



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE



Environmental Sustainability Report

LSE 2012-13



Contents

Foreword by the Director	2
Executive Summary	3
Environmental Management at LSE	4
Energy and Carbon	5
Waste and Resources	6
Construction and Refurbishment	8
Water	9
Procurement	10
Emissions and Discharges	11
Income and Investment	11
Transport	12
Biodiversity and Urban Landscapes	13
Education for Sustainable Development	14
Community Involvement	15
Awards in 2012-13	16

Foreword by the Director

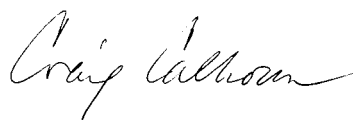
LSE's sustainability journey started in 2005, when former Director Howard Davies led the adoption of our Environmental Policy. Since then, the School has gone from strength to strength, embedding environmental sustainability into every area of its activities.

LSE takes sustainability very seriously, and it is a key principle of both our Strategic Plan and our Ethics Code. We recognise the significance of our actions, and are committed to creating a positive environmental impact.

This is LSE's first standalone public sustainability report. It summarises our environmental achievements over the 2012-13 academic year and highlights plans for future progress. We also hope that just as we at LSE have been inspired by the actions of others, some of the ideas for positive change we have put in place at the School will ripple outwards through the education sector and beyond, contributing to further debate and action in the wider world.

As the UN international Decade of Education for Sustainable Development draws to a close in 2014, our future vision is that LSE continues to move towards embodying an integrated, fully sustainable academic institution. We will continue to conduct world-leading research that influences international climate policy, and teach our students so they become responsible global citizens who understand the complex web of issues surrounding questions of sustainability. We will also continue to "walk the talk", through the excellent management of our own estate and associated environmental footprint.

We hope that in unifying these activities within our own institution, we will make our small contribution towards wider efforts to securing our collective future on this planet.



Professor Craig Calhoun
LSE Director



Executive Summary

This report summarises our progress in delivering LSE's Environmental Sustainability Policy in the 2012-13 academic year, and meeting the commitments set out in our Ethics Code. Although we have publicly reported on our environmental performance annually since 2006 in the Annual Accounts, this is our first standalone Annual Sustainability Report. It is aimed at all LSE students, staff and alumni, as well as interested members of the public. It may also be of interest to those working in the sustainability field, particularly within higher education.

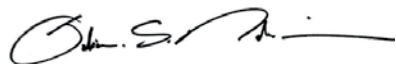
The report is structured according to the objectives of our Environmental Sustainability Policy, highlighting progress in each of these areas. It also notes particular awards we achieved in 2012-13, and outlines the overall approach to environmental management.

2012-13 saw a large number of sustainability projects undertaken. A record number of student and staff applications to the Sustainable Projects Fund received funding. The revitalised furniture re-use project made huge savings in terms of waste and money. A record 50 teams participated in Green Impact, a competition to help staff take grassroots action to reduce the environmental impacts of their workplace.

Recycling and re-use rates improved compared to 2011-12. Unfortunately energy consumption in 2012-13 increased from the previous year, despite continuation of lighting upgrades and energy efficiency campaigns – this was due to the exceptionally cold winter, and the expansion of the estate.

In 2013-14 we will again strive to reduce energy consumption and carbon emissions, whilst continuing to improve waste separation rates to boost recycling. We will measure energy and water usage in even greater detail, and get smarter at analysing consumption data to focus our efforts. We will also ensure the new building currently being designed on the LSE campus, the Global Centre for Social Sciences, achieves the highest standards of environmental sustainability.

We look forward to reporting back next year on our continuing journey to improve our environmental performance.



Julian Robinson
Director of Estates



Environmental Management at LSE

LSE's Environmental Sustainability Policy identifies the School's most significant environmental impacts, and sets objectives to continually improve performance in each of these areas. The policy is embedded into everyday life at the School using an Environmental Management System, which puts robust systems in place to strategically manage, monitor and improve our

environmental footprint. The EMS has been certified to the internationally recognised ISO 14001 standard since July 2012.

We have clearly defined responsibilities for steering and delivering environmental progress, and the management structure of these roles is shown below.

LSE environmental reporting structure



In addition to these formal management structures, we keep in constant contact with LSE staff and students. The School works with the LSE Students' Union and student societies to run events and collaborate on projects like the Sustainable Projects Fund. We also run Green Impact in over 50 teams across the School, to support staff taking localised action to enhance the environmental impact of their own offices.

LSE also has a publicly available Carbon Management Plan, which is a detailed action plan to cut energy consumption and reduce carbon emissions 54 per cent by 2020 compared to a 2005 baseline.

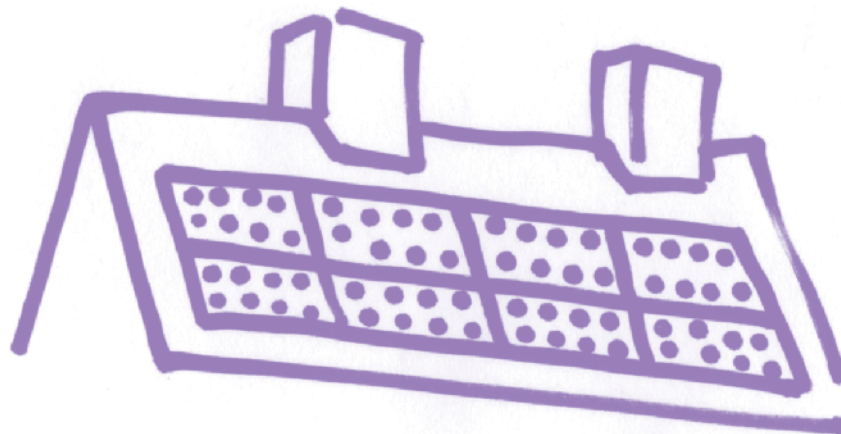
Goal:

LSE's Carbon Management Plan reduces our carbon footprint by cutting our energy consumption. Our target is to reduce carbon emissions 54 per cent by 2020 compared to a 2005 baseline.

Energy and Carbon

Progress

- In the 2012-13 academic year, we emitted 13,704 tonnes of CO₂e:
 - This was a 5 per cent increase from 2011-12, which was partly due to the exceptionally cold winter, and partly caused by the inhabitation of the newly renovated 32 Lincoln's Inn Fields building.
 - The People and Planet Green League ranked LSE 1st among the Russell Group universities for renewable energy, and in the top 10 for carbon management.
 - We made progress towards our carbon reduction target by:
 - Increasing energy efficiency by upgrading lighting across the LSE estate and calibrating Building Energy Management Systems to ensure optimal building heating and cooling levels.
- Saving 43 tonnes of CO₂e by generating electricity from solar panels on the roofs of buildings on campus, residences and the Sportsground, as well as a Combined Heat and Power unit. This saving is equal to taking nine cars off the road, or enough to run the entire Anchorage building.
- The carbon footprint of our IT use is currently being calculated for the first time.



Continuing Progress

- Guided by our Carbon Management Plan, we plan to further reduce our carbon footprint by:
 - Reviewing options for the Mayor of London's RE:FIT energy efficiency scheme, further improving energy efficiency across the LSE Estate. This will potentially save 18 per cent of our energy use, or 8,500t CO₂e.
 - Re-instating an auto-shutdown setting on all computers on campus, following the implementation of a School-wide IT upgrade.
 - Deploying energy monitoring software, TEAM, to identify opportunities for energy conservation.
 - Installing more Combined Heat and Power units across the LSE Estate.
 - The IT carbon footprint study will be developed in more detail to get a better estimate of energy use.

The LSE Community, Energy and Carbon

- LSE staff and student actions saved an estimated 157 tonnes of CO₂:
 - Students living in LSE residences reduced electricity use by 6 per cent as part of the participated in the National Union of Students' Student Switch Off, saving about £11,000 and 78 tonnes CO₂.
 - 40 LSE staff teams conducted energy awareness outreach through the Green Impact programme, saving an estimated 79 tonnes CO₂ from being emitted and about £12,000.
- These savings were equal to taking 32 cars off the road, or enough to power and heat 21 homes for one year.

Collective Action

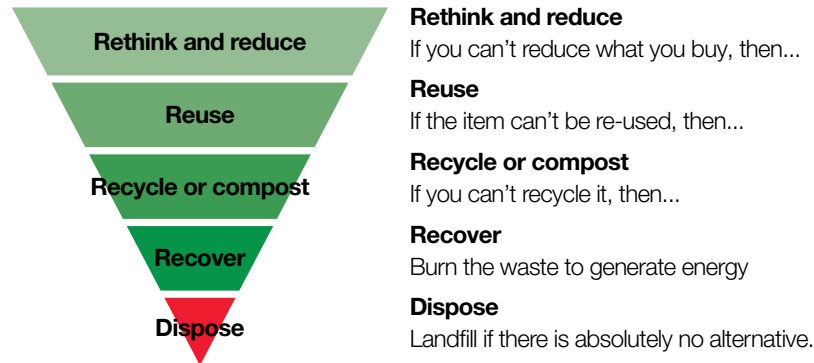
- Staff, students and visitors can switch off lights, IT and AV equipment, and personal heaters when not in use.

Goal:

We aim for zero-waste to landfill.
We do this by employing the "rethink, reduce, reuse, recycle" waste hierarchy in our waste and resource management efforts.

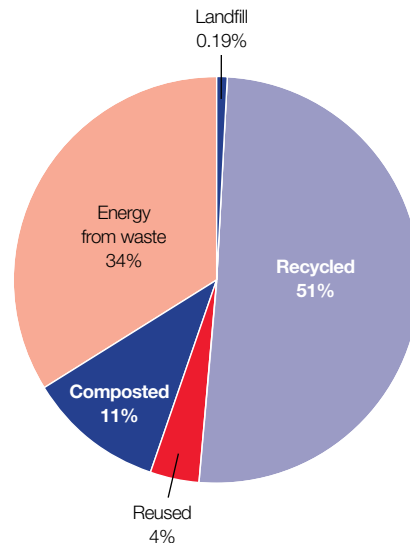
Waste and Resources

The Waste Hierarchy



Progress

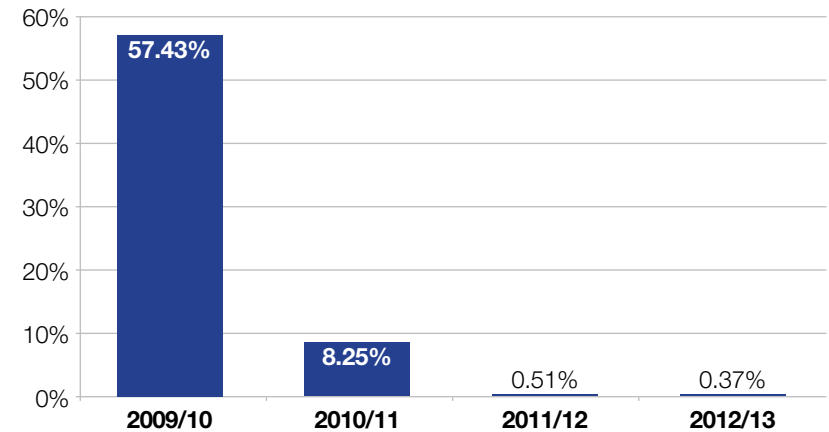
- LSE produced a total of 1,795 tonnes of waste in 2012-13, not counting construction waste.
- The pie chart below shows the destinations of this waste. 66 per cent was recycled, reused or composted.



LSE waste disposal

- In 2012-13 we diverted all but 0.37 per cent of waste from going to the landfill. In 2010-11 a new waste management system was rolled out across campus, allowing for a dramatic increase in diverting LSE waste from landfill.

Percentage of waste sent to landfill



- We made progress toward waste diversion and prevention this year by:
 - Reducing Waste:
LSE Catering outlets sold over 350 reusable Smart Mugs in 2012-13.
 - Reuse:
The furniture reuse scheme was re-instated across the School. This prevented 328 pieces of furniture being wasted, saving an estimated 15 tonnes of CO₂e and £25,864.
 - Recycling:
Students and staff were trained on how to separate their waste correctly, to improve recycling rates.
Waste collections schedules were reviewed to maximise efficiency.

Continuing Progress

- In 2013-14, we will:
 - Review our waste contracts, to improve recycling and composting rates.
 - Evaluate options for a new waste compactor, to cut the frequency of waste collections needed.
 - Enhance student engagement, to improve waste separation.

ReLove and the Sustainable Projects Fund

Students moving out of halls of residence can donate their usable but unwanted items to the ReLove scheme instead of throwing them away. In 2012-13 this diverted 9.8 tonnes of goods from landfill (up from 7.9 tonnes in 2010-11). The resale of these items to new students raised £1,800 for the Sustainable Projects Fund (SPF), which supports student and staff-led sustainability projects on campus. Look out for SPF projects mentioned throughout this report!

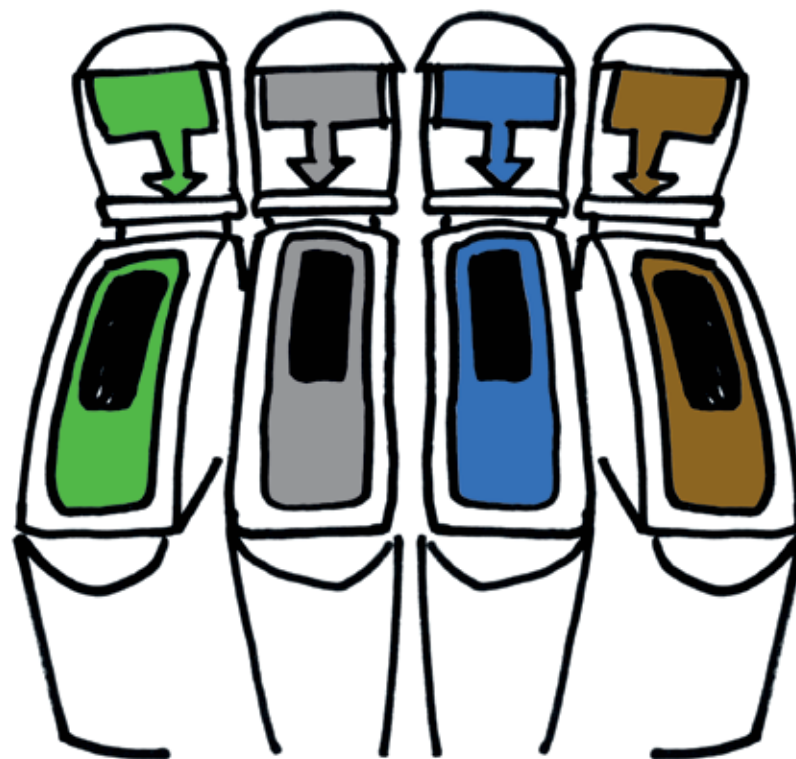


Sustainability Team



Collective Action

- Students and staff can donate to the ReLove scheme at the end of Summer Term, or buy second-hand household goods and stationery from the ReLove sale at the beginning of the academic year.
- All members of the LSE community can ensure that the only items placed in the non-recycled waste are:
 - Crisp packets and sweet wrappers.
 - Polystyrene.
 - Chewing gum.



Goal:

We create built environments that incorporate environmental criteria into material and contract specifications, which allow us to reduce the environmental impacts over the whole life cycle of our buildings.

Construction and Refurbishment

Progress

- New construction:
 - In a commitment to providing excellent student experience, the new Saw Swee Hock Student Centre was awarded BREEAM “Outstanding” status. BREEAM is an international standard that evaluates the environmental sustainability of a building’s design according to a range of factors, including energy and water consumption, and the wellbeing of occupants.
- Refurbishment:
 - The newly purchased 32 Lincoln Inn Fields (32 LIF) was refurbished to BREEAM “very good” standard.
- Salvaging and reusing materials:
 - 1,000 light fittings and several water heaters were salvaged from 32 LIF and re-used elsewhere on campus.
 - Radiators from a recently demolished building were used elsewhere around campus.
 - £100,000 was saved through these re-use measures.

Continuing Progress

- All new buildings will continue to be BREEAM “Excellent” or higher.
- We will pilot using the RICS SKA system to certify the sustainability of refurbishment projects.

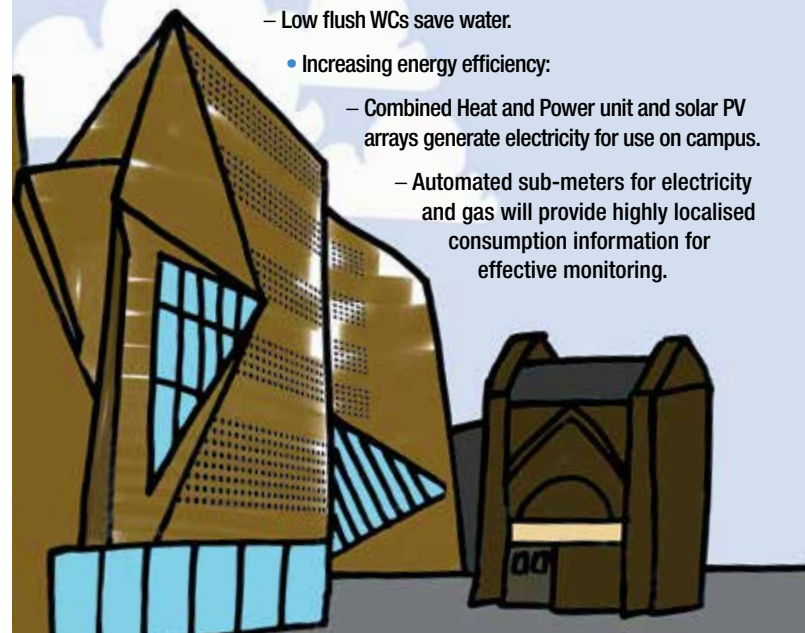
The Global Centre for Social Sciences

A new building at the heart of the LSE campus will house the new Global Centre for Social Sciences. Construction of this major project will begin in 2015. 2013-14 will see preliminary work undertaken with the architects to refine the building design. This will ensure that the building has the lowest environmental impact possible, both during construction, and over the lifespan of the building.

Saw Swee Hock Student Centre

The Saw Swee Hock Student Centre is a new purpose-built centre to accommodate student services, enhancing the LSE student experience by providing world-class facilities. It opened for use in January 2014. It meets the highest environmental standards, and achieved BREEAM “Outstanding” status by:

- Improving biodiversity
 - A green roof, native plant species planters, a bat box and a bird box are featured on the 5th floor.
- Increasing water efficiency:
 - Rainwater and greywater is collected to feed WCs and plant equipment, reducing mains water consumption.
 - Low flush WCs save water.
- Increasing energy efficiency:
 - Combined Heat and Power unit and solar PV arrays generate electricity for use on campus.
 - Automated sub-meters for electricity and gas will provide highly localised consumption information for effective monitoring.



Goal:

We strive to minimise water consumption across campus and in halls of residence. We do this by promoting positive behaviours and installing water-efficient infrastructure.

Water

Progress

- In 2012-13 LSE consumed 207,485 cubic metres of water, up 6 per cent from 2010-11. However, this increase is believed to reflect more accurate water metering capability, rather than an increase in actual consumption.
- We made progress towards water conservation by:
 - Installing 11 Propelair® toilets, which use a vacuum pump to consume just 1.5 litres of water in each flush, saving up to 7.5 litres per flush.
 - Maintaining existing water-efficient infrastructure, such as efficient taps and waterless urinals.
 - Improving metering information in partnership with Thames Water, by increasing the number of water meters and the frequency of meter readings.
 - Embedding water efficiency into the new janitorial supplies contract specifications. We now use foamed hand-soap that requires less water to rinse, and installed machinery that automatically dilutes cleaning chemicals to the correct concentration to avoid wastage.

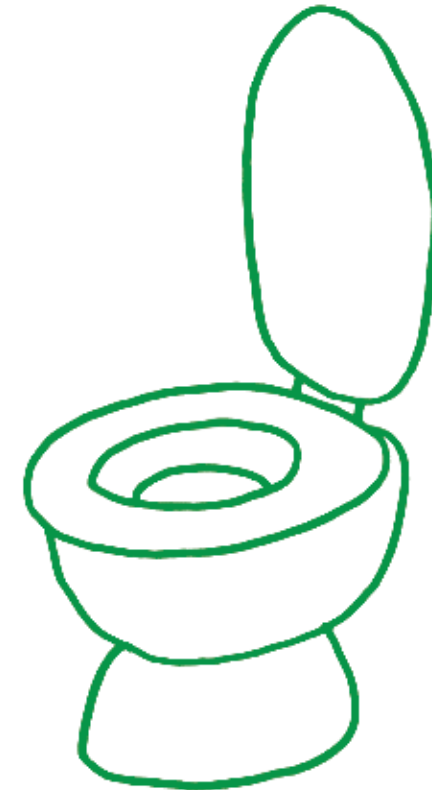


Continuing Progress

- We will establish a robust water consumption baseline, providing the basis of future reduction targets.
- We will install more Propelair® toilets across the LSE estate.

Collective Action

- Students who live in halls of residence can use a timer in the shower to avoid wasting water.
- All members of the LSE community can report leaks and dripping taps to the Estates Helpdesk.



Goal:

We consider social and environmental factors in our purchases, and require suppliers and contractors to comply with our Environmental Sustainability Policy.



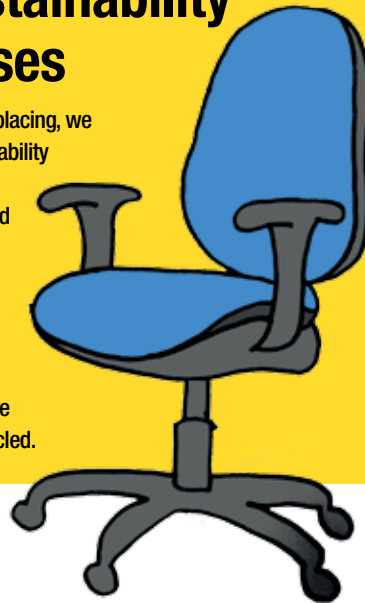
Procurement

Progress

- We signed up to the Mayor of London's Green Procurement Code, achieving the Silver Award when audited.
- A Sustainable Procurement Policy was developed. Margaret Newson, Purchasing Manager, was named as the Sustainable Procurement Champion.
- Carbon emissions from the procurement of goods and services were estimated to be 50,000 tonnes CO₂e.
- The Catering Team now require our fruit and veg suppliers to mark the area of origin on all deliveries. This allows us to make informed choices to increase the amount of local and seasonal produce we buy.

Ensuring the sustainability of major purchases

When 1,800 chairs in our library needed replacing, we purchased ones built to the highest sustainability standards. The new chairs were made of 94 per cent recycled materials and designed to last over a decade, and the factories manufacturing them were inspected. When the supplier delivered the chairs, they collected the packaging for re-use in future deliveries. Students were involved in the selection process. The old chairs were manually dismantled so they could be recycled.



Continuing Progress

- We will develop a Sustainable Procurement Strategy based on the new Sustainable Procurement Policy mentioned above.
- The Sustainability Team will devote additional resources to support the Procurement Team's ongoing work in this area.

Helping students to buy ethically

The 2012-13 Sustainable Projects Fund is supporting Timeless, a major multi-cultural student theatre production, to procure their costumes from ethical and environmentally sustainable suppliers.



Goal:

We strive to prevent pollution to land, air and water caused by non-CO₂ emissions and discharges from buildings and equipment.



Goal:

We will consider ethical, social, environmental and governance factors in investment decisions.



Emissions and Discharges

Progress:

- A School-wide audit was conducted of all plant and equipment containing potentially polluting substances, eg, oils and ozone-depleting substances. The audit demonstrated that we have very few polluting substances on campus, and robust systems in place to avoid pollution from the ones we do have, by maintaining equipment to a high standard.



Continuing progress:

- In 2013-14 we will sign the Air Quality Pledge of the Mayor of London and the London Borough of Camden. In doing so, we will play our part to improve local air quality in the following ways:
 - Raise awareness of air quality as a serious issue.
 - Reduce particulate emissions from gas consumption in our boilers.
 - Further promote walking and cycling as options for students, staff and visitors to travel to campus.
 - Work with our suppliers to reduce particulate emissions from transportation, by streamlining the number of deliveries made to campus.

Income and Investment

Progress:

This is an increasingly important area of concern for LSE. The School's Ethics Code and Socially Responsible Investment Policy ensure the environmental and social sustainability of the School's income and investment practices.

Future progress:

The LSE Council will review the Ethics Code in 2013-2014, ensuring it remains fit for purpose.



Goal:

We strive to reduce emissions from transport that is associated with the School – commuting, business travel, and delivery.

Transport

Progress

- Encouraged low-carbon travel:
 - A tax-free salary-sacrifice bike-purchasing scheme helped 46 members of staff buy a bike and start commuting to work.
- Helped people avoid unnecessary journeys:
 - Our phone system was upgraded to allow online conferencing from all LSE phones.
 - A state-of-the-art video-conferencing suite was installed, enabling staff to hold meetings with colleagues from all corners of the world without needing to leave campus.
- Carbon offsetting:
 - We launched carbon offsetting guidance for departments who wanted to offset their travel emissions. This was based on research by the LSE Grantham Research Institute on Climate Change, which assessed the offsetting schemes with the highest standards of ethics and verification.

Continuing Progress

- Analysing our travel emissions:
 - A travel survey will be conducted in 2013-14, asking students and staff about their travel habits to enable us to calculate the associated carbon emissions. This will increase the accuracy of our overall carbon footprint by including Scope 3 carbon emissions data, ie, carbon emissions arising indirectly from LSE activities. The survey will also allow respondents to give feedback on cycling infrastructure.
- Evaluating options to encourage sustainable transport to campus:
 - Plans to establish a bike lending scheme will be considered, by making use of the bikes that are abandoned on campus every year.

Bike maintenance stands

Two bike maintenance stands were installed, providing tools and instruction manuals for students and staff to repair their bikes on campus. The project was the brainchild of Oliver Lysaght, an BSc Environment and Development student. The stands were built with funding and support from the 2012-13 Sustainable Projects Fund, and are located in the secure cycle storage areas in Tower 2 and the New Academic Building. We hope that they will make it easier for students, staff and visitors to come to the School by bike, and will contribute to our cycling culture.



Collective Action

- Staff and students can cycle or walk onto campus, or opt to reduce or offset their LSE-associated air travel.
- Members of the public who choose not to travel to the School for public lectures and events can catch up with the podcasts online.

Goal:

We are committed to enhancing, conserving and monitoring biodiversity and habitats on the School estate including our main campus, halls of residence, and our 11 acre sportsground.

Biodiversity and Urban Landscapes

Progress

- We worked toward enhancing, conserving and monitoring biodiversity by conducting a biodiversity survey of the LSE campus and halls of residence. The report, produced by the London Wildlife Trust, included a number of recommendations for ways that the School could enhance biodiversity on campus. These included installing more green roofs, as well as bat and bird boxes.

Continuing Progress

- We will implement suggestions from the 2012-13 biodiversity survey, such as increasing wildflower plantings.
- We will conduct a biodiversity survey of our Sportsground.

Collective Action

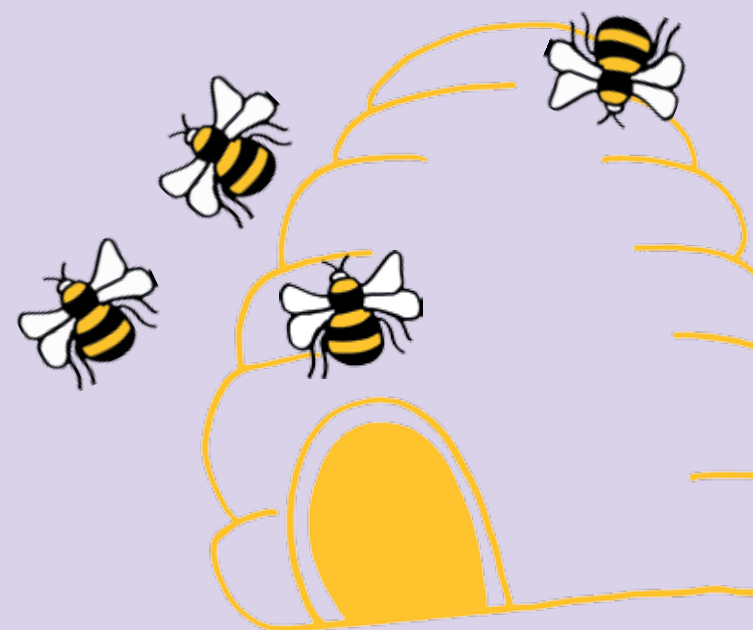
- Staff and students can directly improve the biodiversity of our campus and halls of residence by joining the Rooftop Gardening and Beekeeping Societies.

LSE community: gardening and beekeeping

The Passfield Hall of Residence garden was improved, with £6,000 from the 2012-13 Sustainable Projects Fund. We installed two raised planters, compost tumblers, garden benches featuring planters, and rainwater butts.

Back on campus, students and staff worked together to maintain an active rooftop gardening community, which maintained and increased the biodiversity of the campus by planting flower and vegetable gardens.

Staff and student members of the LSE Beekeeping Society added a second beehive to the roof of Connaught House, funded by the LSE Annual Fund. As well as providing some very tasty honey, this will contribute to the biodiversity of the local area.



Goal:

- **Conduct research** that informs public policy on environmental and social issues.
- **Teach students** about sustainability issues, equipping them to become responsible global citizens.
- **Provide training** on environmental issues to LSE staff and students.

Education for Sustainable Development

Progress

- Research:
 - LSE's Grantham Research Institute on Climate Change and the Environment and Department of Geography and Environment remain world leaders of environmental thought by conducting socio-economic research on climate change and the environment.
- Teaching:
 - Undergraduate and postgraduate courses and modules feature a range of social science approaches to environmental, social, political and economic elements of sustainability. These are not just found in the Geography and Environment Department where they might be expected, but right across the School.
 - The LSE 100 course gives all undergrads an understanding of key global issues, including climate change and the environment.
 - The LSE Sustainability Team worked with the Department of Government to incorporate real-life environmental problems faced by the School as part of the set coursework.
 - The Sustainability in Practice public lecture series featured John Elkington, Giles Hitchens, and a Climate Week debate.
- Training and guidance:
 - Students and staff continue to receive training on several areas of sustainability, including waste and energy management.



Continuing Progress

We are developing innovative sustainability training for all Estates staff, featuring an e-module and group workshops. This will train staff on how to address environmental issues in their daily roles at the School, whilst putting this into a global context.

The Sustainability Team will work with the Department of Management to develop material which integrates sustainability into an undergraduate project management module.

Maths and Stats Go Green

The Sustainable Projects Fund awarded the Maths Department funding to incorporate environmental issues into core undergraduate Statistics homework examples. In 2013-14, the department will incorporate similar changes in core undergraduate Maths assignments.

Collective Action

All are welcome to attend the annual Sustainability in Practice lecture series and other LSE events, which can be found on the LSE Public Events website.

Goal:

We are committed to communicating on sustainability issues with interested parties. This includes the LSE community of staff, students and alumni, the wider public, and the higher education sector.



Community Involvement

Progress

- In 2012-13, we fostered community involvement in sustainability policy and practice on campus and beyond by:

– Opening new channels of communication:

We launched the LSE Sustainability Blog, which covers myriad sustainability topics, and is open to contributions from across the LSE community. We also launched Twitter and Facebook profiles.

– Maintaining existing channels of communication:

The Green Impact programme, which supports staff to take small steps to improve the environment impact of their office, saw a record 50 teams take part. This remains the main way that engage with staff on environmental issues at the School. 235 students took part in Student Switch-Off, a competition that encourages students in LSE halls of residence to save energy and reduce waste.

The annual Celebration of Sustainability took place in May 2012. Hosted by Susan Scholefield, the School Secretary, and Bob Ward of the Grantham Institute, we recognised the achievements of all staff and students involved in Green Impact, Student Switch-Off, and other environmental projects across the School during 2012-13.

We kept the campus updated with our Green News bulletin.

– Maintaining active participation and leadership within the Higher Education Sustainability Sector:

We were active participants in the Green League Oversight Group, which helps improve the People and Planet Green League, an annual ranking of the sustainability of UK universities.

We are a member of the Executive Committee of London Universities Environmental Group (LUEG).

We sit on the Members' Advisory Committee of the national Environmental Association for Universities and Colleges (EAUC).

Co-chaired the London Universities Purchasing Consortium (LUPC) waste-tender group.

Sustainable Projects Fund 2012-13

The Sustainable Projects Fund is a prize-fund to support student and staff-led projects to enhance sustainability within the LSE community. It's funded by a 10p "tax" on each bottle of water sold at LSE catering outlets, as well as proceeds from the Relove fair (see the Waste section, page 6). It's run by the Sustainable Futures student society with support from the LSE Estates Division.

Seven great projects received a total of £14,000 in 2012-13, including:

- Greening the maths curriculum by introducing environmentally-themed assignments.
- Bike maintenance stands with tools allowing cyclists to fix their own bikes on campus.
- Improvements to the garden in Passfield Hall.
- Student research on how networks of communication work across LSE, enabling us to get better at listening to and engaging with students on sustainability.

Continuing Progress:

We will listen to the views on sustainability of the whole LSE community, by undertaking a deep and wide-ranging programme to engage with all students and staff. This dialogue will help us improve the existing environmental work we do, and will also shape a new sustainability strategy for the School, containing a vision for the direction of future progress.



Awards in 2012-13

Environmental Excellence in Camden Organisations (EECO) Award for “Advancing renewable energy generation”. (November 2012)

The EECO awards are held annually by the Camden Climate Change Alliance, which helps Camden-based organisations improve their carbon footprints.

Green Gown Awards: Highly Commended in the “Student Initiatives and Campaigns” category, for the Sustainable Projects Fund. (November 2012)

The Green Gowns annually recognise sustainability excellence in UK universities and colleges, and are held by the Environmental Association of Universities and Colleges (EAUC).

Top among Russell Group universities in CRC Energy Efficiency Scheme 2011-12 league table. (February 2013)

The CRC Energy Efficiency Scheme is a government scheme to get organisations to cut carbon, by creating mandatory reporting and tax requirements for the highest emitters in the UK. From 2009 until 2012, emissions were published in a national league table.

London Mayor’s Green Procurement Code – silver award. (March 2013)

The Mayor’s Green Procurement Code was a scheme that supported London organisations to buy more sustainably, and audited them to assess their progress.

LSESU STARS (Student Training and Awards Recognition Scheme) Silver Award won by the student Sustainable Futures Society. (April 2013)

The LSE Students’ Union STARS awards recognise student societies’ contribution to enriching the life of the LSE student community.

eFIG Interior Landscape Excellence Awards: “Gold Leaf” (April 2013)

Won by Plantforce Ltd for the installing the LSE Plaza Café green roof. The eFIG Awards recognise excellent landscape design, and are held annually by the European Federation of Interior Landscape Groups.

People and Planet Green League: 22nd place. (June 2013)

People and Planet are a student NGO campaigning for universities to become more sustainable. Their annual Green League ranks all UK universities according to their environmental and social impacts. As well as coming 22nd overall, LSE achieved a “First degree” award for the fifth year running, and came 3rd among the Russell Group universities, and 2nd in London.

ISO 14001 re-certification. (July 2013)

ISO 14001 is an internationally recognised standard that demonstrates LSE has robust systems in place to manage and continually improve its environmental impacts, verified by annual external audits.

People and Planet Green League 2013: Student and staff engagement award (awarded in February 2014 as part of the June 2013 Green League)

LSE was recognised for having the best student and staff sustainability engagement of any UK university.

