



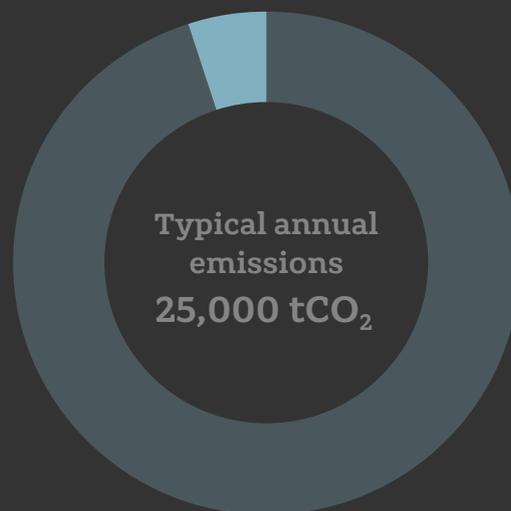
Blavatnik School of Government

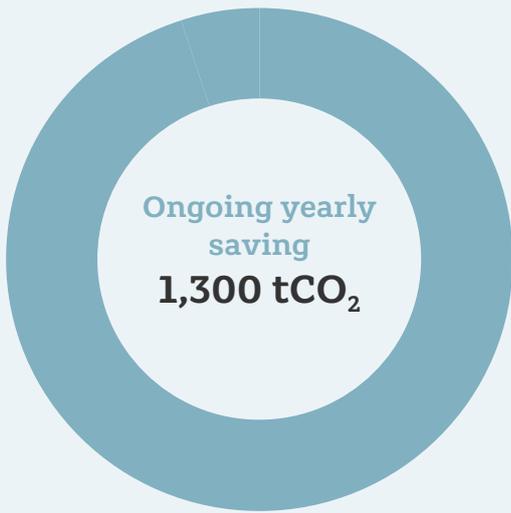
# Delivering performance optimisation. University of Oxford.

Over the last five years, our Performance Group has been running a BMS optimisation programme with the University of Oxford. The initiative included a comprehensive assessment and review of how some of the university's most energy hungry buildings are being operated.

No. of buildings investigated	20
Typical annual emissions	25,500 tCO <sub>2</sub>
Yearly saving realised	1,300 tCO <sub>2</sub>
Yearly cost saving realised	£375,400
Payback time	1.45 years
Cost of carbon saved	£408/tCO <sub>2</sub>

Ongoing yearly saving  
1,300 tCO<sub>2</sub>





## What this means...

### Return on investment (ROI). Payback times



BMS optimisation programme

1.45 years



Solar PV  
(based on latest ROI figures)

10 years

This makes the BMS optimisation programme as cost effective as buying one solar panel, and getting six free of charge.

### Carbon emissions. Yearly saving equivalents



x290

= taking 290 cars off the road



Department of Earth Sciences

## The story.

The BMS optimisation programme at University of Oxford really began with the new (at the time) Department of Earth Sciences building. Following handover, the systems began to underperform, and it became increasingly clear that the designed performance and actual performance were not aligned.

Hoare Lea had consulted on the original system design and was tasked with investigating the discrepancy between the predicted and actual performance of the building's systems. The investigation by our Performance group resulted in a huge number of energy savings made through simple control tweaks, without any impact to the comfort of the spaces.

Following this, we were asked by the University to examine the building control systems for over 20 other buildings across the estate, and explore ways that energy use could be optimised. This project has resulted in Hoare Lea and the University of Oxford developing a fantastic working relationship.

There are great environmental benefits along with the financial savings.

The BMS optimisation works run by the Performance group played an important role in helping the Oxford University Estates Department win environmental awards for their Carbon Management Programmes at both the BIFM Awards and CIBSE Building Performance Awards in 2018.

If you'd like to find out more, please don't hesitate to get in touch with [Roger Macklin](#).