

Five most significant environmental impacts within the Mathematics Department

With reference to LSE's ten Environmental Policy objectives, which can be found here (<http://www2.lse.ac.uk/intranet/LSEServices/estatesDivision/sustainableLSE/about/EMSatLSE/enviroPolicy.aspx>), we have identified, ranked and documented what we believe are our five most significant negative environmental impacts:

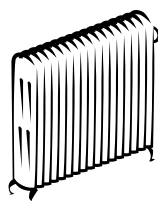
1. Travel for research



(Refers to the policy objective on transport)

This is by far the Department's greatest negative impact, and will be difficult to change in the short-term. Whilst domestically all travel is via public transport, colleagues travel overseas frequently to attend conferences or collaborate with other researchers, and this involves a number of flights per year.

2. Heating



(Refers to the policy objective on energy and carbon)

We do not make excessive use of heating in our department, (we've proactively encouraged staff to be conscious of their radiator settings and keeping these as low as possible), but given that we have few other significant negative environmental impacts, heating is still likely to be our greatest use of energy as a department. The installation of secondary glazing on 3rd floor of Columbia House, and of thermostatic control valves on all Columbia House radiators, will however help us to keep wastage to a minimum in future. Checks and modifications were made to a number of windows/radiators on the 4th floor during the summer 2013 building works.

3. Procurement (in general)



(Refers to the policy objective on procurement, but also on transport, and on waste and resources)

What we buy as a department, whether it is our stationery, IT equipment, furniture, tea, coffee or milk, comes at a negative environmental cost. It all has to be 'produced', often requiring significant energy and water usage. Then it has to travel to LSE, and in some cases we have minimal control over where it travels from, and what method of transportation is used. Finally, most bought items, regardless of their nature, arrive in some sort of packaging. In many cases, this can be recycled or reused, but nonetheless waste is often generated as a result of procurement. Engaging with LSE's suppliers, both at institutional level and at departmental level, is a first step in improving the negative environmental impacts procurement can have.

4. Paper/printing/photocopying



(Refers to the policy objectives on energy and carbon, and on waste and resources)

We are not excessive users of printing and photocopying, and have made many efforts to reduce our negative impact in this area, but inevitably in an academic department responsible for teaching many students, a lot of printed material is produced. This means using a lot of paper, and a lot of energy in the printing/copying process. The purchase of a shared use scanner in 2013 has encouraged the use of scanning and saving documents, rather than copying, amongst colleagues.

5. Coffee machines and kettles



(Refers to the policy objective on energy and carbon)

The department has two coffee machines – mathematicians run on coffee – and two kettles. The coffee machines are switched on for most of each working day, and the kettles get regular use. Heating elements use a large amount of electricity when active, so these machines will contribute significantly to our carbon emissions as a department. Recent experiments using a water boiler unit in place of a kettle showed that, for our department, a kettle still uses far less energy than a water boiler. We're therefore retaining our kettles!