

Estates Division / Sustainability Team

# LSE Carbon Management Plan

2021/22 Updates

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#### 2021/22 At A Glance

LSE wants to lead by example when it comes to addressing our own environmental footprint.

In 2021/22, we started an ambitious programme of heat decarbonisation while remaining carbon neutral for all our measured emissions.

Going forward, we will start working on our indirect emissions.

#### 1. Our approach to Carbon Management

#### 1.1 Our Carbon Management, from 2010 to 2030

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

The School adopted its first Carbon Management Plan in 2011. The Plan set out an ambitious 54 per cent carbon reduction target for its direct emissions (scope 1 and 2) by 2020/21 against 2005/06 baseline. This was based on an expected level of investment and stable number of students.





In the following years, LSE invested close to £5 million in energy conservation measures for its buildings through three phases of work as part of the Mayor of London RE:FIT programme. This programme delivered significant carbon reductions as well as cost savings and a return on investment for the School. By 2021/22, we achieved a 44 per cent reduction against our baseline.

In 2019, as part of the launch of LSE 2030 Strategy, the School decided to go further and made a <u>public announcement</u> committing to reach net-zero carbon by 2030 for its direct energy use (scope 1 and 2) and by 2050 for its indirect emissions (scope 3).

#### 1.2 Our Carbon Management Strategy

Achieving our 2030 net-zero carbon target will require a combination of absolute carbon reductions and the use of carbon removal measures for our residual emissions.

To establish our absolute target, we undertook a strategic review of our Carbon Management Plan with the support of external consultants. The resulting <u>Carbon Reduction Strategy</u>, adopted in 2020, describes the different potential measures identified to deliver a carbon reduction pathway aligned to a 1.5°C <u>Science Based Target</u> for our scope 1 and 2.

#### 1.3 Becoming Carbon Neutral

As a key milestone on our carbon reduction journey, LSE became the first carbon neutral verified university for all emissions we currently measure (scope 1 and 2 and small proportion of our scope 3) for 2020/21. We used high quality carbon credits to mitigate the emissions we have not yet reduced.

In 2021/22, we remained carbon neutral by offsetting the same emissions.



The carbon credits we used were selected by the LSE community by popular vote. The choice was between three tailored portfolios from our carbon offsetting partner, Compensate.

Compensate takes a thorough approach in selecting and monitoring carbon mitigation projects for their integrity in delivering <u>demonstrable carbon</u> reduction impact for LSE.



#### 1.4 Our funding options

There is a rolling funding commitment in the capital plan of c.£3million allocated for the decarbonisation of the estate. In addition to the internal budget for projects, LSE has secured a £175 million Sustainable Private Placement for green and social projects at the School.

This fund supports the development of our first net-zero carbon building, the <u>Firoz Lalji Global Hub</u>, as well as projects to decarbonise our heating systems.

A £38 million investment plan over 10 years has also been set aside to support our net-zero target.

66 This past year was a challenging one for sustainability, as the world returned to being physically present once more after the events set in motion by the COVID-19 pandemic. At LSE, 2021/22 saw a full and vibrant return to campus for the first time in two years, with sustainability remaining one of the key priorities for the School as we adapted to a post-pandemic world.

Dame Minouche Shafik, President and Vice Chancellor, LSE

#### 1.5 Our Reporting Structure

The Carbon Reduction Manager, in the Sustainability Team, is responsible for the LSE's carbon management plan. They work closely with teams across the Estates Division and the wider LSE community.

Our ISO certified management systems ensure an effective delivery and monitoring of the carbon reduction plan.



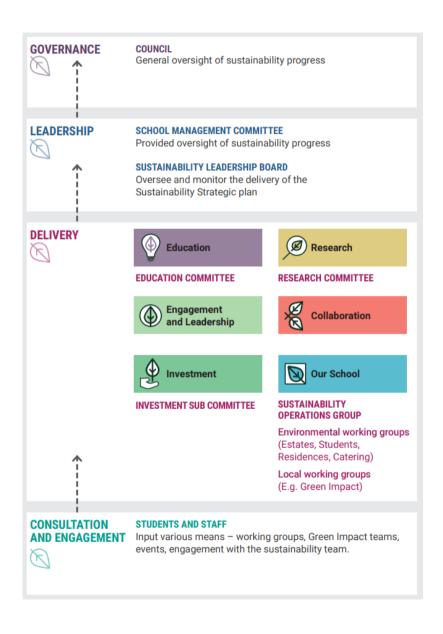
The Sustainability Policy is delivered via our Environmental Management System, which has been ISO 14001 certified since 2012.



The Energy Policy is delivered via our Energy Management System, which has been ISO 50001 certified since 2015.

Decision-making is supported by several committees and working groups including both student and staff representatives.

Further details on our processes and sustainable policies can be found on our website.



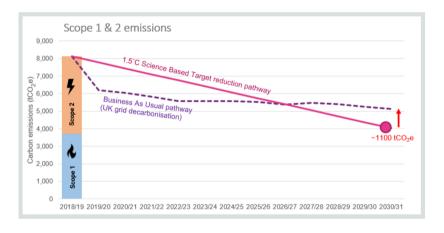
### 2. Our Scopes 1 and 2

#### 2.1 Our Baseline

Like most of the higher education institutions, LSE's baseline is the academic year 2005/06 for our scope 1 and 2 emissions. That year, LSE's total footprint was 13,170 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e).

#### 2.2 Our Target

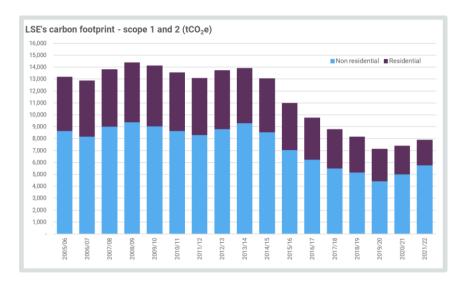
As part of our <u>Carbon Reduction Strategy</u>, LSE adopted an absolute reduction target of 69 per cent carbon reduction for scope 1 and 2 by 2030 against our 2005 baseline.



By 2050, as we reach our net-zero target for scope 3, our aspiration is to have reduced all emissions related to scope 1 and 2 by 100 per cent.

#### 2.3 Our Progress in 2021/22

In 2020/21, LSE's carbon footprint for scope 1 and 2 emissions was 7,877 tonnes  $CO_2e$ . This represents a 40 per cent reduction against our 2005 baseline.



To reopen our campus buildings safely in 2021/22, we had to significantly increase the fresh air intake. Consequently, we had to use more gas to heat the space and our carbon emissions went up compared to the previous year. However, ongoing investments in energy saving technologies and renewal of the estate have helped us secure a long-term reduction trend and improve our carbon intensity. In 2020/21, it was  $36.5\ kgCO_2e$  per square meter, representing a 52 per cent reduction since 2005.

#### 2.4 Our Next steps

To deliver our net-zero 2030 target, we opted to decarbonise our heating systems to take advantage of the decarbonisation of the UK electricity grid. Several projects are under way and our first fully electric building, the Cheng Kin Ku Building, should be completed by Summer 2023.

We are also actively working with Westminster and Islington City Councils to connect our buildings to future low carbon district heating networks when feasible.

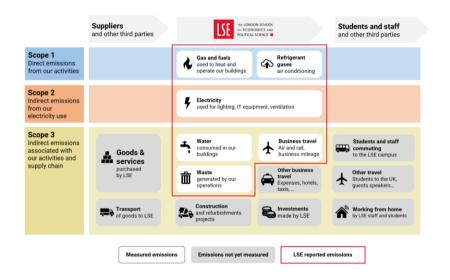


### 3. Our Scope 3

#### 3.1 Understanding our Scope 3

In 2021/22, we continued to work on an action plan to reach our net-zero target for scope 3 by 2050.

We have mapped our scope 3 and we now measure and report on some emissions related to water usage, waste generated, and business travel booked via our main travel agent. For these emissions, we have set our baseline as 2018/19.



Going forward, we will focus on setting targets and developing management plans for our reported emissions. We have also started working on our emissions related to business travel booked through expenses, staff and student commuting and procurement of good and services.

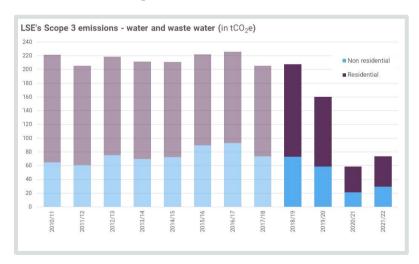
#### 3.2 Water and wastewater

During our baseline year, in 2018/19, we consumed 199,070 cubic meters of water, representing 207 tCO<sub>2</sub>e.

In 2021/22, we consumed 177,184 cubic meters of water. Despite an increase due to the campus reopening, we have reduced our water usage by 11 per cent since 2018/19. This reduction can be attributed to the reduced number of staff present on campus since the introduction of hybrid working following the COVID-19 lockdowns.



LSE does not operate any research laboratories and our water is primarily used for offices, catering, and domestic purposes. As a result, 99 per cent of the water we use returns to the network as waste water. This means that, converted into carbon, our water and waste water consumption for 2021/22 combined emitted  $74 \text{ tCO}_{2}e$ .



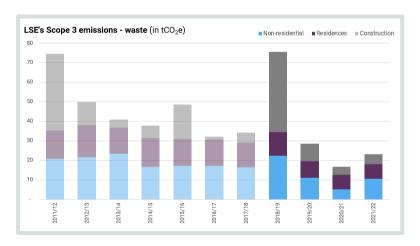
By 2030, we aim to reduce our water usage by 30 per cent against our 2018/19 baseline and we are working on a reduction plan to achieve this target.

#### 3.3 Waste

During our baseline year, in 2018/19, we generated 28,697 tonnes of waste, representing 75.5 tCO<sub>2</sub>e. Without construction, our waste amounted to 1,668 tonnes and 34.4 tCO<sub>2</sub>e.

In 2021/22, we produced 1,473 tonnes of waste (including construction), 64 per cent of which was reused or recycled. Without construction, we generated 1,077 tonnes of waste.

Our waste contributed to emitting 23 tCO $_2$ e. This 69 per cent reduction against our baseline is largely due to completion of the Marshall Building. Without construction waste, we reduced our emissions by 48 per cent, to 17 tCO $_2$ e, thanks to the introduction of hybrid working.



By 2030, we aim to reduce our total waste by 80 per cent against our 2018/19 baseline, and by 30 per cent waste excluding construction.

#### 3.3 Business Travel

During our baseline year in 2018/19, our business travel booked through our central supplier represented  $4,195 \text{ tCO}_2\text{e}$ .

In 2021/22, our emissions related to business travel were 1,999 tCO $_2$ e. This is 73 per cent below our baseline. However, as international travel resumes, it is likely that emissions linked to business travel will increase.



Going forwards, we will work to improve the data quality for our business travel and start accounting for travel booked through expenses and alternative travel agents.

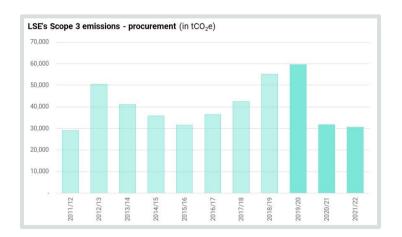
We will also continue to promote alternatives to business travel through our <u>Digital Smart</u> campaign and <u>sustainable travel online</u> <u>guidance</u>.



#### 3.4 Procurement

During our baseline year, in 2018/19, the goods and services we procured emitted an estimated 53,985 tCO<sub>2</sub>e.

In 2021/22, our procurement activities generated about 30,618 tCO<sub>2</sub>e. This represents a 44 per cent reduction against our 2018/19 baseline.



At present, the emissions related to Procurement are based on spend data and not accurately measured. As a result, it is difficult to analyse trends and establish a reduction plan.

However, going forward, we will work with our Procurement team and some key suppliers to better understand these emissions and start to establish a more accurate baseline.





Sustainability Team
The London School of Economics
and Political Science
Houghton Street
London WC2A 2AE

Email: Sustainability.Team@lse.ac.uk



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