

# CARBON MANAGEMENT REPORT 2017-18



LSE is strongly committed to environmental sustainability, and it is a key principle of both our Strategic Plan and Ethics Code.

Acknowledging the Clean Growth Strategy proposed by the Government, and conscious of the new development of our activities and estate portfolio, we undertook a review of our 2010 Carbon Management Plan.

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A new target of 34% carbon emission reduction by 2025 from the 2005-06 baseline was consequently adopted.

LSE has made good progress towards this target.



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#### Baseline data:

LSE total footprint (scope 1 and 2) for the baseline 2005-06 was 13,170 tonnes of carbon dioxide equivalent ( $tCO_2e$ ).



#### **Current footprint:**

LSE carbon footprint for the most recent academic year 2017-18 was  $8,750 \text{ tCO}_2\text{e}$ . This represents a 33% decrease from the 2005 baseline.

2017-18 carbon footprint decrease is mainly the result of the School RE:FIT programme, an energy saving programme supported by the Mayor of London. The decarbonisation of the grid also contributed to the decrease.



### Carbon Emissions (tCO<sub>2</sub>e):



#### Total footprint by energy use:

			2017-18 total Carbon Emissions, tCO <sub>2</sub> e	% breakdown of total 2017-18 Carbon Emissions
	Academic	Heating	1,270	15%
	-	Hot Water	21	< 1%
	-	Lighting	1,932	22%
		Electricity	2,185	25%
	-	Cooling	58	< 1%
	Residential	Heating	1,217	14%
	-	Hot Water	565	6%
	-	Lighting	565	6%
		Electricity	899	10%
	Sports Ground		39	< 1%
	Total Figure		8,750	

#### In 2017-18, LSE made significant progress towards its carbon reduction target.

- We completed Tranches 1 and 2 of RE:FIT. Working with Bouygues, we invested £4 million in energy conservation measures such as energy efficient lighting, boilers, photovoltaic panels and improved building controls. The measures helped LSE to reduce its carbon footprint by 8%. It also helped us achieve maintenance savings and increase our building efficiency.
- We have developed a Tranche 3 of RE:FIT and invested another £0.5 million in the first part of the project. The second part is currently being reviewed. The total project would save LSE around 240 tCO<sub>2</sub>e.

- Photovoltaic panels and Combined Heat and Power units continue to produce energy for our estate, saving 336 megawatt-hour of electricity and 95 tCO<sub>2</sub>e in 2017-18. This is enough to power St Clement's for a year.
- Thanks to these projects, we have significantly reduced the carbon intensity of our estate: in 2017-18 we produced only 46 kilogrammes of CO<sub>2</sub>e per of square meter, a 39% cut since 2005/06.

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## **CONTINUING PROGRESS**

# Guided by the Carbon Management Plan, LSE plans to further reduce its carbon footprint:

- We are working with the Greater London Authority to develop a low carbon heating strategy for our campus buildings. This includes reviewing our heat demand as well as the possible renewable heat sources available around our campus.
- We will continue improving our building environment by ensuring all new constructions and refurbishment projects have the lowest possible environmental impacts. Notable examples are the Centre Buildings Redevelopment which achieved BREEAM 'Excellent', and Saw Swee which secured Hock BRFFAM 'Outstanding' in construction.
- Student and staff engagement will continue to be one of our priorities. We are expanding the University of London "Reduce the Juice" programme to cover all eight centrally managed halls of residence, targeting energy, waste

and water reduction.





New Academic Building carbon emissions were reduced by 49% thanks to new controls and lighting



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