

From SDGs to SMEs:

Driving sustainable tourism through data

Professor Graham Miller

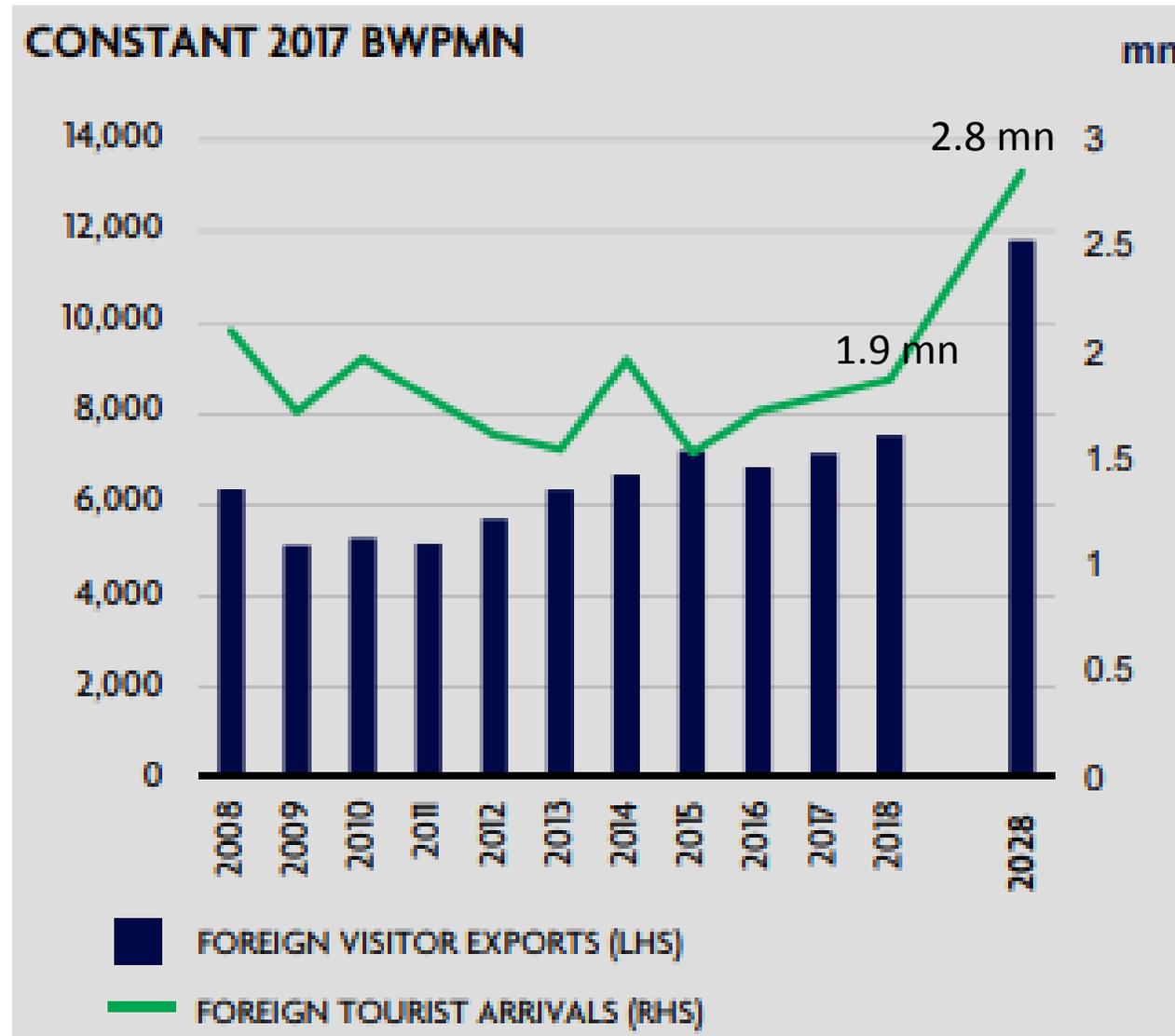
Executive Dean of the Faculty of Arts and Social Sciences –
University of Surrey, UK

G.Miller@surrey.ac.uk

Tourism in Botswana

	Actual value	% of total	Sub-Saharan Africa % of total	2018 Projected growth
GDP: Direct contribution	US\$ 687.5 mn	3.8%	2.7%	5.8%
GDP: Total contribution	US\$ 2,072.9 mn	11.5%	7.1%	4.9%
Direct Employment	26,000 jobs	2.6%	2.3%	4.3%
Total Employment	76,000 jobs	7.6%	5.8%	3.6%
Visitor exports	US\$ 686.6 mn	7.4%	8.5%	5.7%
Investment	US\$ 443.3 mn	8.3%	5.2%	3.3%

Tourism in Botswana



Are tourism benefits retained?

Country	Visitor Exports (US\$ Mn)	Supply chain (US\$ Mn)	Supply chain : Visitor exports
China	125,308	541,137	432%
Germany	50,447	202,336	401%
United Kingdom	35,628	99,715	280%
Japan	35,265	97,701	277%
Namibia	327	748	229%
South Africa	9,510	9,762	103%
Kenya	1,880	1,701	91%
Botswana	687	461	67%
Tanzania	2,178	1,181	54%
Saudi Arabia	13,194	5,334	40%



The Sustainable Development Goals



Need to monitor and measure tourism better

- **What do we want tourism to do for us?**
 - **Who do we need to have involved?**
- **Develop indicators that help us measure what needs to be managed**
 - **Develop interventions for a specific problem we have identified**
 - **Measure again to see if the intervention worked**

Global Sustainable Tourism Dashboard

EXPLORE THE DATA

NEWS

Poverty Alleviation

Dispersion of Travel

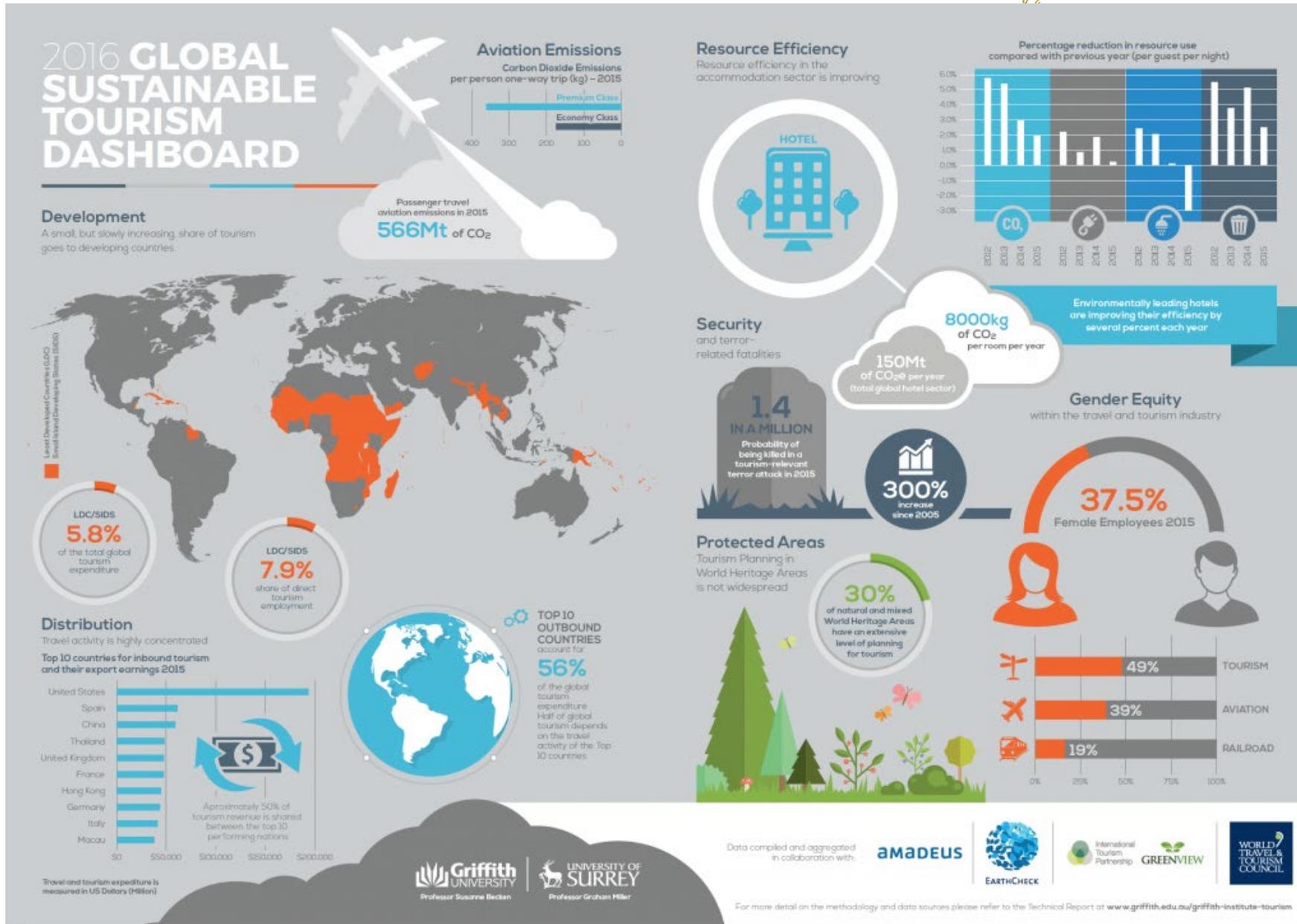
Carbon Emissions

Sustainable Production

Protected Areas and Tourism Planning

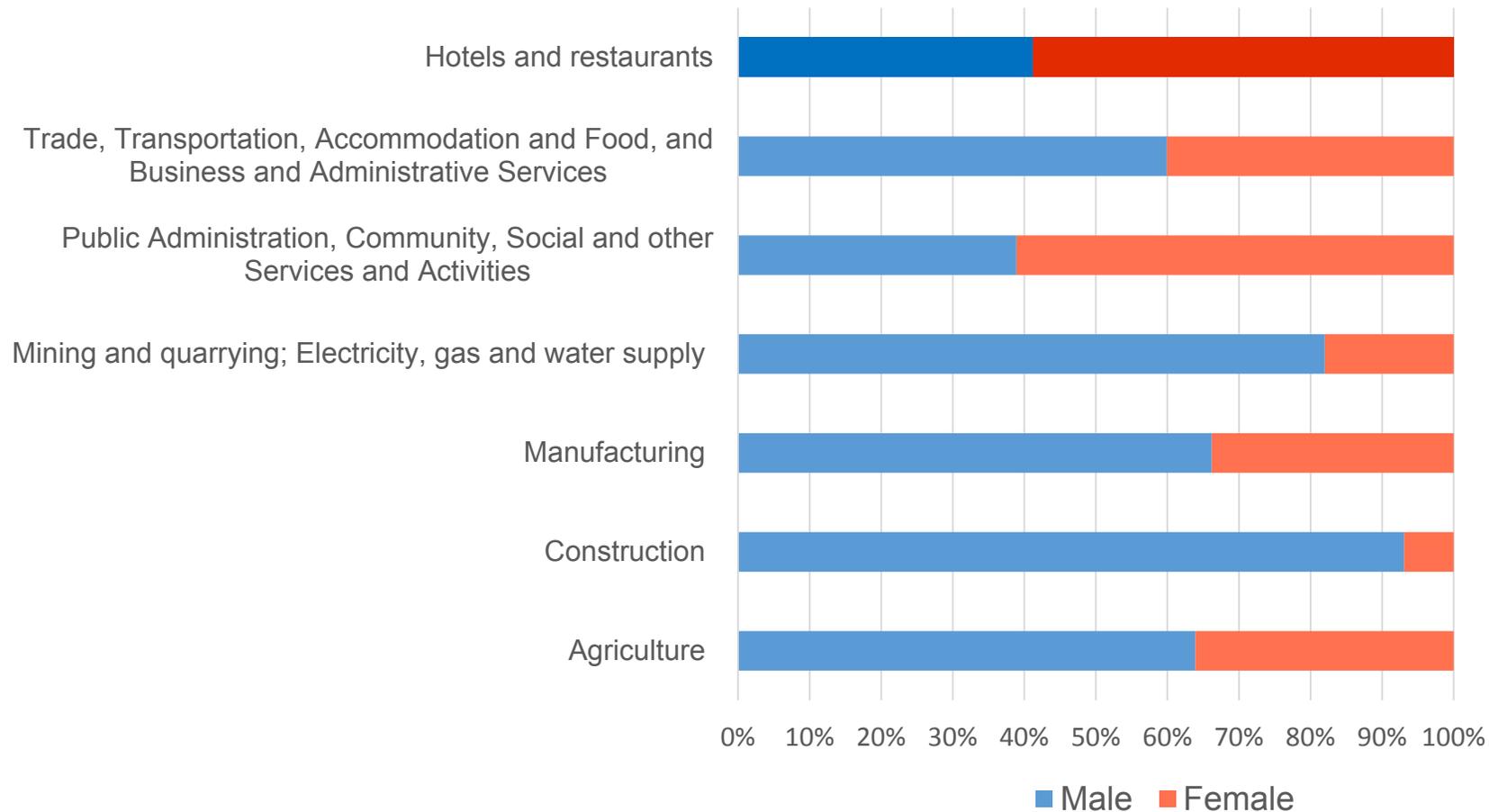
Gender Equity

Security

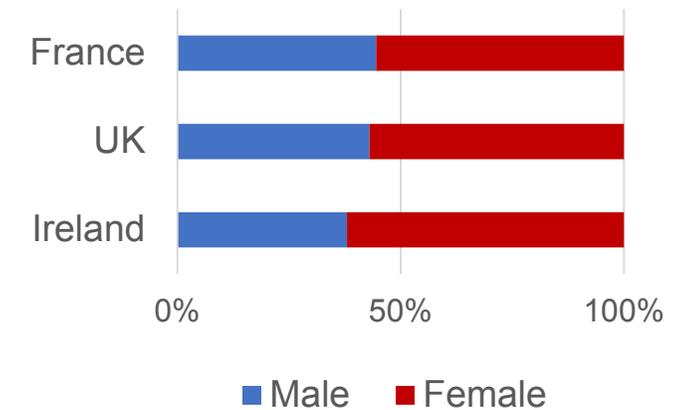


Global Sustainable Tourism Dashboard

Gender Equity (Global)



Gender in tourism



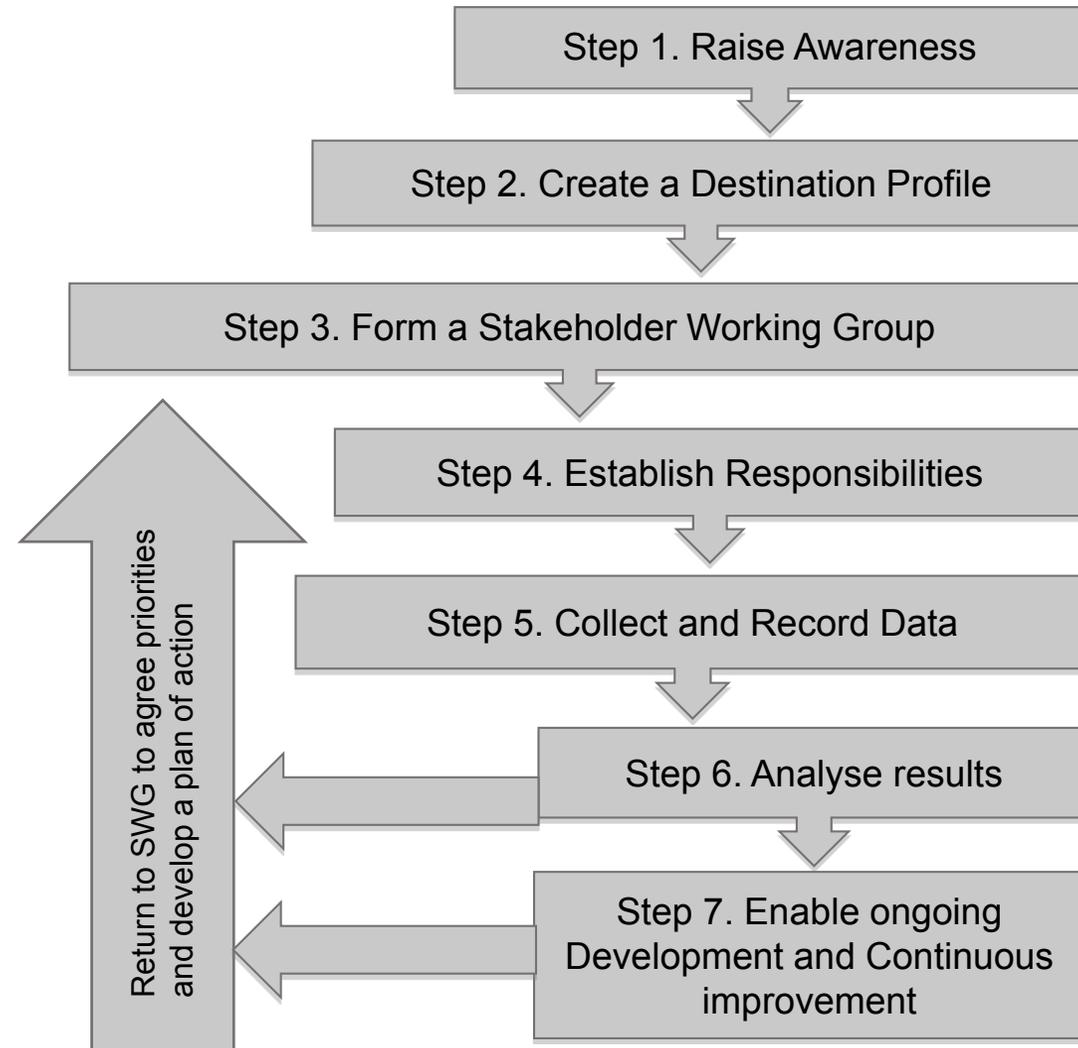
European Tourism Indicator System (ETIS)

Section A: Destination management

Section B: Economic value

Section C: Social and cultural impact

Section D: Environmental impact

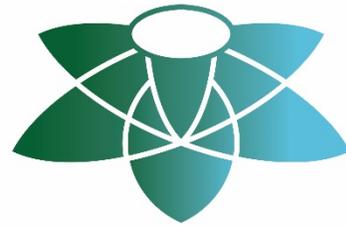


Resource consumption

Section D: Environmental impact

Criteria	Indicator reference#	ETIS core indicators
D.3 Solid waste management	D.3.1	Waste production per tourist night compared to general population waste production per person (kg)
	D.3.2	Percentage of tourism enterprises separating different types of waste
	D.3.3	Percentage of total waste recycled per tourist compared to total waste recycled per resident per year
D.5 Water management	D.5.1	Water consumption per tourist night compared to general population water consumption per resident night
	D.5.2	Percentage of tourism enterprises taking actions to reduce water consumption
	D.5.3	Percentage of tourism enterprises using recycled water
D.6 Energy usage	D.6.1	Energy consumption per tourist night compared to general population energy consumption per resident night
	D.6.2	Percentage of tourism enterprises that take actions to reduce energy consumption
	D.6.3	Percentage of annual amount of energy consumed from renewable sources (Mwh) compared to overall energy consumption at destination level per year





CONSIDERATE

RECOGNITION

Membership for accommodation providers & venues
Supplier membership
Infographics
CSR Marketing assets
Voluntary reporting

[LEARN MORE](#)

CON-SERVE

Data management system
Live feed set-up
Automated data reports
Benchmarking
Bespoke data analysis
KPI Alignment

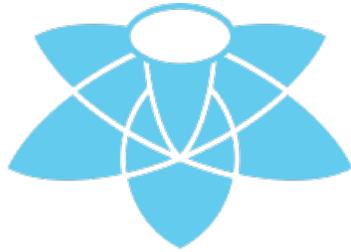
[LEARN MORE](#)

ADVISORY

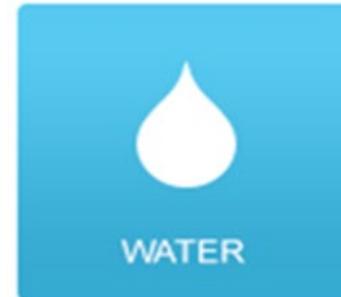
Workshops
Audits
CSR Strategies
Mandatory reporting & compliance
Stakeholder engagement
Energy concepts

[LEARN MORE](#)

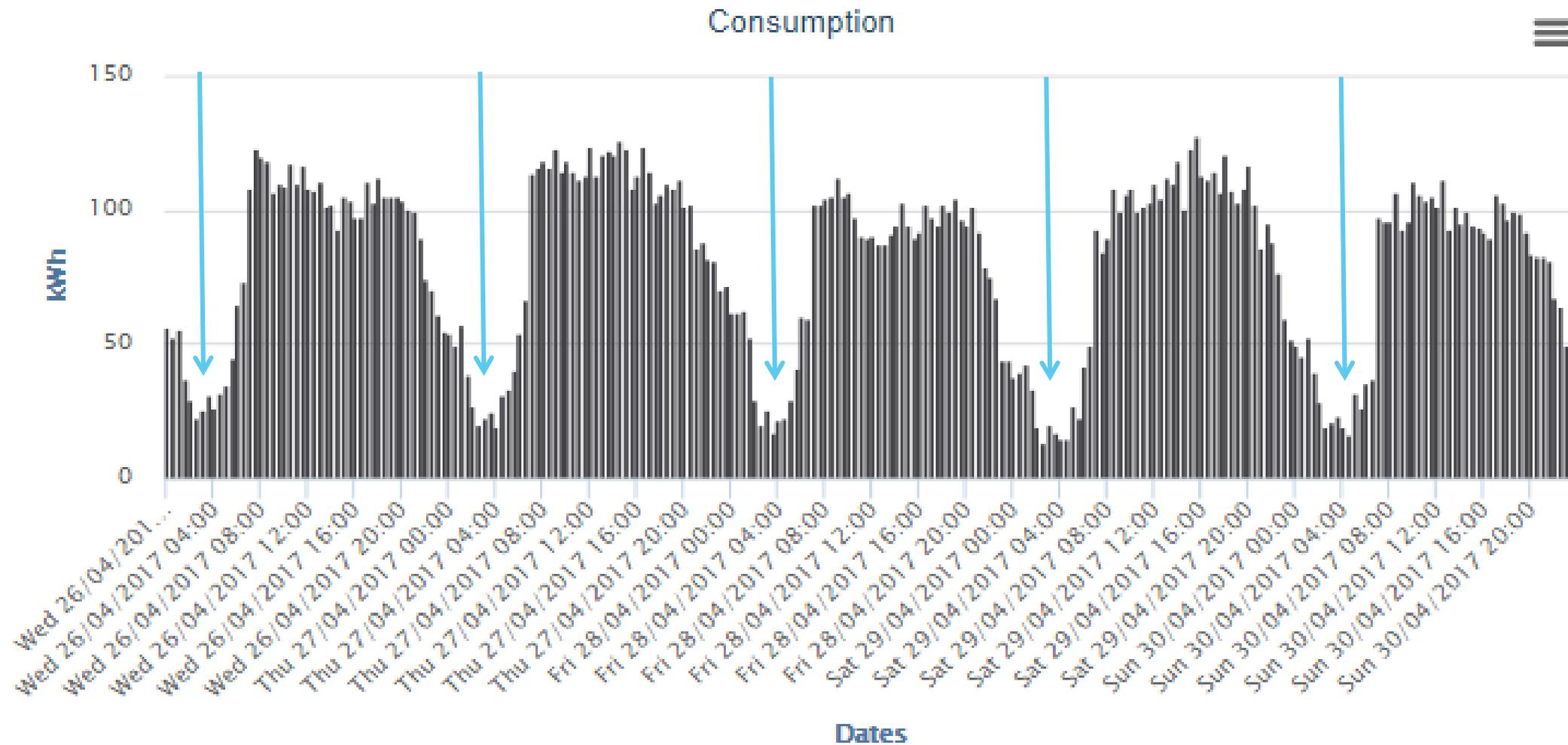
What gets measured gets managed



CON-SERVE™



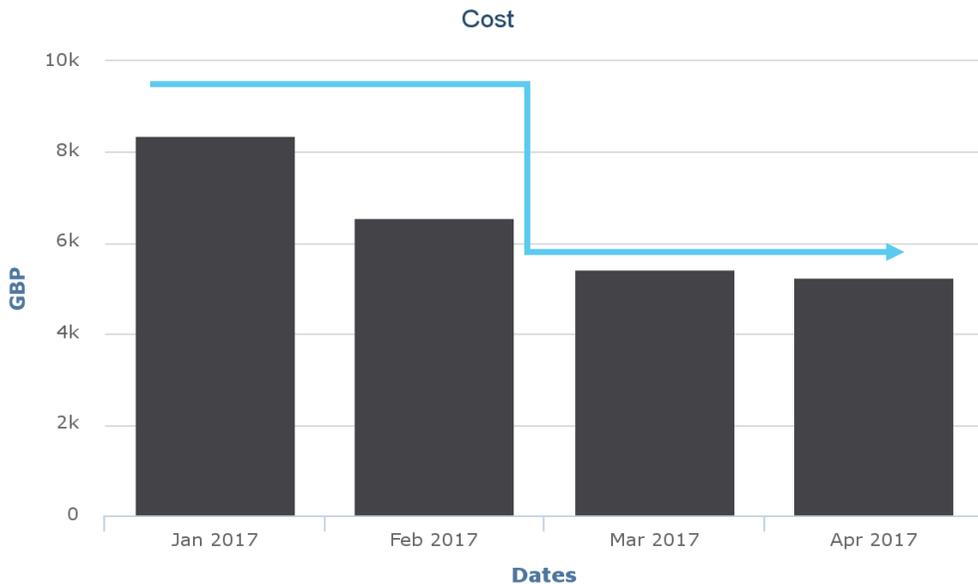
Electricity: Night Savings



Electricity: Night Savings

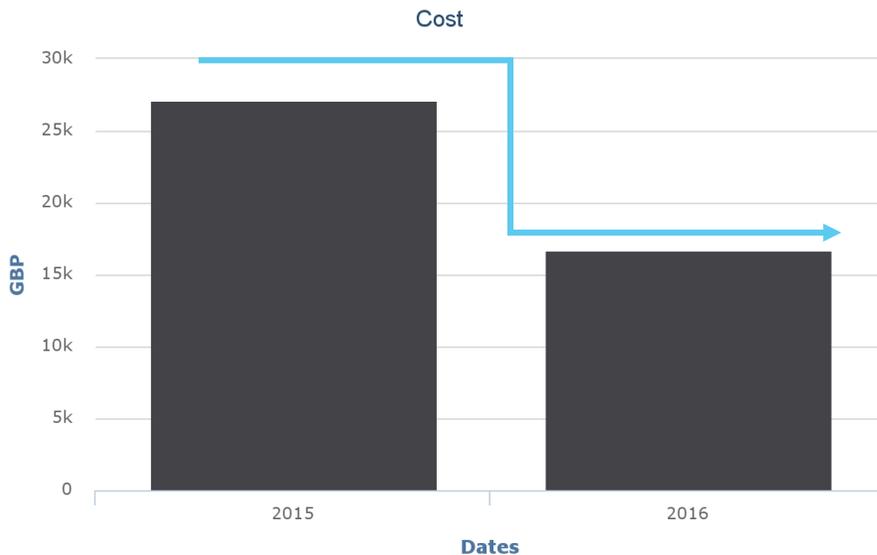
Electricity	Carbon Footprint	Costs
-60% -28,300 kWh	-19,900 kg CO ₂	- £1,630 in 2 months
Equivalent to:	Equivalent to:	Equivalent to:
 <p>19,653 Average lightbulbs switched on for 24 hours</p>	 <p>Growing 515 tree seedlings for 10 years</p>	 <p>11 Room nights at £148 ADR*</p> <p><small>*Based on PwC ADR forecast for 2018</small></p>

Gas: Boiler Temperature

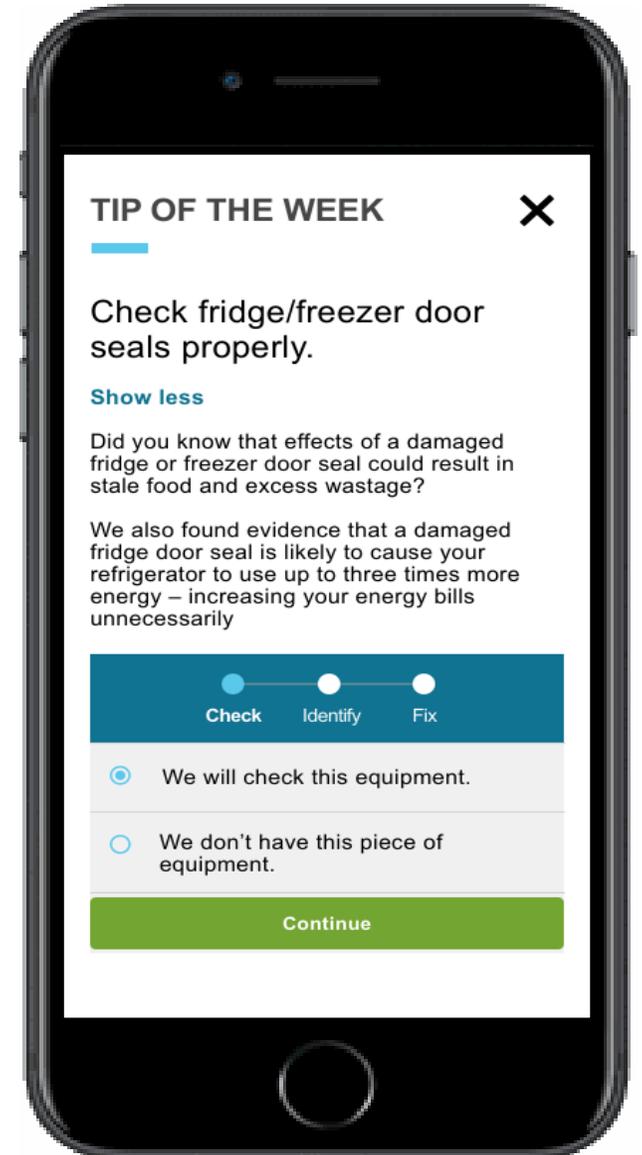
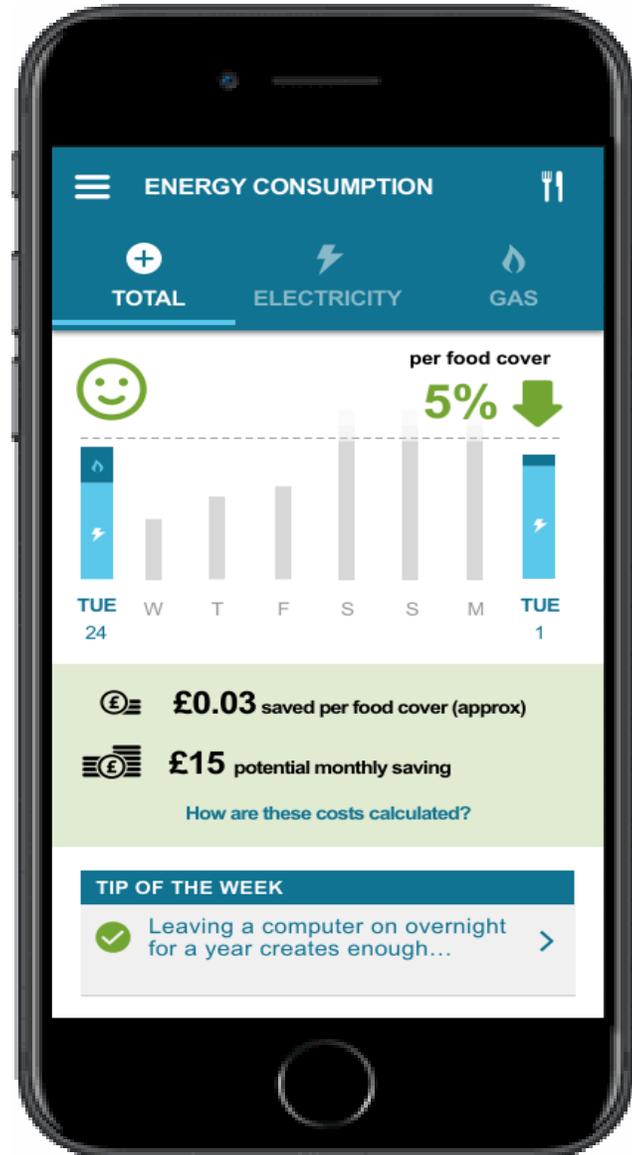
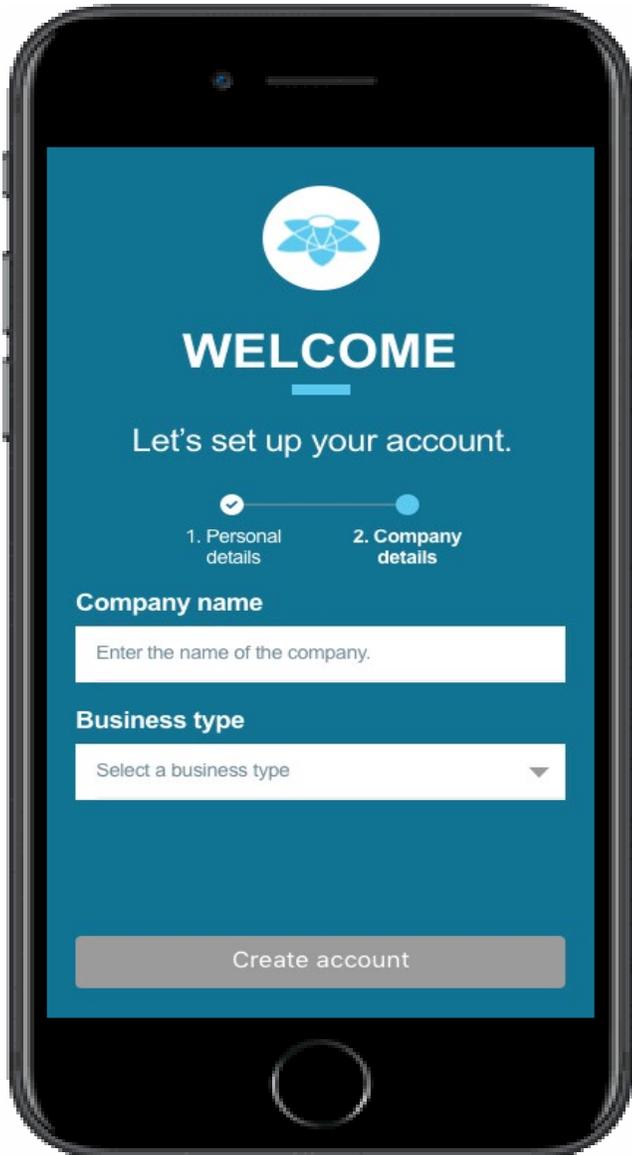


Gas	Carbon Footprint	Costs
-31% -172,296 kWh	-31,780 kg CO ₂	- £4,330 in 2 months
Equivalent to:	Equivalent to:	Equivalent to:
 Baking 143,580 Victoria sandwich cakes in a gas oven	 Growing 824 tree seedlings for 10 years	 29 Room nights at £148 ADR*
		*Based on PwC ADR forecast for 2018

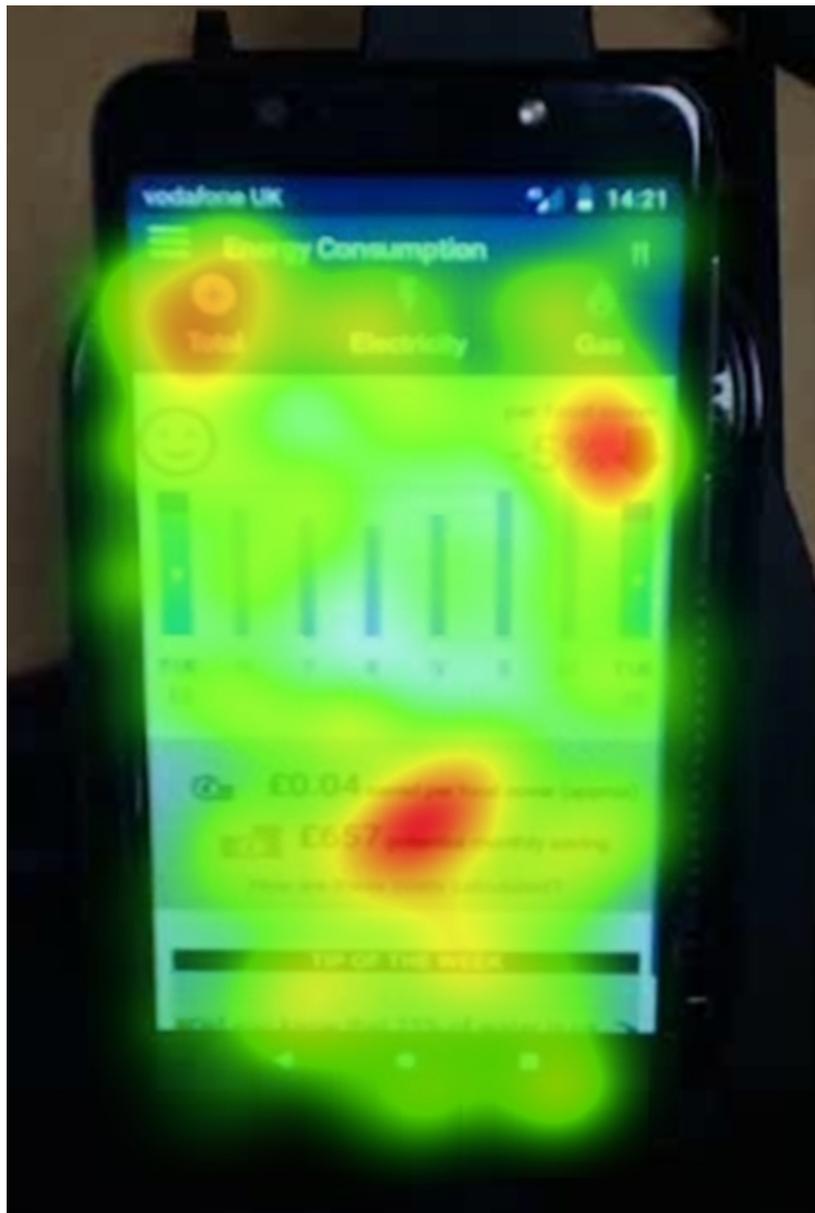
Water: New Shower Heads



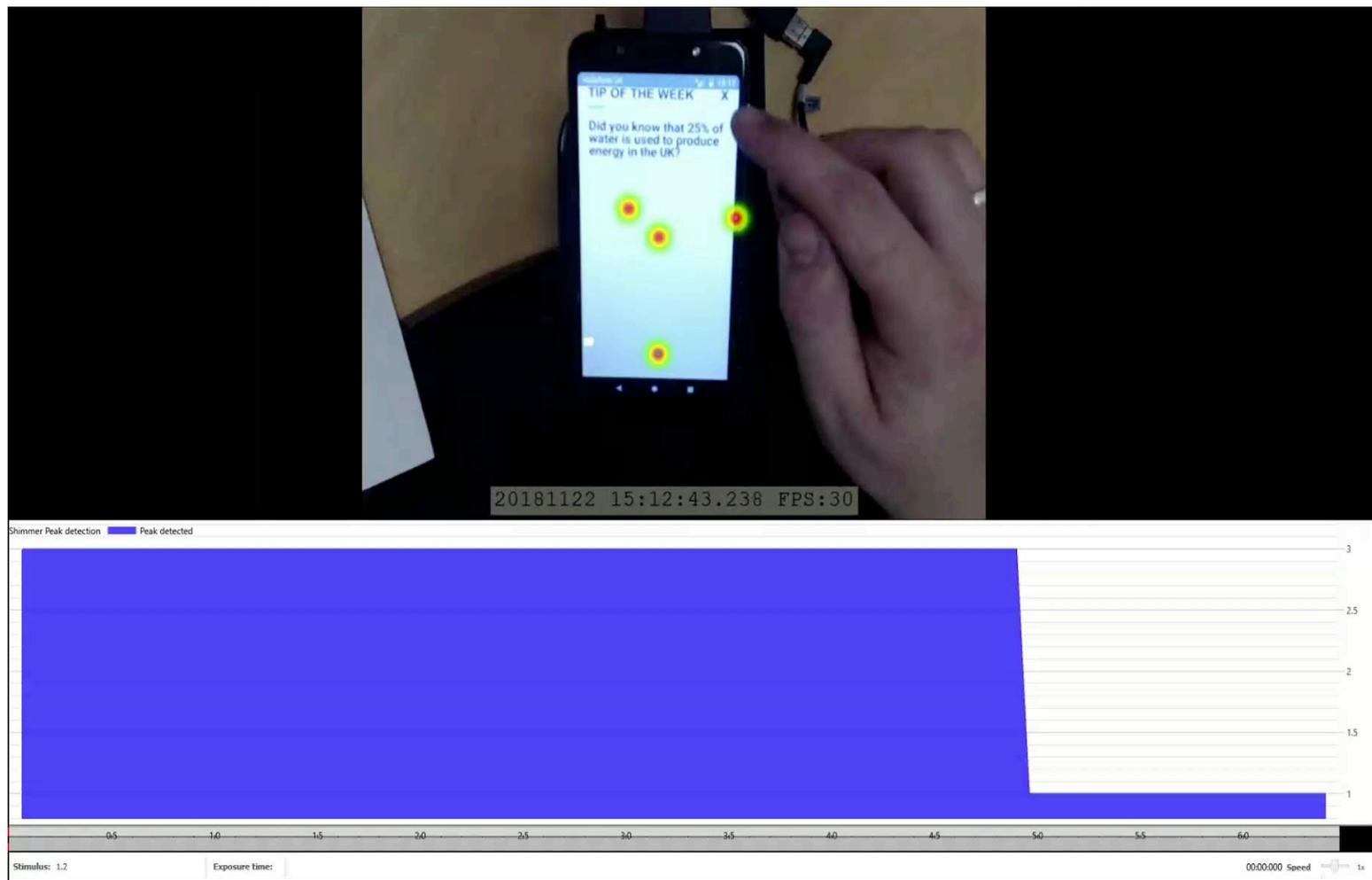
Water	Carbon Footprint	Costs
- 41% - 4,193,570 litres	-1,443 kg CO ₂	- £10,413 in a year
Equivalent to:	Equivalent to:	Equivalent to:
 67,638 Average showers	 Growing 37 tree seedlings for 10 years	 70 Room nights at £148 ADR*
		<small>*Based on PwC ADR forecast for 2018</small>



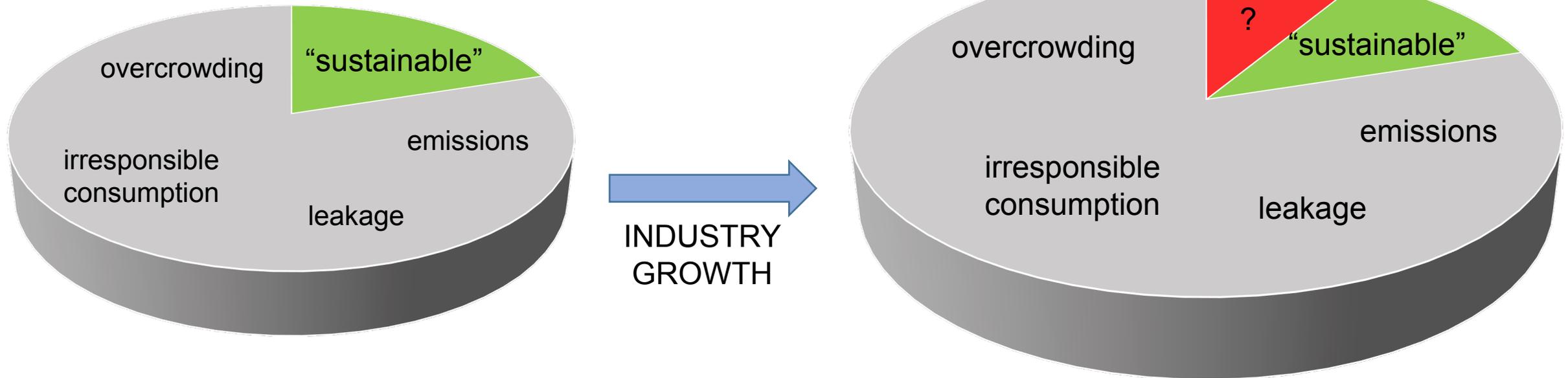
Eye tracking



GSR



The Big Picture



Professor Graham Miller
Executive Dean of the Faculty of Arts and Social Sciences –
University of Surrey, UK
G.Miller@surrey.ac.uk