; the underlying assumptions and future developments may change over time, which would cause changes to management expectations and this information. See pages 73-78 for more about the potential impact of climate change on Diageo and our current plans to manage and mitigate risks.

Our risk assessment and scenario analysis show us that consumer behaviour is an important transition risk, and companies who don't decarbonise their operations will suffer as consumers increasingly demand more sustainable products. Also, decarbonisation requires investment. But by working with suppliers to innovate in low-carbon manufacturing techniques for glass production, for example, we help to accelerate towards a low-carbon world while benefitting from the experience that comes from early innovation.

(2) Four carbon-neutral facilities have been assessed and certified using PAS2060 - Carbon Neutrality Standard and Certification (Scope 1&2, Direct Operations boundary) as reducing emissions aligned to an equivalent net zero trajectory with <5-10% of residual emissions neutralised using purchase of carbon offsets.

### Emissions from our direct operations

#### Target by 2030

Become net zero carbon in our direct operations (Scopes 1 and 2)

**Percentage reduction in absolute carbon emissions (direct and indirect carbon emissions by weight (market/net based)) from the prior year**

**5.4%<sup>Δ</sup>**



In fiscal 23, as part of our ambition to decarbonise our operations to decouple growth from emissions, we continued to reduce our absolute carbon emissions (direct and indirect carbon emissions by weight (market/net based)), achieving a further 5.4% reduction on last fiscal year and a cumulative 14.7% improvement from our fiscal 20 baseline.

The main factor in reducing our emissions in fiscal 23 was our continued investment in renewable energy. We commissioned biomass facilities at sites in Kenya and Uganda, bringing significant emissions reductions of approximately 42,000 tonnes CO<sub>2</sub>e over the course of the year. We increased on-site bioenergy use at facilities in Scotland and Turkey and also replaced fossil fuel with liquid biofuels at two of our whisky distilleries in Scotland. We have also implemented continuous improvement initiatives across a number of sites, and continued to use certificate-backed renewable natural gas at facilities in the UK and Canada.

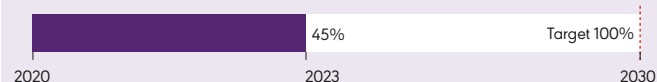
To reach our 2030 SBTi-approved near-term target for direct operations, we must reduce our emissions by more than 95% from our 2020 baseline. We continue to invest in carbon-neutral facilities, in addition to our four carbon-neutral distilleries<sup>1</sup> in Scotland and North America. We are designing new sites in Mexico, Canada, Ireland and China to be as efficient and low-emitting as possible.

#### Target by 2030

Use 100% renewable energy across all our direct operations by 2030

**Change in percentage of renewable energy across our direct operations in fiscal 23**

**1.9%**



This year, 45% of all the energy consumed at our facilities came from renewable sources, an increase of 1.9% on last year. To achieve this, we have increased the use renewable electricity, fuel and heat. Our improved performance in fiscal 23 was driven largely by the electrification of our sites, our efforts to source renewable electricity and our investment in biomass technology.

As a signatory of the RE100 initiative, with a target to reach 100% electricity from renewable sources by 2030, we are proud that we are already ahead of our 2025 target of 50% renewable electricity, reaching 86.7% this year, up from 85.6% in fiscal 22. We have invested in 100% renewable electricity sites like our Lebanon all-electric distillery in North America. Comprising approximately 8,000 panels that will add 4.1MW of renewable electricity generation capacity. As well as reaching 100% renewable electricity ourselves, we encourage our suppliers to use more electricity through power purchase agreements (PPAs) and support additional power generation opportunities in our markets.

This year we have increased our use of renewable thermal energy by 1.3% compared to last year across our global operations. The start up of three biomass facilities at our sites in Kenya and Uganda produced our biggest single increase in renewable thermal energy use, a 25% increase in renewable fuel and heat across our Africa market compared to fiscal 22. We also increased energy output from on-site biomass and biogas plants and introduced renewable biofuel at two sites in Scotland. As we make renewable energy advances across our operations, we have reduced our usage of certificate backed renewable gas.

We are a significant enabler of the generation of biomethane in Scotland through the supply of Diageo distillery co-products. This is used by third parties as a feedstock to generate green gas, which is injected into the natural gas network. We then reuse the resulting renewable gas in our distilleries, with 23% of the green gas used by our sites in Scotland derived from our own feedstocks this year.

### Emissions from across our value chain

#### Target by 2030

Reduce our value chain (Scope 3) carbon emissions by 50%

**Percentage reduction in absolute greenhouse gas emissions (ktCO<sub>2</sub>e) from the prior year**

**1.2%**



We continue to refine our understanding of our baseline and footprint, including our supplier network, after reviewing our total value chain footprint and associated emissions in 2023. This year our Scope 3 CO<sub>2</sub>e emissions decreased by 1.2% but we remain behind our 2020 baseline by 20.7%.

Our emissions derived from packaging decreased due to reductions in volumes, as well as decarbonisation activities including glass light-weighting, carton removals, and switching to lower-carbon materials. This was partly offset by increased emissions attributed to capital goods, including investments in plants that enable our low-carbon transition.

We are navigating the complexities of Scope 3 to ensure we achieve our reduction targets, and enable impactful change up and down the value chain by working with our suppliers, our peers and the wider beverage industry.

As well as reducing Scope 3 emissions by 50% by 2030, we want to achieve a net zero value chain by 2050 or sooner. To achieve these targets, in common with many multinationals, we are working with global GHG accounting bodies and our suppliers to get more detailed Scope 3 data. As we refine our value chain data, we can be more specific about our GHG footprint, including refined categories of upstream and downstream Scope 3 emissions.

(1) Four carbon-neutral facilities have been assessed and certified using PAS2060 - Carbon Neutrality Standard and Certification (Scope 1&2, Direct Operations boundary) as reducing emissions aligned to an equivalent net zero trajectory with <5-10% of residual emissions neutralised using purchase of carbon offsets.  
 (Δ) Within the scope of PricewaterhouseCoopers LLP's (PwC) independent limited assurance reported to the Directors. For further detail and the reporting methodologies, see pages 242-266.

## Total direct and indirect carbon emissions by region by year

Total direct and indirect carbon emissions by weight (market/net based) (1,000 tonnes CO <sub>2</sub> e)				
Region	2020	2021	2022	2023
North America	127	125	100	83
Europe	152	129	144	194
Asia Pacific	32	10	10	9
Latin America and Caribbean	22	27	38	26
Africa	137	154	132	89
<b>Diageo (total)</b>	<b>470</b>	<b>445</b>	<b>424</b>	<b>401</b>

## Streamlined Energy and Carbon Reporting (SECR)

	2020	2021	2022	2023
Total Global energy consumption (MWh)	3,310,388	3,392,923	3,557,760	3,507,733
Total market based (net) intensity ratio of GHG emissions (g CO <sub>2</sub> e per litre of packaged product)	139	122	105	105 <sup>A</sup>
Total UK energy consumption (MWh)	1,056,931	1,064,795	1,091,153	1,249,306
Direct (MWh)	924,022	927,917	951,302	1,102,403
Indirect (MWh)	132,910	136,878	139,851	146,903
Total UK direct and indirect carbon emissions (kt CO <sub>2</sub> e)	86	71	84	136
Scope 1	86	71	84	136
Scope 2	–	–	–	–

(A) Within the scope of PricewaterhouseCoopers LLP's (PwC) independent limited assurance reported to the Directors. For further detail and the reporting methodologies, see pages 242-266.

## Moving towards regenerative agricultural sourcing

Our supply chain connects us to communities around the world. This gives us the chance to make a positive social and environmental impact by enhancing livelihoods and promoting regenerative agriculture.

One of the foundations of our regenerative agriculture strategy is our Sustainable Agriculture Guidelines (SAG), which set out the principles we expect our agricultural raw materials suppliers to adopt to make farming more regenerative. We work with suppliers and farmers across our supply chains to implement, assess and scale regenerative practices.

This work also helps make our supply chain more resilient. Our assessments show the possible impacts of climate change on agricultural commodities, and that they are vulnerable to climate hazards including water stress, temperature rises and flooding, particularly where the commodities only grow in one country.

We work with communities to help them adapt and build resilience through our 'Preserve Water for Life' strategy, implementing regenerative agricultural practices and developing climate-resistant variants of agricultural crops. We are also exploring alternative crops to build diversity and enhance resilience in crop systems and across our raw materials portfolio. By working with farmers in this way, and by giving them skills and resources, we make them and their communities economically, environmentally and socially stronger, as well as strengthening our own supply chain.

## Positive partnerships

### Target by 2030

Develop regenerative agriculture pilot programmes in five key sourcing landscapes

### Number of regenerative agriculture pilot programmes initiated



We are committed to partnerships with farmers to help them implement projects to test new regenerative farming approaches and practices, measure the results and share what we learn. By following regenerative practices, agriculture can restore soil health and fertility, boost biodiversity, protect watersheds and promote ecological resilience. By focussing on life above and below ground, everyone benefits from regenerative agriculture from the farmer to the ecosystem.

We also continue to build our understanding of the agronomic context across our key crops and sourcing regions, working with agronomic partners and our suppliers, growers and farmers. We are currently conducting assessments in the United Kingdom, United States, India, Brazil, Mexico and East Africa for barley, wheat, corn, rice, sugarcane, agave and sorghum production systems.

### Guinness barley programme

#### Discovering how to lower farming's footprint

In Ireland, our programme looking for ways to lower-carbon emissions of barley production for Guinness is in its second year, with 45 farmers now participating. Data from 1,125 soil samples showed that three quarters of the soil's carbon footprint is from nitrogen fertilisers. This shows there's potential to reduce emissions by at least 30% from the baseline year through regenerative practices and low-carbon fertilisers.

We also supplied barley farmers with cover crops, which fix nitrogen and carbon in soil, and quantified biomass they generate.

## Local sourcing

### Target by 2030

Provide all local sourcing communities with agricultural skills and resources, building economic and environmental resilience (supporting 150,000 smallholders)

### Number of smallholder farmers in our supply chain supported by our smallholder farmer programme in fiscal 23



Where low yields and quality issues threaten smallholders' income, we work with suppliers, research organisations and other partners to build more resilient local supply chains. This has included developing more climate-resistant and higher-yielding varieties of sorghum adapted for Kenya and Ghana.

We are on course to reach our target of supporting 150,000 smallholders by 2030, after supporting nearly 13,000 farmers in fiscal 23 with sustainable development.

## PIONEER GRAIN-TO-GLASS SUSTAINABILITY continued

We have worked mainly in Kenya to test and learn from our approach to support our smallholders before expanding to the network of smallholders we source from. The programme focuses on training and enabling knowledge transfer for the transition to more resilient agriculture production systems. We trained smallholders on improving soil health, working with technical and implementation partners on the ground. We have also supported our smallholders with essential resources such as high-quality, certified seeds, distributing more than 100 tonnes of input at a subsidised rate to smallholder farmers.

Last year, we partnered with an agricultural technology provider to digitise our smallholder value chains. Starting with our primary crop for smallholder farmers, sorghum, we have rolled the technology platform out across Ghana, Kenya and Uganda in fiscal 23. We aim to broaden this to Nigeria and Tanzania. The technology acts as a valuable data source. We aim to use it to tailor our offering to smallholders based on their needs, while monitoring changes to baseline data to make sure our interventions have an impact on the ground. To help accelerate change for smallholders, we launched challenges through Diageo Sustainable Solutions, encouraging innovators to pitch ideas relating to soil biodiversity, carbon (relating to soil health) and water.

To clarify farming communities' needs, we have used the main communication method in our sourcing regions: radio. Working with local agricultural radio shows and Farm Radio International, we are looking to understand farmers' challenges to help us target our support. Together, we ran a six-week series on 'Farming as a Business', discussing challenges to women in agriculture and the support available to farmers. Listeners could freephone to submit views in their local dialect across eight radio stations in Ghana and Uganda.

### Making packaging more sustainable

Consumers are rightly demanding more sustainable products and legislation continues to drive industry changes. We are committed to reducing our value chain's carbon footprint by reducing packaging and increasing the recycled content in the packaging we produce. We are also developing circular business models and designs, which allow for more reusable and refillable packaging.

By becoming sustainable by design in packaging, we reduce our carbon footprint, by using fewer materials in production and by limiting emissions when the packaging reaches the end of its life. We buy most of our packaging materials, so partnerships are crucial to achieving our ambitions. An example is Diageo Sustainable Solutions (DSS), where we partner with technology innovators, customers, suppliers and researchers to spot potential technology breakthroughs and pilot them, with the ultimate aim of scaling them to increase their impact.

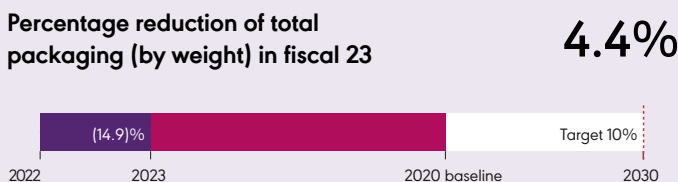
Examples of how we are reducing our packaging footprint include:

- Pioneering net-zero glass bottles - In December 2022, we announced our partnership with Encirc, a leading glass manufacturer and co-packer, to create the world's first net zero glass bottles at scale by 2030. The new furnace at Encirc's plant in Cheshire, United Kingdom, will reduce carbon emissions by 90% with an energy mix of green electricity and low-carbon hydrogen. We expect that carbon capture technology will capture the remaining carbon emissions by 2030. The furnaces are expected to be fully operational by 2027 and to produce up to 200 million Smirnoff, Captain Morgan, Gordon's and Tanqueray bottles a year by 2030.
- Leading the way to sustainable aluminium - We have invested in a groundbreaking project to create a circular economy for aluminium in the United Kingdom. We are funding a new consortium (BACALL - British Aluminium Consortium for Advanced Alloys), which will build a plant to provide recycled aluminium for more than 400 million cans of Guinness and pre-mixed Gordon's and tonic, significantly reducing our carbon emissions while also creating jobs in the United Kingdom.

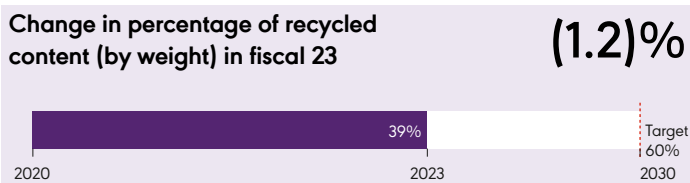
### Reducing packaging weight and increasing recycled content

#### Target by 2030

Continue our work to reduce total packaging and increase recycled content in our packaging (delivering a 10% reduction in packaging weight and increasing the percentage of recycled content in our packaging to 60%)



In fiscal 23, we reduced packaging weight by 4.4% compared to fiscal 22, but this was 14.9% above our 2020 baseline because we have increased production from fiscal 20 to fiscal 22. In fiscal 23, we removed 141 million cartons from some of our Johnnie Walker and scotch brands. We have reduced weight in our primary scotch portfolio by moving some of our bottles into standard, more lightweight formats, allowing us to take some heavier formats out of the portfolio. These changes have saved almost 4,000 tonnes of glass and 9,170 tonnes of board in fiscal 23. From fiscal 24, we will continue to embed our Design for Sustainability packaging guidelines, emphasising use of lightweight glass and recycled content. We also continue to encourage bars, restaurants and other on-trade outlets to support the reuse of packaging.



Recycled content now makes up 39% of our packaging, down 1.2% on fiscal 22. This is because of a shortage of cullet, a feedstock for recycled glass, in the United Kingdom and North America. We continue to face challenges in sourcing quality recycled glass and PET (polyethylene terephthalate), though we are working with suppliers and industry peers to strengthen recycling infrastructure.

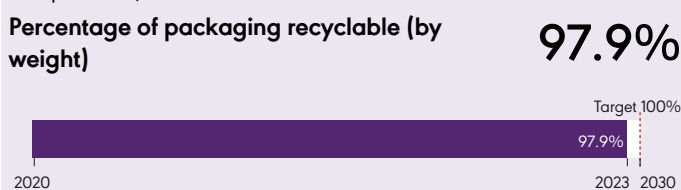
Despite the challenges, we have made positive changes, moving Johnnie Walker Gold Label Reserve from 0% recycled content to 40% and trialling Johnnie Walker core sizes with increased recycled content. We also launched Talisker x Parley: Wilder Seas in the brand's first 100% recycled bottle.

**Pioneering a lighter bottle**

In 2021, we launched a challenge to develop lightweight bottles through Diageo Sustainable Solutions. This led to us working with glass industry consultants EXXERGY, which has developed an innovative glass coating technology that could enable us to use lighter glass for bottles, without reducing their strength. We invited strategic supply chain partner Ardagh Group to collaborate, and they engaged manufacturing software specialist Dassault Systèmes to support with testing the EXXERGY coating. We have been testing the coating through industry-first lab-based and virtual trials. Virtual trials allow us to develop innovations using real-time digital representations of products and processes, which reduces time, cost, energy and raw materials. After the trials, we will test the thinner glass on our Johnnie Walker bottles. Through this collaboration, we hope to significantly reduce the raw materials needed to create a bottle, and the overall weight, so it takes less carbon to transport our bottles.

**Target by 2030**

Ensure 100% of our packaging is widely recyclable (or reusable/compostable)



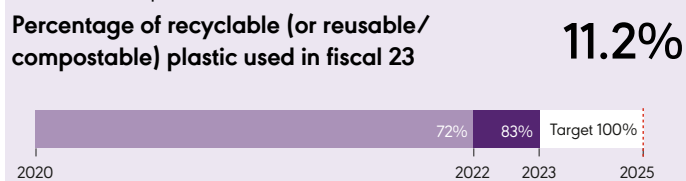
In fiscal 23, 97.9% of our packaging was technically recyclable, using the same fiscal 22 methodology.

We have an ambition to adjust our recyclability metrics in line with market-differentiated recycling frameworks in the future.

**Recycled content and recyclability of plastic**

**Target by 2025**

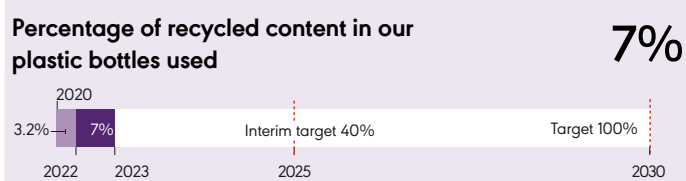
Ensure 100% of our plastics are designed to be widely recyclable or reusable/compostable



In fiscal 23, we achieved 83.2% recyclability for plastics, an increase of 11.2% from last year. We continue to use the 'technically recyclable' definition. The remaining non-recyclable components are currently not replaceable, although we continue to explore alternatives.

**Target by 2030**

Achieve 40% recycled content in our plastic bottles by 2025, and 100% by 2030



In fiscal 23, we started projects in North America, Europe and Africa to increase recycled content in plastic bottles, particularly single-use formats, and achieved 7% recycled content in plastic bottles.

This year, in the United Kingdom we have moved our Johnnie Walker Red Label 1.75L bottles to 30% recycled PET. Our North America business achieved 26% recycled content in plastic bottles and in Africa we trialled 40% recycled content. In Ghana, we have partnered with the Mohinani Group to introduce the first bottle-to-bottle recycling plant in the country. In fiscal 23, 2,000 metric tonnes of plastic have been collected, with the aim of the plant being fully operational in fiscal 24. The plant will have a capacity to recycle 15,000 metric tonnes of plastic per year.

Also, our largest packaging site in Scotland has removed single-use shrink-wrap across a range of products, saving 67 metric tonnes of plastic per year, and delivering shrink-wrap-free drink flasks to 47 countries.

We will see these shifts continue in fiscal 24; sourcing recycled PET remains a priority.

### Reusing and reducing waste

We manage around one million tonnes of waste each year. This includes ‘co-products’ from our production processes in the form of spent grain and other agricultural commodities. These co-products return to agriculture in the form of animal feed and fertiliser and are also used as feedstocks for biomass facilities. This helps reduce the environmental footprint of our agricultural supply chain and supports our regenerative agriculture programmes. By reusing scarce resources, we help improve the system that produces our key ingredients. In addition, we aim to divert all waste from landfill, so it is recycled or reused.

#### Reducing waste to landfill

##### Target by 2030

Achieve zero waste in our direct operations and zero waste to landfill in our supply chain

**Percentage reduction in total waste sent to landfill from the prior year** **35.5%<sup>Δ</sup>**



Globally, the total volume of waste diverted from our direct operations to landfill was 180 tonnes this year (vs 279 tonnes in fiscal 22), which is below our zero waste to landfill de minimis threshold of 200 tonnes. We recycle, reuse and recover more than 99.98% of waste from our global operations either for our own reuse or in partnership with local agricultural communities and energy and waste handlers. Our performance in fiscal 23 means we have achieved a key milestone in fulfilling our 2030 direct operations zero-waste commitments.

In the second half of fiscal 23, we launched an initiative with our suppliers and KPMG to fully understand the waste in our supply base. The project will look for ways to change how we approach waste management across our Tier 1 supply chain by avoiding waste to landfill and recovering and recycling more waste by 2030. Our commitment to a more sustainable and less wasteful supply chain is also reflected in our marketing, where our point-of-sale (POS) project is working towards guidelines for sourcing better materials for experiential marketing, as well as designing POS and campaign props for reuse.

Last year, we reported that a third-party contractor at one of our facilities in Australia had incorrectly diverted waste material to landfill. This prompted a global review in fiscal 23 of more than 350 waste handlers and our own internal waste management practices, aiming to strengthen our controls and avoid similar issues in the future. This hadn't been possible during the Covid-19 pandemic because of restrictions on site visits. The review of waste handlers identified 111 metric tonnes of waste that hadn't been accounted for in fiscal 22, taking the total volume of waste sent to landfill to 279 tonnes. We have now included this in waste-to-landfill volumes for fiscal 22, representing 0.028% of the 984,057 tonnes we handled in that year. We'll continue to assess our waste handlers regularly and improve our internal controls to maintain our zero waste to landfill status.

We consider we have achieved zero waste to landfill if we have disposed of less than 0.2% of baseline waste-to-landfill volume during the year. This volume equates to 200 tonnes and excludes any waste we are required to send to landfill under local regulations.

(Δ) Within the scope of PricewaterhouseCoopers LLP's (PwC) independent assurance reported to the Directors. For further detail and the reporting methodologies, see pages 242-266.



## How we have reported consistent with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

In preparing our disclosures, we have taken into consideration the TCFD all sector guidance.

TCFD recommendation	Compliance
<b>GOVERNANCE See page 72</b>	
a. Describe the board's oversight of climate-related risks and opportunities.	
b. Describe management's role in assessing and managing climate-related risks and opportunities.	Yes. See page 72.
<b>RISK MANAGEMENT See pages 73-78</b>	
a. Describe the organisation's processes for identifying and assessing climate-related risks.	
b. Describe the organisation's processes for managing climate-related risks.	Yes. See pages 73-78. Having completed comprehensive risk assessments our focus is now on ensuring appropriate adaptation plans are in place for all risks identified.
c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	
<b>STRATEGY See pages 78-86</b>	
a. Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	We have described risks and opportunities for our business in >95% of our operating locations, as well as the impact of those risks and opportunities on our strategy. We have modelled the resilience of our strategy under three climate-related scenarios. See pages 243-245. As a next step we are exploring the further development of our scenario analysis capability and associated tools.
b. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	
c. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	
<b>METRICS &amp; TARGETS See pages 79-86</b>	
a. Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Yes. See pages 79-86.
b. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	Yes for Scope 1 and 2. See page 82. We are working with global GHG accounting bodies and our suppliers to get more detailed Scope 3 data. As we refine our value chain data, we can be more specific about our GHG footprint, including refined categories of upstream and downstream Scope 3 emissions.
c. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Yes. See pages 79-86.

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