The University of Reading used

interest-free funding from Salix Finance to install ventilation upgrades to a number of fume cupboards in their laboratories. The university now benefits from reduced annual energy costs and carbon emissions. This is how they did it.



Project overview

The University of Reading identified fume cupboards in their teaching labs which had been running 24/7 since they were installed. Utilising £187,000 of interest-free Salix funding, £418,000 from the Salix/HEFCE joint funded Revolving Green Fund 4 (RGF4) and £405,000 of their own internal funding, the University installed ventilation upgrades to fume cupboards in their laboratories.

The fume cupboards now operate only when required which is estimated to be 12 hours per day, 5 days per week, and 25 weeks per year.

These works have reduced the carbon emissions of the fume cupboards by over 72% and are generating estimated financial savings of over £316k per year while still retaining the integrity of extraction levels essential for handling hazardous chemicals.





"Our fume cupboard efficiency programme has delivered some of the best savings we have achieved through our ongoing Carbon Management Programme. The support and funding from Salix Finance was invaluable in making this scheme a reality, and in providing university decision makers with assurance that the anticipated financial returns would be delivered."

Dan Fernbank, Energy Manager at The University of Reading

Total measured savings from the University of Reading

Annual £ Savings £316,680

Lifetime £ Savings £3,249,137

Total Project Value £1,010,000

Project Payback 3.2 years

To apply, or for more information, please contact universities@salixfinance.co.uk







Working with Salix

Technical overview

Fume cupboards were running 24/7 prior to the upgrades.

Variable air volume and inverters installed in fume cupboards.

Actual savings far greater than predicted.

Sub-metering facilitated a case for estate-wide rollout.

Wider benefits

As a result of the success of the SEELS project, the University of Reading carried out an estate-wide review of all its fume cupboards, and commenced a £1m investment programme to improve their efficiency; including the £418k loan from the HEFCE/SALIX RGF4 scheme and £405k of their own funds.

Further advice

Energy wastage from fume cupboards can easily be underestimated.

Because of this, the University of Reading developed a calculator to provide a more accurate picture.

This can be found in the Knowledge Share section on the Salix website.

How can Salix help you?

- ✓ Interest-free funding from Salix for Universities.
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