



## Reducing our environmental impact

Behind every Diageo product is a story of shared natural resources. The ingredients and water we use, the air and land around our operations and supply chain, the energy we consume – all these are shared with the people and communities around us.

Climate change, water scarcity, soil degradation and the loss of biodiversity are shared risks, which have the potential to affect our supply chain and operations. By impacting the development of the communities we live and work in, they also undermine the inclusive economic growth on which our own growth depends. So, as well as being the right thing to do, it makes clear business sense to use natural resources efficiently across our whole value chain and, where possible, to restore the environment we operate in.

### Climate and risk

We're already seeing some of the impacts of climate change and water stress in our supply chain and operations. Drought has affected our supply of raw materials in Nigeria, South Africa, India and Brazil. In Africa and India, water security is a central factor in our planning and investments.

Impacts like these affect people and businesses throughout local value chains. And they increase our conviction that supporting global action on climate change and taking leadership in responsible water stewardship are both ethically and commercially critical.

As long-term members of the UN Global Compact, and the We Mean Business Coalition, we are already making progress on a range of global initiatives, such as on science-based carbon emissions reduction targets, and on eliminating commodity-driven deforestation. We are also committed to procuring 100% of our electricity from renewable sources by 2030, and reducing emissions from short-lived climate pollutants such as HFCs.

Our Water Blueprint, updated this year, is another crucial component in our climate change mitigation plans. It is supported by our targets for responsible water use in our own and third-party operations and agriculture, and for replenishing water in water-stressed areas; by supporting community water programmes; and by our advocacy of greater collaboration and commitment to responsible water stewardship.

### Aligning with TCFD

We have also conducted a gap analysis to assess the extent to which our existing public disclosures on climate risk align with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). We're already integrating climate-related issues into our mainstream business operations: this year, we continued to analyse our approach and our resilience. We are clear on where issues such as water stress are greatest, and continue to build activity into our core business plans to mitigate this.

Based on analysis of our existing public climate change disclosures in our Annual Report and CDP submission, we have developed a plan to progressively meet TCFD requirements. We do not consider our short-term (three-year) impacts to be material in the context of TCFD. However, we are reviewing our medium-term (three to ten years) and longer-term (more than ten years) impacts and will report on those in the future. By mitigating risks of water stress in both our operations and supply chain through implementation of our Water Blueprint, we are enabling a more resilient business for the future that will support our growth.

Our approach to reducing carbon emissions contributes to global delivery of the Paris Agreement while also mitigating any risks that may arise for Diageo in a low-carbon policy environment.

### Managing water responsibly

We've described how climate change is a critical consideration for water management. Water is a strategic priority for other reasons, too – because it is such a vital resource for us, and for the people and habitats around us.

Our strategic aim is to reduce our overall impact, especially in our operations in water-stressed regions in Africa, India and Brazil, as shown in the map on page 15. Our sites located in these water-stressed regions account for approximately a third of our total production by volume.

Working with other stakeholders is crucial. In 2018, for example, our Meta brewery in Ethiopia formed a new partnership with the local authority and German development agency GIZ to provide safe water and support responsible management of the water catchment. We continue to look for opportunities like this to work on catchment-based approaches, which include community-focused programmes that align with SDG 6: 'Clean water and sanitation', including through our Water of Life programme, described on page 47.

### Absolute targets. Absolute commitment.

Our commitment to minimising our environmental impacts is long-standing. Building on the success of previous environmental sustainability programmes, in 2015 we set ourselves ambitious targets for reducing our impacts and building

our resilience in critical areas by 2020, adding new targets at intervals to further push performance.

These targets are business-orientated, and deliberately stretching. Many commit us to achieving absolute reductions, rather than relative reductions, because we believe that in areas such as greenhouse gas emissions or waste to landfill, the most responsible policy is to decouple our impacts from business growth.

### Making progress and addressing challenges

Our long-standing systematic approach has driven substantial progress. Despite increasing production, we've reduced absolute greenhouse gas emissions from our direct operations by 40.8% against our 2007 baseline, and from our entire supply chain by 23.1%. In the same period, waste to landfill was down by 84.3%, and the total weight of our packaging has reduced by 9.4%.

Nonetheless, we do face challenges, and our progress slowed in 2018 as in some markets it has taken longer than expected to implement environmental projects. Delivering carbon reductions and water efficiency improvements in particular will require additional investment in renewable energy and water conservation technologies at specific sites, as well as implementing continuous improvement opportunities across all locations.

This does not alter our commitment to our 2020 targets. We have identified a range of environmental investments that will help us continue our progress to 2020.

### Setting out our plastics ambition

In June 2018, we announced new targets specifically designed to address plastics in our packaging. They build on our existing sustainable packaging ambitions and aim to address the full value chain impact of our use of plastics. These include that 100% of plastic

used should be widely recyclable by 2025 and plastic bottles should be made of 100% recycled content by 2030. Our new targets for 2025 commit us to:

- Ensure 100% of our plastic use is designed to be widely recyclable (or reusable/compostable), using plastics that allow for increased consumer recycling rates
- Achieve 40% average recycled content in our plastic bottles – and 100% by 2030
- Continue to invest in circular economy opportunities and other sustainable packaging breakthroughs
- Accelerate our support for recycling by increasing collaboration, particularly where we have influence, and engaging with governments, peers and consumers to facilitate improved recycling.

We will report against these targets from 2019.

## Summary performance against targets

2020 target	KPI	2018 performance	Cumulative performance vs baseline <sup>(i)</sup>
<b>Reduce water use through a 50% improvement in water use efficiency</b>	% improvement in litres of water used per litre of packaged product	0.8%	40.3%
<b>Return 100% of wastewater from our operations to the environment safely</b>	% reduction in wastewater polluting power measured in BOD ('000 tonnes)	(31.5)%	27.5%
<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> )	8.6%	47.9%
<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	90.0%	n/a
<b>Reduce absolute greenhouse gas emissions from direct operations by 50%</b>	% reduction in absolute GHG (kt CO <sub>2</sub> e)	1.0%	40.8%
<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)	2.2%	23.1%
<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	100%	100%
<b>Reduce total packaging by 15%, while increasing recycled content to 45% and making 100% of packaging recyclable</b>	% of total packaging by weight	0.7%	9.4%
	% of recycled content by weight	(0.5)%	40.5%
	% of recyclable packaging by weight	0.0%	98.7%
<b>Sustainably source all of our paper and board packaging to ensure zero net deforestation</b>	% of sustainably sourced paper and board packaging	81.0%	n/a
<b>Achieve zero waste to landfill</b>	% reduction in total waste to landfill (tonnes)	(145.4)%	84.3%

(i) Baseline year is 2007 except for packaging which is 2009 and water replenishment which is 2015.

## Performance against 2020 targets

Water stewardship				
2020 target	KPI	2018 performance	Cumulative performance vs baseline <sup>(i)</sup>	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	0.8%	40.3%	Overall water use efficiency has improved by 0.8% this year. In India, water use efficiency improved by 18%, reflecting the benefits from investments in water recovery and reuse technologies. 492,686 cubic metres of water were used for agricultural purposes on land under Diageo's operational control. This is reported separately from water used in our direct operations. Planned investments in environmental projects, including water efficiency technology in Africa, and continuous improvements in our brewing and distilling operations worldwide, should significantly improve performance in the next two years.
<b>Return 100% of wastewater from our operations to the environment safely</b>	% reduction in wastewater polluting power measured in BOD ('000 tonnes)	(31.5)%	27.5%	Wastewater BOD increased by 31.5%, principally due to increased distillation volume. This masked the strong performance at our sites in India and Africa, where the benefits from our investments reduced the polluting power of wastewater by more than 96%. While we meet all regulatory requirements on wastewater discharge from our sites, we know we must do more to meet our ambitious target, and we are actively pursuing design work on additional wastewater handling capacity as well as exploring alternative and new technologies.
<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> )	8.6%	47.9%	Cumulatively, 47.9% of total water used in final product in water-stressed areas was replenished. This is an improvement of 8.6% on last year, driven in particular by our efforts in Uganda, where we implemented projects to increase provision of access to clean water and sanitation in Gulu District and to reforest an area near Mount Kenya. It was also helped by water replenishment initiatives in Tanzania and Ghana. The volume of water recycled or reused in our own production was 1,070,994 m <sup>3</sup> , representing 5.1% of total water withdrawals.
<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	90%	n/a	We continue to engage our tier one suppliers through our CDP Supply Chain Water Programme. This year, we contacted 103 of our largest suppliers to disclose their water management practices through this programme. Ninety per cent responded, with 61% reporting active targets. At the same time, our growing understanding and mapping of water risk in our supply chain, driven by our global water risk assessment of third-party operators (TPOs), is providing greater insight into which of our suppliers operate in water-stressed areas. In 2018 we completed water risk assessments of more than 100 TPOs, identifying more than 20 sites as being in water-stressed areas in 16 countries. This helps us to engage more TPOs with tools for water management, such as the water toolkit we began piloting in India this year. This will help their water management to improve alongside ours.

Carbon				
2020 target	KPI	2018 performance	Cumulative performance vs baseline <sup>(i)</sup>	Progress
<b>Reduce absolute greenhouse gas emissions from direct operations by 50%</b>	% reduction in absolute GHG (kt CO <sub>2</sub> e)	1.0%	40.8%	<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 800,434 tonnes (2017 – 808,107 tonnes), comprising direct emissions (Scope 1) of 621,127 tonnes (2017 – 617,015 tonnes), and indirect (Scope 2) emissions of 179,307 tonnes (2017 – 191,092 tonnes). The intensity ratio for this year was 190 grams per litre packaged (2017 – 191 grams per litre packaged.)</p> <p>This year we reduced greenhouse gas emissions by 1.0%. We have defined and scoped new projects, especially in Africa and Scotland, to re-establish our carbon reduction trajectory, and we are confident that we will resume the progress we've made in reducing absolute emissions.</p> <p>This year, approximately 49.8% of electricity at our production sites came from low-carbon sources such as wind, hydro and nuclear (2017 – 53.7%), and 18.5% of our electricity was from renewable sources only. In the United Kingdom, 100% of our electricity came from low-carbon sources.</p>

## Carbon continued

2020 target	KPI	2018 performance	Cumulative performance vs baseline <sup>(i)</sup>	Progress
<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)	2.2%	23.1%	In 2018, our total supply chain carbon footprint was reduced by 2.2% and cumulatively by 23.1% versus the baseline. We continue to engage suppliers on measuring and managing their carbon emissions through CDP; this year we received responses from 95% of the 166 tier one suppliers we engaged, an increase in both supplier numbers and response rate. 52% of these suppliers report that they have emissions reduction targets. We also continue to work with our suppliers on emissions reduction through our carbon performance review programme which, alongside our own background data assurance, enables us to analyse and assess our Scope 3 emissions.
<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	100%	100%	Eliminating HFCs plays a role in reducing our overall carbon footprint. 100% of the 38,000 new fridges we have purchased since July 2015 were HFC-free.

## Packaging

2020 target	KPI	2018 performance	Cumulative performance vs baseline <sup>(i)</sup>	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	0.7%	9.4%	This year, we achieved a 0.7% reduction in packaging weight but recycled content decreased by 0.5%. On average, recycled content was 40.5%, an improvement of 19% against our 2009 baseline. This progress was driven by lightweighting and new bottle configurations. We know we have to accelerate progress in this area if we are to meet our 2020 targets, and have plans in place to do so. Overall this year, 98.7% of our packaging was recyclable.  We continue to work with our suppliers and other partners to improve recycled glass content. Our Sustainable Packaging Commitments are used by brand and technical teams as well as suppliers, and support our ongoing programme to produce packaging with lower environmental impact. This year we announced additional targets specifically designed to address the use of plastics in our packaging, described on page 51. We will report against these targets from 2019.
	% of recycled content by weight	(0.5)%	40.5%	
	% of recyclable packaging by weight	0.0%	98.7%	
<b>Sustainably source all of our paper and board packaging to ensure zero net deforestation</b>	% of sustainably sourced paper and board packaging	81.0%	n/a	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 250 suppliers and 82% responded. Collectively these suppliers have self-reported that 81% 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.

## Waste

2020 target	KPI	2018 performance	Cumulative performance vs baseline <sup>(i)</sup>	Progress
<b>Achieve zero waste to landfill</b>	% reduction in total waste to landfill (tonnes)	(145.4)%	84.3%	This year our overall strong performance on waste was offset by one-off damage caused by Hurricane Maria in September 2017, which 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. This meant waste to landfill increased by 145.4% this year. We have taken remedial action, including upgrading equipment, to minimise the risk of this reoccurring.

(i) Baseline year is 2007 except for packaging which is 2009 and water replenishment which is 2015.

## Environmental data by region

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

Region	2007	2016	2017	2018
North America	6.88	5.20	5.73	5.55
Europe and Turkey	7.94	5.87	5.78	6.02
Africa	8.48	4.55	4.32	4.28
Latin America and Caribbean	34.84	4.49	3.88	4.66
Asia Pacific	7.06	5.05	4.31	3.64
<b>Diageo (total)</b>	<b>8.27</b>	<b>5.16</b>	<b>4.98</b>	<b>4.94<sup>A</sup></b>

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

Region	2007	2016	2017	2018
North America	214	101	240	176
Europe and Turkey	22,610	19,508	17,617	23,502
Africa	9,970	436	183	150
Latin America and Caribbean	10	34	34	14
Asia Pacific	92	296	64	3
Corporate	–	–	–	–
<b>Diageo (total)</b>	<b>32,896</b>	<b>20,375</b>	<b>18,138</b>	<b>23,845</b>
<b>Total under direct control</b>	<b>32,070</b>	<b>20,097</b>	<b>17,936</b>	<b>23,584<sup>A</sup></b>

(i) 2007 baseline data and data for each of the intervening years in the period ended 30 June 2017 have been restated in accordance with Diageo's environmental reporting methodologies.

(ii) In accordance with Diageo's 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 162 for further details.

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

Region	2007	2016	2017	2018
North America	39,857	148	146	12,177
Europe and Turkey	19,898	2,953	1,252	169
Africa	37,062	6,080	3,937	3,108
Latin America and Caribbean	243	143	379	106
Asia Pacific	8,583	922	380	504
Corporate	604	682	719	657
<b>Diageo (total)</b>	<b>106,247</b>	<b>10,928</b>	<b>6,813</b>	<b>16,721<sup>A</sup></b>

(i) 2007 baseline data and data for each of the intervening years in the period ended 30 June 2017 have been restated in accordance with Diageo's environmental reporting methodologies.

△ Within PwC's independent limited assurance scope. Please see page 162 for further details.

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

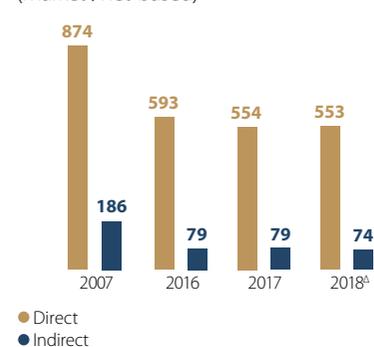
Region	2007	2016	2017	2018
North America	211	45	50	44
Europe and Turkey	399	284	264	281
Africa	271	244	234	225
Latin America and Caribbean	8	15	15	18
Asia Pacific	151	72	58	48
Corporate	20	12	12	11
<b>Diageo (total)</b>	<b>1,060</b>	<b>672</b>	<b>633</b>	<b>627<sup>A</sup></b>

(i) CO<sub>2</sub>e figures (market/net) 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 2017, have been restated in accordance with the WRI/WBCSD GHG Protocol and Diageo's environmental reporting methodologies.

△ Within PwC's independent limited assurance scope. Please see page 162 for further details.

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



(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 2017, have been restated in accordance with the WRI/WBCSD GHG Protocol and Diageo's environmental reporting methodologies.

△ Within PwC's independent limited assurance scope. Please see page 162 for further details.

#### Highlight

## Sustainability & Responsibility Performance Addendum

See the Sustainability & Responsibility Performance Addendum 2018 for our detailed disclosures against the GRI Standards, the United Nations Global Compact and the Sustainability Accounting Standards Board.