Extract from Annual Accounts 2019-20

The Board of Trustees of the Tate Gallery

Sustainability

Operations and sustainability

Environmental sustainability is a prime consideration across Tate's work, from the way food is sourced for cafés and restaurants, to the way buildings are managed and exhibitions created. Since 2007, Tate has been working to reduce the environmental impact of its estate and operations, lead and influence the cultural sector and inspire and engage visitors on sustainability, and in June 2019 Tate declared a Climate Emergency.

As part of this declaration, Tate has recently committed to a five-year plan for climate action, which includes a target to reduce Tate carbon footprint by 10% in this time, as well as to act as a sector leader in carbon reduction.

In 2019, Tate switched to a renewable electricity supply tariff in order to lower our direct carbon usage. This tariff provides Tate with 'REGO' certificates that show that all of the electricity Tate purchases is 'matched' by equivalent generation from renewable sources.

Tate has committed to including sustainability or 'green' criteria in each of its tender exercises. The aim of this is to ensure each contract and supplier contributes to Tate's stated aim of a 10% reduction in carbon footprint. Such contributions could include direct financial support to a specific carbon reduction project, or concrete proposals on how to improve the sustainability performance of that contract.

Greenhouse gas emissions

Tate has been measuring and reporting emissions since 2007 and set 2007-08 as a baseline year for reductions, mainly for Scope 1 and 2 emissions.

Overall Tate's carbon emissions for Scopes 1 and 2 have reduced by 33% since the baseline year as a result of a number of energy-saving initiatives being implemented in recent years. Initiatives in the current year have included the installation of more efficient Motor Control Centre panels and the ongoing program of upgrading LED lighting across the Tate sites.

Energy expenditure increased in 2019-20 as a result of the impact of the hot summer and the conditioning needs of the galleries and the introduction of the Climate Change Levy as a replacement for the Carbon Reduction Commitment. Tate's overall exposure to financial risk is reduced by purchasing energy up to 30 months in advance of consumption through the Crown Commercial Service framework agreement. The Carbon Reduction Commitment was a legislative scheme which requires payment for carbon emissions associated with energy use. This scheme closed in 2018-19 and was replaced by the Climate Change Levy which is paid directly by Tate within energy bills.

Business travel emissions data is based on a combination of actual business travel mileage from centralised travel providers and estimated mileage using the Carbon Trust methodology. Scope 3 emissions from business travel are 66% lower than the baseline year (2013-14). In 2019-20, Tate have adopted a "train first" policy in the UK and destinations in northern Europe that are accessible by high-speed train, and have encouraged colleagues to take the train where possible further afield in Europe too.

Scope 3 emissions from water use have been steadily reduced. Electricity transmission and distribution emissions have fallen by 45% since the base year, reflecting the savings made through the energy reduction programme.

Greenhouse gas emissions (tCO ₂ e) %							
		2016-17	2017-18	2018-19	2019-20	cnange on base	
		2010-17	2017-10	2010-13	2013-20	Vľ	
Greenhous	Scope 1 & 2 emissions					J .	
e gas emissions (tCO ₂ e) ¹	Scope 1 ²	3,420	3,421	3,335	3,418	(12)	
	Scope 2	10,941	9,206	7,746	7,136	(48)	
	Total Scope 1 & 2	14,361	12,627	11,081	11,797	(33)	
	Total Scope 1 & 2 tCO ₂ e per m ²	0.122	0.107	0.094	0.100	(51)	
	Scope 3 emissions						
	Business travel ³	907	740	549	329	(66)	
	Water use ⁴	200	191	101	80	(31)	
	Electricity transmission & distribution	990	861	660	606	(45)	
	Total Scope 3	2,097	1,792	1,310	1,015	(54)	
	Total Scope 1–3	16,458	14,419	12,391	11,569	(45)	
Energy use (million kWh)	Electricity, non-renewable	22.2	21.9	24.1	0	(100)	
	Electricity, renewable ⁵	4.4	4.3	3.3	27.9	100	
	Total electricity	26.6	26.2	27.4	27.9	0	
	Gas	18.6	18.6	18.1	18.6	11	
	Total kWh per visitor	5.3	5.6	6.4	5.6	(3)	
Expenditure (£000)	Energy	3,032	3,070	3,433	3,682	62	
	Carbon Reduction Commitment	242	257	172	0	(100)	
	Business travel	741	680	682	762	4	

Waste and finite resources

Tate's approach to waste management is guided by the waste hierarchy of "refuse, reduce, re-use, recycle, recovery, disposal" as mostly set out in Article 4 of the revised EU Waste Framework Directive, with 'refuse' being added to suit the aims and goals of Tate. Tate has committed to attaining zero waste to landfill and between 70-75% of the waste produced each month is recycled. In addition to recycling, Tate also aims to reduce the amount of waste produced and to re-use or upcycle products. Overall production of waste has decreased by 18% from the baseline year, despite an expansion of the estate, due to a significant increase in waste being recycled or re-used, composted (via anaerobic digestion) and also sent to energy from waste.

We've also adapted our shops and cafes so that we eliminate some of the waste previously being produced, such as single use plastic cups and packaging. Tate have also signed up to distribute unsold food at the end of the day, including an app (TooGoodToGo) that allows visitors to buy any unsold food at a reduced cost in the last half hour of opening.

Waste costs have increased by 48% since the baseline year, mainly due to the addition of different waste streams, together with the opening of the new buildings and the overall increase in waste costs and tax levies. Water use under Scope 2 (Finite Resource Consumption) reduced significantly in the year as a result of the reduction in water abstraction from the closure of the borehole cooling system at Tate Modern. A water harvesting facility is now operational in the Blavatnik Building at Tate Modern that allows the collection, storage and distribution of recycled rainwater for flushing the toilets. Moving forward, Automated Meter Reading technology for water has now been installed across the London sites in 2019 so that water usage can be closely monitored.

¹ All emissions calculated and updated using relevant Defra conversion factors

http://www.ukconversionfactorscarbonsmart.co.uk/

² Includes emissions from natural gas consumption and refrigerants

³ All business travel including international air and rail travel

⁴ Mains water only and boreholes abstraction, in line with government guidance. All figures updated with water treatment and supply conversion factors, in line with Defra guidance

⁵ Electricity procurement through Crown Commercial Services, all other Tariffs Fuel Mix info https://ccs.edfenergy.com/fuel-mix

Finite resources: Waste						% change
						on base
		2016-17	2017-18	2018-19	2019-20	yr
Waste	Landfilled	1	0	0	0	
(tonnes)	Reused/recycled	771	569	608	580	232
	ICT waste reused/recycled	1	4	4	3	200
	Composted ⁶	252	267	244	243	263
	Energy from waste	278	363	416	334	146
	Incineration without energy	0	0	0	0	
	recovery					
	Total waste ⁷	1,303	1,203	1,272	1,160	(18)
	Total waste tonnes/m ²	0.0119	0.0109	0.0116	0.0098	68
Spend	Landfilled	0	0	0	0	
(£000)	Reused/recycled	86	87	82	87	56
	ICT waste reused/recycled	N/A	N/A	N/A	N/A	
	Composted	35	40	36	39	177
	Energy from waste	42	54	66	59	56
	Incineration without energy	0	0	0	0	
	Total waste	163	181	184	185	48

Finite resource	s: Water					% change on
		2016-17	2017-18	2018-19	2019-20	base yr
Water use (m ³)	Total scope 1 & 2	190,495	181,224	96,207	116,400	5
	Scope 2 m ³ per m ²	1.62	1.54	0.82	1.28	(22)
	Total scope 2 litres per visitor	22.55	22.71	11.79	14.08	(3)
Expenditure (£000)	Water supply	205	276	302	220	44

Biodiversity action planning

Tate, in partnership with its ISO 14001-certified landscape contractor, actively works to preserve and enhance biodiversity within its estate. Varied habitats are provided wherever possible and this year has seen a review of the types of plants in Tate gardens, including the addition of more bee-friendly plants and the introduction of bug hotels to encourage wildlife activity further. Tate has kept bees on the roofs of Tate Modern and Tate Britain since 2010.

⁶ Disposal via anaerobic digestion

⁷ Excludes waste from Tate St Ives and Chadwell Heath; current contractors cannot provide tonnages