

Michael Alexander

Head of Environment, Water, Agriculture
Sustainability, Diageo

DIAGEO'S WATER BLUEPRINT: RECOGNISING THE TRUE VALUE OF WATER

MICHAEL ALEXANDER

HEAD OF WATER, ENVIRONMENT, AGRICULTURE SUSTAINABILITY

24 NOVEMBER 2015 - WORLD FORUM ON NATURAL CAPITAL - EDINBURGH



DIAGEO - WORLD LEADING BRANDS



Johnnie Walker is the **number 1** Scotch whisky in the world

Crown Royal is the **number 1** Canadian Whisky in the world

Smirnoff is the **number 1** Premium vodka in the world

Baileys is the **number 1** Liqueur in the world

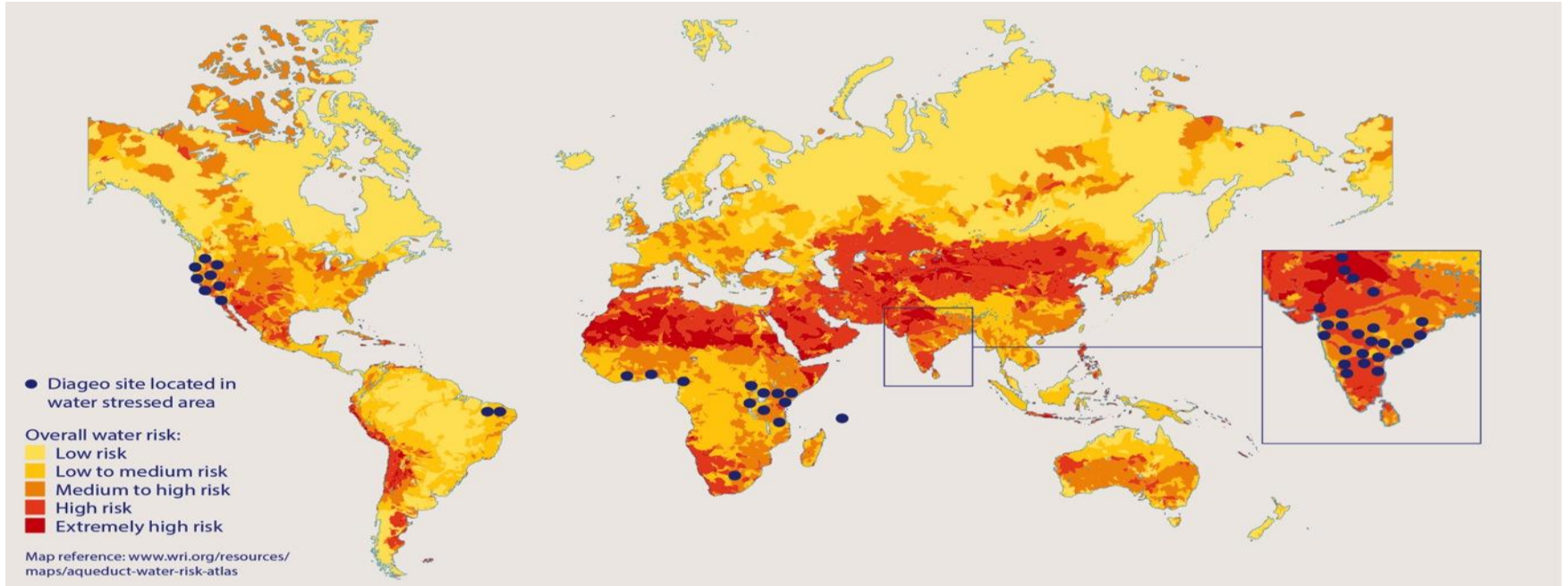
Don Julio is the **number 1** ultra premium tequila in the world

Guinness is the **number 1** Stout in the world

DIAGEO – A GLOBAL FOOTPRINT



GLOBAL WATER STRESS MAP

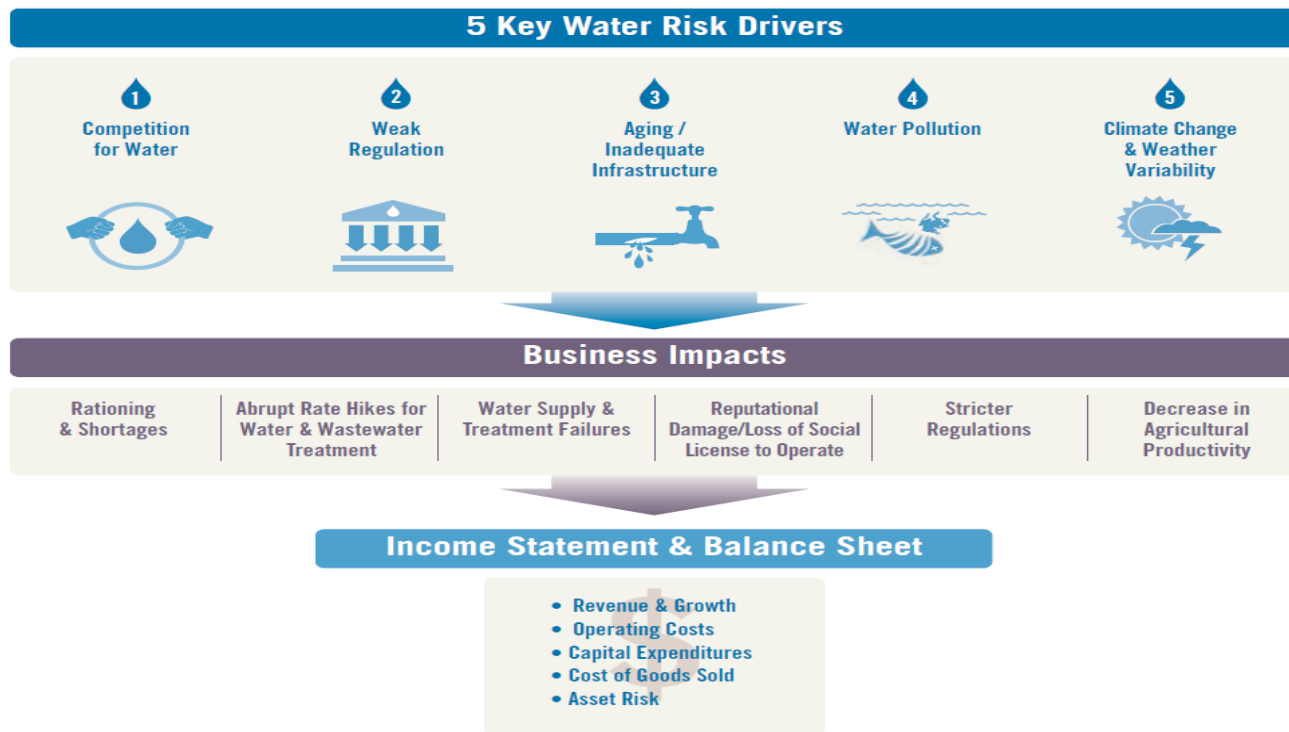


GLOBAL CONTEXT AND THE BUSINESS CASE

- Globally Diageo uses over 25million m3 of water each year
- Over 90% of beer and 60% of spirits is water – we also use water to clean, cool, lubricate, convey, heat, pasteurise, germinate and steep.
- Diageo has 47 production sites across four continents located in water stressed areas - accounting for over one third of total global production.
- In 2005 less than a quarter of our net sales were in emerging markets – in 2014 it was 39% - and last year we made acquisitions in businesses in India, Mexico and in South Africa



BUSINESS & FINANCIAL IMPACTS (CERES, 2015)



LEADERSHIP

“As we grow, particularly in emerging markets, I firmly believe that managing water responsibly is key to achieving our performance ambition and the future success of our business”

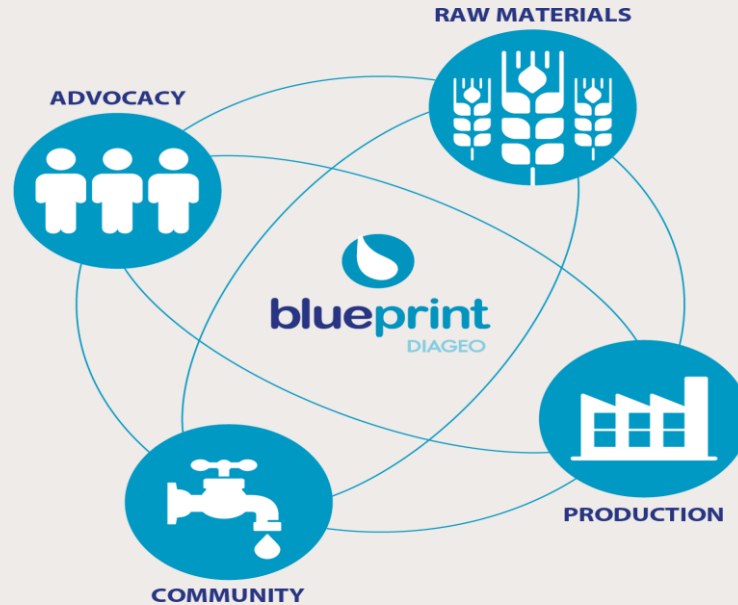
Ivan Menezes, Chief Executive

- ➔ Sustainable water management doesn't just benefit the wider community, it benefits us greatly as a company too
- ➔ Ensuring robust, sustainable water resourcing makes sound strategic sense in the face of climate change and increasingly unpredictable water supply



OUR INTEGRATED STRATEGY – OUR TOOL

**DIAGEO WATER BLUEPRINT:
AN INTEGRATED STRATEGY
ACROSS THE VALUE CHAIN**



TARGETS KEY TO STRATEGY

Targets and commitments for each platform drive programmes locally.

- Integrated into broader Sustainability & Responsibility Targets for 2020
- Sustainability Performance Management System to facilitate consistent reporting and manage programmes
- Need to integrate business case for investment
- Local leadership and accountability essential – but with strong global team support

Key Water Blueprint targets for 2020

Raw materials:

- Equip our suppliers with tools to protect water resources in the most water stressed locations.

Production:

- Reduce water use through a 50% improvement in water use efficiency.
- Return 100% of waste water from our operations to the environment safely.
- Replenish water stressed areas with the equivalent amount of water used in our final products made in water stressed areas.

Community:

- Develop a Water of Life community project in the water stressed watersheds where our production sites are located.
- Ensure appropriate access to safe water, sanitation and hygiene for all employees in all premises under Diageo's control.

Advocacy:

- Increase positive contribution, locally and globally, to collaborative efforts to address the water crisis.








VALUING WATER IN OUR WATERSHEDS



Reforestation of Navulugu Central Forest Reserve, Uganda. Working with WWF and Uganda National Forests Authority, multiple benefits.

- Promotes biodiversity and provides mitigation through carbon capture and storage
- Healthy forest regulates water flows and minimises sediment and pollutant in streams
- Forest canopy intercepts precipitation, reduces runoff and minimizing erosion - helps restore the watershed's natural hydrology
- Reduces silting in Northern Lake Victoria
- Decreased siltation reduces costs associated with siltation around water intake for Port Bell Brewery, Kampala

UNDERSTANDING TRUE COST OF WATER

WATER COST MODEL & INDIVIDUAL COMPONENTS			
1		INCOMING WATER COSTS	Direct water charges; £/m ³
2		INCOMING WATER TREATMENT COSTS	Direct treatment costs; UF/RO -£/m ³
3		CHEMICAL COSTS	Chemical costs for boiler make-up, water treatment, and wastewater treatment
4		NON RETURNED CONDENSATE COSTS	Condensate losses and costs attributed to generation
5		TRANSPORT OF WATER THROUGH FACILITY COSTS	Electricity use in Kwh associated with water pumps
6		WASTEWATER TREATMENT & DISCHARGE COSTS	Direct discharge Cost: £/m ³
7		WATER-RELATED MAINTENANCE COSTS	Assumed to be 1% of Site Energy Costs.
TOTAL COST			£ /M³

Water cost model enables better understanding of true cost of water.

- Water flow and mass balance approach key
- Total cost of water can be x10 more than actual invoice
- Indirect costs of treatment, chemicals, energy, and discharge
- Model built into business case evaluation – and future scenario planning
- Drives behaviours improvements as well as engineering, operational investment
- Opportunity to add the value of ecosystem services

LESSONS LEARNT SO FAR

Diageo Water Blueprint provides consistent, integrated approach for markets to adapt and implement locally.

- Water Blueprint provides tool for markets to better recognise the true value of water
- Partnership with experts and broad collaboration with local stakeholders is fundamental to success
- Piloting independent Alliance for Water Stewardship standard brings new insights – including from stakeholders
- Targets drive performance – essential component of the strategy
- Measurement and evaluation embedded into programmes
- Small step forward to promoting local sustainable use of natural capital



For more details please contact:

Michael Alexander, Head of Water, Environment & Agriculture Sustainability :
michael.alexander@diageo.com