

## Reducing our environmental impact

We are a business which relies on the careful stewardship of natural resources for our long-term success. From the fields in which our raw materials are grown, to the water and energy we use to make our brands, we depend on resources that we share with the communities around us – just as we also share the impacts that result from these resources becoming constrained.



### Our work contributes to the following UN Sustainable Development Goals:



Climate change, water scarcity, soil degradation and the loss of biodiversity threaten the prosperity of our communities and the environment, as well as our business. For our own benefit, as well as for the future of those around us, we must use natural resources efficiently across our whole value chain and, wherever possible, have a positive impact on the environment.

This is not new for us – our brands have relied on responsible environmental stewardship for generations. Nonetheless, we need to make sure we keep building on our longstanding commitment to preserving the natural environment, to ensure the continuing viability of the resources and communities that help us create value.

### Addressing our most material issues

In 2015 we set ambitious targets for 2020 to reduce our environmental impacts and build resilience in critical areas. We have periodically added new targets to push performance, such as prioritising renewable electricity and addressing plastics. To stretch ourselves and ensure our efforts have a material impact on tackling climate-related issues, many of our targets are absolute, rather than relative reductions. Diageo is part of a pioneering group of companies with approved science-based targets for carbon reduction. In areas such as greenhouse gas emissions or waste to landfill, we believe the most responsible approach is to decouple our impacts from business growth. We report on all our targets in the following pages.

### Climate and water: at the heart of our strategy

The need for businesses to act is compelling. We continue to see some of the impacts of climate change and water stress in our supply chain and operations. Drought has affected raw material supplies in Africa, India and Brazil. Hurricanes impacted our business in the Caribbean in 2017, while the extreme summer

in Scotland in 2018 led to high water temperatures and the temporary closure of two distilleries. Water availability is inevitably a key consideration in our planning and investments in water-stressed areas.

These impacts reinforce our support for global action on climate change. As members of the UN Global Compact, the CEO Water Mandate and the We Mean Business coalition, we are also making progress on a range of initiatives, including our science-based carbon emissions reduction targets and the elimination of commodity-driven deforestation. To reduce our climate impacts further, we are committed to procuring 100% of our electricity from renewable sources by 2030 and reducing emissions from short-lived climate pollutants such as HFCs.

We also know the importance, both ethical and commercial, of responsible water stewardship. Water is a strategic priority for us and our Water Blueprint provides the framework to reduce our overall impact, especially in sites in water-stressed areas in Africa, India and Brazil, which account for approximately a third of our total production by volume. In 2018 we carried out water

risk assessments of all our third-party manufacturing sites and identified 18 in water-stressed areas. This year we began working with these sites to better understand their water performance and to roll out our water stewardship toolkit.

Our Water Blueprint is delivered through a four-pillared strategic approach and is driven by our key targets for improving water efficiency in our own and third-party operations, replenishing water in water-stressed areas and supporting community water programmes. We continue to advocate for greater collaboration and impact in water management.

**Understanding the challenges and looking beyond 2020**

We have seen significant, long-term progress against most of our targets. We have reduced absolute greenhouse gas emissions from our direct operations by 44.7% against our 2007 baseline and from our entire supply chain by 27.1%. In the same period, waste to landfill was down by 96.2% and we have improved our water efficiency by 43.8%.

We have made slower progress in some areas, notably the quality of wastewater we discharge and our efforts to reduce the overall weight of our packaging. Although we comply with regulations on wastewater everywhere we operate, for wastewater and packaging the solutions we have explored so far have not produced the improvements in performance we need to meet our stretching 2020 targets. They will continue to be a focus beyond 2020, and, in the next two to three years, we plan to address them through a range of solutions, including further investments in wastewater treatment.

We remain committed to our 2020 targets and we have identified investments that will help us continue our progress. We have also started work to define our ambition and targets for environmental sustainability beyond 2020, which we will share during the next financial year.

“As the severity of environmental risks to business becomes ever more apparent, companies showing environmental leadership are positioning themselves to provide solutions, seize new market opportunities and thrive in the transition to a sustainable economy. I congratulate Diageo on their inclusion in CDP’s A List for Climate and Water in 2018, and for joining the Supplier Engagement 2018/9 leader board. We need to urgently scale up environmental action at all levels to meet the goals of the Paris Agreement and the UN Sustainable Development Goals.”

**Paul Simpson**  
Chief Executive Officer,  
CDP

**Diageo sites located in water-stressed areas**







**Sites**




1 Kenya Brewing, Nairobi, Kenya	7 Khangela Brewery, South Africa	15 IDU, Kampala, Uganda	23 Meta Abo, Ethiopia	30 Kumbalgodu, Karnataka	38 Sovereign, Karnataka
2 East Africa Maltings, Nairobi, Kenya	8 Isithebe, South Africa	16 Accra, Achimota, Ghana	24 Marracuene, Mozambique	31 Malkajgiri, Telangana	39 Tern, Andhra Pradesh
3 Seybrew, Seychelles	9 Tlokwe, South Africa	17 Kumasi, Kaasi, Ghana	<b>India</b>	32 Meerut, Uttar Pradesh	40 Udaipur, Rajasthan
4 SA Cider, South Africa	10 Ispingo, South Africa	18 Ogba, Lagos, Nigeria	25 Alwar, Rajasthan	33 Nacharam, Telangana	
5 Phelindaba Brewery, South Africa	11 Moshi, Tanzania	19 Paraipaba, Ceará, Brazil	26 Aurangabad, Maharashtra	34 Pathankot, Punjab	
6 Butterworth Brewery, South Africa	12 Dar es Salaam, Tanzania	20 Agricultural lands, Ceará, Brazil	27 Baddi, Himachal Pradesh	35 Pioneer, Maharashtra	
	13 Mwanza, Tanzania	21 Messejana, Brazil	28 Baramati, Maharashtra	36 Rosa, Uttar Pradesh	
	14 UBL, Kampala, Uganda	22 Maracanaú, Brazil	29 Hospet, Karnataka	37 Serampore, West Bengal	

## Performance against 2020 targets<sup>(i)</sup>


### Water stewardship

2020 target	KPI	Performance	Progress
<b>Reduce water use through a 50% improvement in water use efficiency</b>	% improvement in litres of water used per litre of packaged product	6.0% <sup>Δ</sup> 2019 <b>43.8%</b> cumulative	 <p>We have made significant further progress this year at our sites, driven by continuous improvement and innovation projects in brewing, maltings and distilling operations worldwide.</p> <p>This year, 16,442m<sup>3</sup> of water were used for agricultural purposes on land under our operational control. We report this separately from water used in our direct operations.</p> <p>The volume of water we recycled or reused in our own production was 1,029,305m<sup>3</sup>, representing 5.2% of total water withdrawals.</p>
<b>Return 100% of wastewater from our operations to the environment safely</b>	% reduction in wastewater polluting power measured in BOD ('000 tonnes)	13.6% <sup>Δ</sup> 2019 <b>36.0%</b> cumulative	 <p>While we met all regulatory requirements on wastewater at our sites and have made good progress this year, we recognise we will not achieve our full target by 2020.</p> <p>Over 80% of our sites have achieved the 2020 target. We are now concentrating on our remaining cluster of sites. As part of a range of solutions, we are planning further investment in wastewater treatment together with the use of new technologies to create value from our by-products.</p>
<b>Replenish the amount of water used in our final product in water-stressed areas</b>	% of water replenished in water-stressed areas (m <sup>3</sup> )	11.8% 2019 <b>60.5%</b> cumulative	 <p>This year we replenished 11.8% of the total water used in our final product, and cumulatively 60.5% of the water used in water-stressed locations is now replenished. Significant progress will be required in Nigeria, Ghana and Kenya in 2020 to ensure we achieve our ambitious target.</p>
<b>Equip our suppliers with tools to protect water resources in our most water-stressed locations</b>	% of key suppliers engaged in water management practices	86% 2019	 <p>We engaged 128 suppliers to disclose their water management practices through CDP's Supply Chain Water Programme, with an 86% response rate. We prioritised more than 100 third-party operators for more in-depth water risk assessment and support, and have begun mapping site water performance and rolling out our water guidance for the most water stressed.</p>





### Carbon

2020 target	KPI	Performance	Progress
<b>Reduce absolute greenhouse gas emissions from direct operations by 50%</b>	% reduction in absolute GHG (kt CO <sub>2</sub> e)	5.9% <sup>Δ</sup> 2019 <b>44.7%</b> cumulative	 <p>We made important progress this year, achieving a 5.9% decrease in carbon emissions. In addition to continuous improvement at our operations and fuel switching, we have purchased energy attribute certificates to support our decarbonisation strategy.</p> <p>As a signatory to RE100, we aim to source 100% of our electricity from renewable sources by 2030. This year 45.4% of electricity at our production sites came from renewable sources such as wind, hydro and solar (2018 – 18.5%). In the United Kingdom, 100% of our electricity came from renewable sources.</p> <p>We use the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol as a basis for reporting our emissions, and we include all facilities where we have operational control for the full financial year.</p> <p>Diageo's total direct and indirect carbon emissions (location/gross) this year were 785,545<sup>a</sup> tonnes (2018 – 782,294 tonnes), comprising direct emissions (Scope 1) of 620,573<sup>a</sup> tonnes (2018 – 620,608 tonnes), and indirect (Scope 2) emissions of 164,971<sup>a</sup> tonnes (2018 – 164,971 tonnes). The intensity ratio for this year was 185 grams per litre packaged (2018 – 186 grams per litre packaged).</p>
<b>Achieve a 30% reduction in absolute greenhouse gas emissions along the total supply chain</b>	% reduction in absolute GHG (kt CO <sub>2</sub> e)	5.9% 2019 <b>27.1%</b> cumulative	 <p>Our total supply chain carbon footprint this year was 3.165 million tonnes, a 5.9% improvement and important progress towards our target.</p> <p>We engaged suppliers directly on measuring and managing their carbon emissions and made further data analysis improvements. This year we received responses from 86% of the 224 suppliers we engaged through the CDP, and 50% of these suppliers reported that they had emissions reduction targets.</p>
<b>Ensure all our new refrigeration equipment in trade is HFC-free, with a reduction in associated greenhouse gas emissions from 2015</b>	% of new equipment sourced HFC-free from 1 July 2015	99.5% 2019	 <p>Eliminating HFCs plays a role in reducing our overall carbon footprint. 99.5% of the 48,000 new fridges we have purchased since July 2015 were HFC-free.</p>

## Waste

2020 target	KPI	Performance	Progress
<b>Achieve zero waste to landfill</b>	% reduction in total waste to landfill (tonnes)	75.7% <sup>Δ</sup> 2019 <b>96.2%</b> cumulative	 Following a setback in 2018 caused by hurricanes in the Caribbean, we achieved significant progress this year. Over 80% of our sites have now achieved our 2020 target of zero waste to landfill. We continue to focus on our residual volumes and sites.



## Packaging

2020 target	KPI	Performance	Progress
<b>Reduce total packaging by 15%, while increasing recycled content to 45% and making 100% of packaging recyclable</b>	% of total packaging by weight	1.4% 2019 <b>10.8%</b> cumulative	 We made significant progress this year in reducing total packaging by weight, predominantly through initiatives to optimise glass and carton weight in India. However, despite recent improvements, delivery of this target in full will stretch beyond 2020.
	% of recycled content by weight	0% 2019 <b>40.5%</b> cumulative	 Our commitment to increase recycled content in our packaging, set in 2009, has resulted in a 19% improvement against our baseline. We continue to work with suppliers and other partners to improve recycled content.  We reuse returned glass bottles in parts of our business, but do not currently include them in our reported recycled content data. We are reviewing our reporting boundaries for recycled content so that we can consider including returned glass in our recycled content data from 2020.
	% of recyclable packaging by weight	0% 2019 <b>98.7%</b> cumulative	 As we approach our target, we are finding challenges in the areas of recycling infrastructure and technology solutions. We plan to carry out a review of the options available in order to achieve the final 1.3% to meet our target.
<b>Sustainably source all of our paper and board packaging to ensure zero net deforestation</b>	% of sustainably sourced paper and board packaging	94% 2019	 We define sustainably sourced as Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) certified, or recycled fibre. To date we have engaged over 280 suppliers, with 93% responding. Collectively these suppliers have self-reported that 94% of the paper and board packaging they supply meets our sustainable sourcing criteria, and we continue to work with our suppliers to deliver our goal of 100% by 2020.

(i) Baseline year is 2007 except for packaging which is 2009 and water replenishment which is 2015.  
 Δ Within PwC's limited assurance; see page 173 for further details.

## Performance against 2025 targets<sup>(ii)</sup>

### Packaging (plastic)

2025 target	KPI	Performance	Progress
<b>Achieve 40% average recycled content in all plastic bottles (and 100% by 2030)</b>	Tonnes (metric) of recycled content/ total tonnes of plastics used	0.02% 2019 cumulative 0.02%	 In our first year of reporting against this target, we have identified opportunities to increase the use of recycled content in plastic (PET) bottles, particularly in North America. Although only 2% of our packaging is made from plastic (PET), we nonetheless consider this an important target.
<b>Ensure 100% of our plastics will be designed to be recyclable, reusable or compostable in countries where we operate</b>	Tonnes (metric) plastics widely recyclable (or reusable/ compostable)/ total tonnes of plastic used	81% 2019 <b>81%</b> cumulative	 We continue to work with our suppliers and other partners to remove non-recyclable plastics from our products and to promote better recycling infrastructure in selected markets.

(ii) These targets were introduced in 2018.

**Understanding and responding to climate-related risks and opportunities**

As part of our drive to increase our understanding of the financial aspects of climate-related risks, and in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), we have carried out Sustainability Value Assessments (SVAs) in three key markets.

Water scarcity is our most material risk, and our SVAs examined the potential impact of climate-related water scarcity over a five- and ten-year horizon.

The insights provided by our SVAs feed into our overall approaches to both water stewardship and climate adaptation. This year, we formed a new cross-functional working group, with representatives from our Compliance and Risk, Strategy, Investor Relations, Environment, Procurement, Security, Corporate Relations, and Treasury functions. This group will manage climate risk and provide regular updates to the Executive Committee and the Board.

**HIGHLIGHT**

**Executive oversight of climate risk**

David Cutter was appointed Chief Sustainability Officer in November 2018, in addition to his role as President, Global Supply and Procurement. He sits on Diageo's Executive Committee, and chairs the Executive Environment Working Group.

Board oversight of environmental performance is described on page 74.

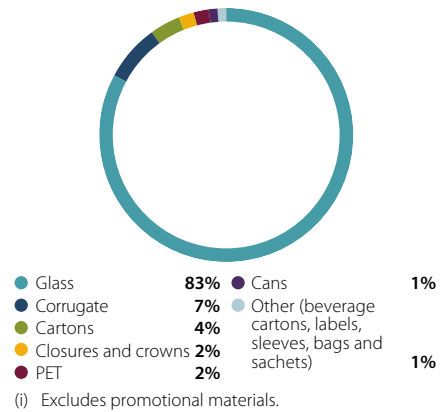
Our processes for identifying, assessing and managing climate-related risks are described further on page 21.

**HIGHLIGHT**

**Collaborating on climate adaptation**

We share knowledge and expertise through the Beverage Industry Environmental Roundtable (BIER), a technical coalition of leading global beverage companies working together to advance environmental sustainability. We are supporting BIER's work exploring options to develop a consistent approach to TCFD scenario planning for the beverage sector.

**Global packaging materials<sup>(i)</sup> by volume**  
(Total – 1.5 million tonnes)



**SPOTLIGHT**

**Working with others to transform recycling**

Our long-term commitment is to make our packaging as sustainable as possible at every stage of its life cycle. Increasing our use of recycled materials – and making it as easy as possible for consumers to recycle our packaging after use – is vital to achieving our packaging ambitions, described on page 55.

But with any material, our ability to contribute to a recycling culture is heavily influenced by the available local infrastructure. In some of the places where we operate, consumers have few options to recycle, or none. The only way to change this is to work with others, which makes our partnerships very important.

The Glass is Good initiative in Brazil is a great example. It brings together the entire glass production chain, from glass packaging manufacturers to commercial establishments to major beverage companies, to support the work of local recycling cooperatives. Since 2010, it has

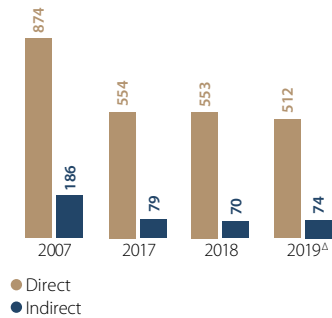


enabled 27,000 tonnes of glass to be recycled – equivalent to approximately 50 million one-litre vodka bottles. We are very pleased that this year, other alcohol companies joined us in this effort.

It is this sort of collaborative thinking that we want to expand elsewhere, and to other materials. So in 2019 we co-founded the Africa Plastics Recycling Alliance, which aims to drive collective action by some of the biggest consumer goods businesses to address plastics

waste, while creating economic opportunities through better recycling and reprocessing infrastructure. It is early days, but by sharing knowledge, encouraging innovation, and collaborating on technical and other solutions appropriate for Sub-Saharan Africa, we believe we can make a real impact – and ensure that our products are not just enjoyable, but sustainably packaged.

### Direct and indirect carbon emissions by weight (1,000 tonnes CO<sub>2</sub>e)<sup>(i),(ii)</sup> (market-/net-based)



### Carbon emissions by weight by region (1,000 tonnes CO<sub>2</sub>e)<sup>(i),(ii)</sup>

Region	2007	2017	2018	2019
North America	211	50	44	54
Europe and Turkey	399	264	279	233
Africa	271	234	225	225
Latin America and Caribbean	8	15	18	19
Asia Pacific	151	58	49	47
Corporate	20	12	8	8
<b>Diageo (total)</b>	<b>1,060</b>	<b>633</b>	<b>623</b>	<b>586<sup>A</sup></b>

(i) CO<sub>2</sub>e figures are calculated using the WRI/WBCSD GHG Protocol guidance available at the beginning of our financial year, the kWh/CO<sub>2</sub>e conversion factor provided by energy suppliers, the relevant factors to the country of operation, or the International Energy Agency, as applicable.

(ii) 2007 baseline data, and data for each of the intervening years in the period ended 30 June 2018, have been restated where relevant and in accordance with the WRI/WBCSD GHG Protocol and Diageo's environmental reporting methodologies.

△ Within PwC's independent limited assurance scope. Please see page 173 for further details.

## Environmental data by region

### Water efficiency by region, by year (l/l)<sup>(i),(ii)</sup>

Region	2007	2017	2018	2019
North America	6.88	5.73	5.55	5.26
Europe and Turkey	7.94	5.78	6.02	5.37
Africa	8.48	4.32	4.28	4.16
Latin America and Caribbean	34.84	3.88	4.66	4.58
Asia Pacific	7.06	4.31	3.63	3.36
<b>Diageo (total)</b>	<b>8.27</b>	<b>4.98</b>	<b>4.94</b>	<b>4.64<sup>A</sup></b>

### Wastewater polluting power by region, by year (BOD/t)<sup>(i)</sup>

Region	2007	2017	2018	2019
North America	214	240	343	835
Europe and Turkey	22,610	17,617	23,502	18,353
Africa	9,970	183	151	1,609
Latin America and Caribbean	10	34	14	10
Asia Pacific	92	64	2	2
Corporate	–	–	1	1
<b>Diageo (total)</b>	<b>32,896</b>	<b>18,138</b>	<b>24,013</b>	<b>20,810</b>
<b>Total under direct control</b>	<b>32,070</b>	<b>17,936</b>	<b>23,751</b>	<b>20,531<sup>A</sup></b>

(i) 2007 baseline data, and data for each of the intervening years in the period ended 30 June 2018, have been restated where relevant and in accordance with our environmental reporting methodologies.

(ii) In accordance with our environmental reporting methodologies, total water used excludes irrigation water for agricultural purposes on land under the operational control of the company.

△ Within PwC's independent limited assurance scope. Please see page 173 for further details.

### Total waste to landfill by region (tonnes)<sup>(i)</sup>

Region	2007	2017	2018	2019
North America	39,857	146	12,177 <sup>(ii)</sup>	276
Europe and Turkey	19,898	1,252	169	195
Africa	37,062	3,937	3,108	2,545
Latin America and Caribbean	243	379	106	84
Asia Pacific	8,583	380	504	549
Corporate	604	719	461	372
<b>Diageo (total)</b>	<b>106,247</b>	<b>6,813</b>	<b>16,525</b>	<b>4,021<sup>A</sup></b>

(i) 2007 baseline data, and data for each of the intervening years in the period ended 30 June 2018, have been restated where relevant and in accordance with our environmental reporting methodologies.

(ii) In September 2017, damage caused by Hurricane Maria meant that by-products from our distillery in St Croix in the US Virgin Islands, which are usually recycled as animal feed, were diverted to landfill. We took remedial action, including upgrading equipment, to minimise the risk of this reoccurring.

△ Within PwC's independent limited assurance scope. Please see page 173 for further details.