



British
Geological
Survey

2021/2022 HIGHLIGHTS

BGS environmental sustainability report



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Reduce energy and fossil fuel consumption on site

Submetering has been installed in our Keyworth and Hartland sites and energy usage can now be monitored for specific areas.

The solar car port was started in March 2022 with a completion date of May 2022. The solar car port is estimated to deliver 300 500 kWh of energy per year.

The air-source heat pumps for three buildings have been completed and are now off gas. Other improvements to buildings include new thermally efficient windows and low energy (LED) lighting in four buildings.

The building management system optimisation survey has been completed and the work will be carried out throughout 2022. A decarbonisation heating plan is being developed for Keyworth and our observatories. In addition, we are investigating the potential of heat recovery systems for our computer server rooms and the chiller systems.

Reduce water usage

Water use and wastage surveys have been done for Edinburgh, Keyworth and our Observatories. We are now looking at improving environmental compliance. A review of water usage in the laboratories has been completed and submetering installed to help locate leaks.



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Reduce waste sent to landfill

We continue to develop staff engagement through various initiatives, including recycling paper, both hard and soft plastic, batteries and pens. Some areas have small composting containers for coffee granules, fruit peelings, etc. and we have a central compost bin on the Keyworth site.

We have published a waste management handbook.

We continue to encourage staff to reuse surplus items for home use, such as core boxes and pallets, which have been made into bird boxes, insect hotels, fencing, planters, etc., and furniture.

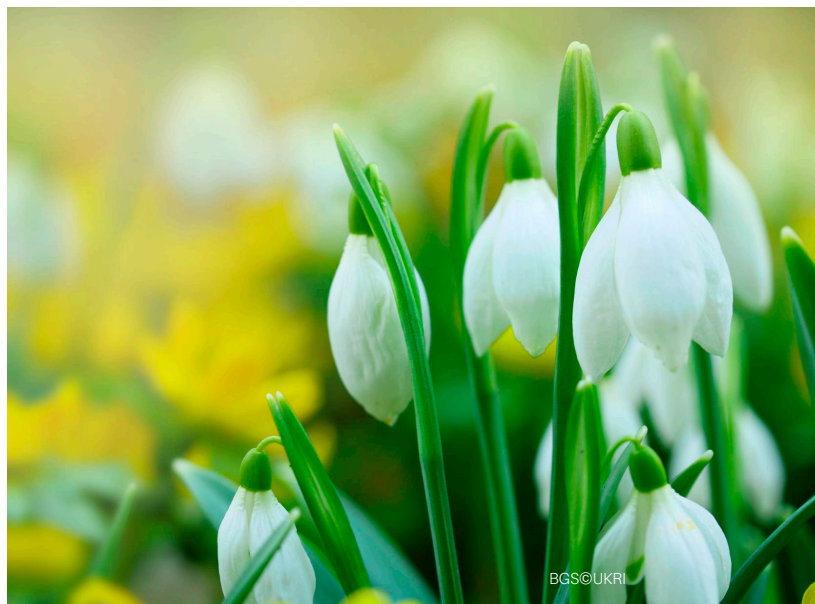
A draft waste specification for an integrated waste contract has been developed ahead of a new waste management tender.

Reduce and recycle paper

The number of printers on our sites has been reduced from 51 to 36. The use of paper is down by more than 50 per cent and we continue to look at moving to 100 per cent recycled paper for in-house, day-to-day printing.

When using external service providers, we now specify 100 per cent recycled paper and only use providers that hold carbon-balanced accreditations.

The cost of 100 per cent recycled paper is being monitored. If alternatives are used, they will be at least 50 per cent recycled paper or derived from sustainable forestry. New online print platforms allow a 'just-in-time' approach and therefore we print only what we need.



We encourage virtual-first working, utilising online platforms and sharing media. We have advertised the use of digital business cards and will be printing business cards only for staff with specific overseas business requirements.

Increase biodiversity

A small orchard and a cherry tree walkway have been planted at Keyworth. The summer (March–October) no-mow area has been increased to 80 per cent at Keyworth and no-mow for bees signs have been erected. Daffodil bulbs have been planted close to the Keyworth site entrance.

Through specific biodiversity funding from NERC, we have installed 60 birdboxes for owls, swifts, sparrows, blue tits, great tits and robins. A grass snake habitat has been created by removing old leylandii in a sunny corner of the Keyworth site close to a small stream; we have added woodchip,

logs, corrugated iron sheeting and a compost bin to encourage reptiles.

A small woodland area that borders the Keyworth site, named the Mary Ward Nature Area, has been cleared of dead and dying trees and branches. Some areas of bramble have been removed and 12 000 spring bulbs planted, the path (a public right of way) has been woodchipped and signs have been installed. This area is monitored for wildlife via cameras. Key sightings include foxes, badgers, deer and birds of prey.

The bee orchids at Keyworth continue to flourish and be observed.

More sustainable laboratories

Fifteen laboratories across the Keyworth and Wallingford sites have been given the Silver Laboratory Efficiency Assessment Framework

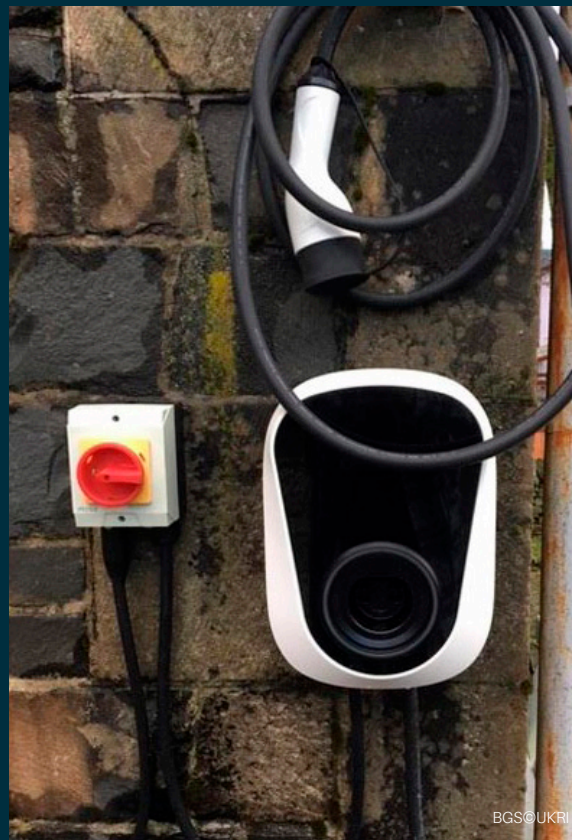


(LEAF) award. This was initially piloted in two Keyworth laboratories before being rolled out to 13 further labs. Two new labs were brought into the assessment and were awarded both bronze and silver this year. Labs shared the measures implemented for silver accreditation and outcomes were assessed through peer review, ensuring that good practise was widely shared. We also continue to liaise with BAS and several other NERC facilities to share good practise. Initial planning has taken place to prepare for a gold submission in 2022/23.

We continue to discuss how we can improve the sustainability of our existing laboratories. For example, we have made further improvements through purchasing more energy efficient fridges and drying cabinets in several labs where the existing equipment was energy intensive.

Climate change adaptation

We have investigated the risk of flooding to the BGS sites and to the NERC observatory sites (Capel Dewi, Eskdalemuir, Hartland and Herstmonceux). We reviewed existing assessments of the risk of flooding at these locations and BGS science staff then improved the assessments for Keyworth, Edinburgh and the NERC MST Radar Facility at Capel Dewi. Detailed models of river and surface water accumulation have been developed for Keyworth and Edinburgh to quantify flood risk under current and future climate conditions. The findings of the studies, including recommendations about measures to reduce flood risk, will be published in May 2022 in the form of a summary report and detailed technical report.



Low-carbon working

Environmental sustainability training is now included in the BGS induction.

Environmental sustainability has been added into the project initiation document ahead of projects being approved.

We published a blog post directing staff and public to the Rushcliffe County Council (for Keyworth staff) Green Rewards app.

The staff restaurant at Keyworth now has a vegan/vegetarian option every day, we offer fair trade snacks and home-made cakes, and we no longer sell bottled water.

More sustainable procurement

We are developing sustainable procurement tools, with support from UKSBS, to measure and monitor our sustainable procurement strategy. A discussion around sustainability forms part of the new

requirements to purchase ahead of procurement activity (including equipment and services).

Environmental considerations have been built into the specification and evaluation of tenders where the estimated contract value exceeds the procurement threshold. Suppliers are also required to provide their carbon reduction plans as part of the tender process for high-value contracts.

Advocacy, awareness and communication

A sustainability communications subgroup meets monthly and have put in place a calendar of activities that will provide increased advocacy, awareness and communication.

During 2021/22, external communications included several articles on BGS rewilding activities, green initiatives at work and the solar panel installation on the roof of the BGS Core Store. In addition, we have promoted our updated sustainability strategy and

shared footage from the wildlife camera traps on site at Keyworth.

Internal communications have also been a focus, with an all-staff survey, a mini-campaign on sustainable festive activities and new interpretation around the Keyworth site to promote wilding activities. Environmental sustainability is also now a standard item at the BGS Senior Management Board meetings and has a presence during the all-staff Q&A sessions.

Reducing the environmental impacts of business travel and culture

We have published a carbon accounting methodology based on harvesting information from permission to attend and permission to travel forms. The flight C calculator and revised permission to travel form now provide carbon information to inform travel planning. The metrics are harvestable.

We have started the trial of the implementation of the business travel carbon management system (from April 2022).

We have initiated a project to work on agreed business travel carbon reduction targets for 2022/23.





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Contact us

E enquiries@bgs.ac.uk

T 0115 937 3100

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