Energy Usage Policy and Guidance

Document Control

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Owner and Key Contact(s)	Andrew Thomas Senior Energy and Carbon Manager, Estates
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Ensure links are updated online following amendments.

Version No.	**Date**	**Summary of amendments (if no change, write NA)**	**Author**
1	Dec 2022	First version	A Thomas
2	Feb 2025	Policy Owner changed from Director of Estates to Estates Director	A Thomas

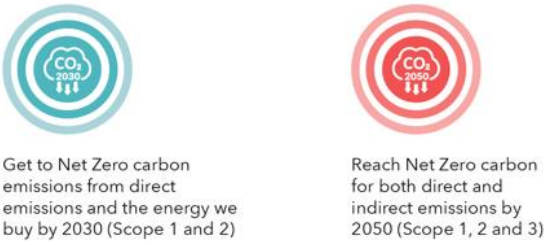
University Energy Usage Policy and Guidance

Contents

1. Policy Introduction and Purpose

This policy has been prepared in direct response to the approved W*ay to Sustainable* strategy. Further guidance within Appendix 2 of this document can be related directly to our overall approach and "way of thinking" about *Sustainability,* particularly the themes below.

Almost all of University Scope 1 and 2 carbon emissions occur because of the energy consumed on the University estate [1] with additional, Scope 3, emissions produced in the fuel extraction, energy generation and delivery supply chain. An effective energy usage policy and clear guidance can support energy and emissions reduction, addressing the two specific goals within the *Way to Sustainable* strategy below.



The carbon reduction implementation plan developed by the Estates infrastructure Group identified energy reduction as a key pillar in the route to achieving university carbon targets. The purpose of this policy is to articulate the University's commitment to responsible use of energy whilst at the same time provide healthy spaces within which people can work and live.

The policy includes guidance to energy users and operational staff which will reduce our carbon emissions across all Scopes and progress our contribution to the UN Sustainable Development Goals, specifically *SDG 7 (Affordable and Clean Energy)*, *SDG 9 (Industry, Innovation, and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action).*

[1] A small proportion of emissions relate to the escape of fluorinated gases (a *greenhouse gas*) from refrigeration equipment on campus.

2. Document Structure and Scope

This document contains both policy statements and guidance within Appendix 2 on energy usage.

This document is applicable to energy usage within all buildings on University of Warwick campuses, it does not extend to the following energy related items, where specific action plans and guidance will be developed under the *Way to Sustainable* operations improvement pathway.

- energy used in university owned transport.
- the particulars of energy conversion system performance management (e.g., boiler maintenance or replacement)
- the particulars of energy delivery control systems (e.g., weather compensation of radiator temperatures)

3. Responsibilities

3.1. All Staff and Students:

Every member of staff and every student has a responsibility to consider the implications of their energy use, take opportunities to reduce consumption and avoid wastage. Refer to further guidance within Appendix 2.

3.2. Heads of Department:

Department heads shall ensure that energy usage is managed within their Departments, implement processes to comply with the policy and regularly review its operations and practices to minimise energy consumption. Refer to further guidance within Appendix 2.

The University Green Champion network[2] is a well-established group of volunteer Staff and Students that currently support the University in improving its environmental performance.

3.3. Retail and Commercial Services:

Retail operators and managers shall ensure that energy consuming equipment, including lighting, heating and cooling and hot water systems, are operated efficiently and that staff are adequately trained to implement energy saving measures and actively promote positive behaviour on energy usage. Refer to further guidance within Appendix 2.

3.4. Estates Office:

The Estates Office representatives will drive improvement in building energy performance through its refurbishment and new build programme using best practice measures described in the *Building Services and Energy Efficiency Standards* document.

The Estates Office representatives will continually monitor significant uses of energy and identify and address areas of sub-optimal operation. Where technically and economically feasible, measures will be implemented to reduce energy consumption and improve availability of data. Refer to further guidance within Appendix 2.

[2] https://warwick.ac.uk/sustainability/environment/gettinginvolved/greenchampions/

3.5. University:

The University will support the application of this policy, uncontrolled energy consumption not aligned to this policy and supporting guidance is counter to the aims set out in the Way to Sustainable strategy and will be challenged.

4. Space Heating

Effective internal temperature management is one of the most effective ways of reducing energy demand and associated costs and carbon emissions[3]. Meeting the comfort needs of everyone within the University is very challenging and the cooperation and tolerance of all staff and students is appreciated in the management of building temperatures.

4.1. Heating Set points

Where staff and students are likely to remain sedentary for long periods (e.g. Offices, Libraries and Bedrooms) temperatures shall be maintained at 20°C. Spaces that are typically occupied for an hour at a time (e.g. Lecture Theatres) and spaces where occupants are likely to be more active (e.g. Laboratories) set points will be lower at 19°C. Set points in circulation spaces and areas of high activity (e.g. Sports Halls) will be lower than other areas but have a minimum target temperature of 16°C. A schedule of space types and temperature set points is provided in Appendix 1.

4.2. Portable Heaters

Use of portable heaters increases the risk of fire in buildings and cause localised high temperatures that can impact on the main heating system controls resulting in the heating system turning off.

The use of unapproved portable space heaters is not permitted in university buildings. Warwick staff members and students who feel that their work/living environment is too cold should contact the Estates Service desk (Estates.Servicedesk@warwick.ac.uk) in the first instance and approved portable heating may be provided if the main system is not working effectively.

5. Cooling/Air Conditioning

5.1. Provision of Cooling

The environmental and financial consequences of providing cooling for personal comfort for all Staff and Students across the University Estate are currently unsustainable.

The University will only provide cooling to spaces under the following circumstances.

*Where internal environmental conditions need to be maintained for scientific purposes or for the protection of sensitive collection materials.
* To prevent damage or malfunction of sensitive business-critical equipment.
* Where internal space temperatures consistently rise above 28ºC due to excessive heat gains that cannot be mitigated.

5.2. Cooling Set Points

Where cooling systems are installed for personal comfort, set points shall be no lower than 24°C, set points will be determined on a case-by-case basis for specialist areas. Refer to further guidance within Appendix 2.

[3] An adjustment of a single degree on a temperature setpoint can impact energy consumption by over 7%.

6. Heating and Cooling Set Point Derogation:

Thermal comfort is a subjective matter and there are many reasons why individuals may feel that the heating or cooling provided to their place of work or accommodation is insufficient.

Whilst we expect that the set points and guidance outlined in this document will provide a comfortable environment for many, we recognise that this will not be the case for some.

Should any staff member or student feel that the temperature conditions are not sufficient, then they should, in the first instance, discuss with their line manager who will support them in determining appropriate adaptations, changes that the University Estates Office will support as required.

7. Heating and Cooling Time Schedules

The duration that heating and cooling is provided to buildings is a key determinant in the energy consumption, associated costs and carbon emissions for our campus.

Most of the heating systems across the University are controlled by a central Building Energy Management System (BEMS). The BEMS will automatically start and stop the heating systems to ensure target temperatures are maintained.

All Heads of Department shall support the Estates Office representatives in optimising the heating time schedules for each building by nominating a responsible person to communicate up to date heating requirements based on achieving a balance between meeting departmental needs, conserving energy, and avoiding waste. Some typical heating schedules are provided overleaf, although all schedules will be regularly reviewed with building representatives and adjusted to match occupancy patterns.

Building Category	**Example Buildings**	**Time Schedule (Mon – Fri)**	**Time Schedule (Sat – Sun)**
Administration	University House, Senate House, Argent Court	0800 – 1800	No Programmed Schedule. Heating by request to bms.schedules@warwick.ac.uk
Teaching (non-Research)	Social Sciences, Mathematical Sciences Building	0800 - 2000	No Programmed Schedule. Heating by request to bms.schedules@warwick.ac.uk
Research Buildings	Interdisciplinary Biomedical Research Building (IBRB)	As required for Research Areas.	
Residential Buildings	Heronbank	0730 – 1000 On 1000 – 1500 Set Back 1500 – 2300 On 2300 – 0730 Set Back / Off	0730 – 1400 On 1400 – 1600 Set Back 1600 – 2300 On 2300 – 0730 Set Back / Off

7.1. Out of Hours Heating and Cooling

The University does not heat or cool buildings to the set points in this document outside of core occupancy hours unless specifically requested. During unoccupied periods low level heating will be provided if internal temperatures are likely to cause damage to building fabric or facilities.

8. Hot Water

Hot water consumption accounts for a significant portion of the energy used for heating at the University. In Residential blocks more than 50% of the total energy used for heating is used to heat hot water to supply taps and showers.

Every member of staff and every student should consider the implications of their water use – hot and cold and take all opportunities to reduce consumption and avoid wastage. Refer to further guidance within Appendix 2.

9. Electricity

Electricity is used at the University in a diverse range of applications and providing prescriptive guidance for all uses is not practical in this document. Although the University purchases its grid electricity from renewable suppliers, a significant proportion is still generated on campus using gas fired combined heat and power engines. Electricity can be a low carbon energy source for heating and transportation and this shift will be greatly supported by conserving electricity in other areas.

Every member of staff and every student has a responsibility to consider the implications of their electricity use, take all opportunities to reduce consumption and avoid wastage. Refer to further guidance within Appendix 2.

[1] https://warwick.ac.uk/sustainability/environment/news-events/sustainablelabsinitiative/

10. Communication

The entire University community is responsible for reducing energy consumption. To encourage changes in energy usage, the central Marketing, Communication and Insight team will co-ordinate communications with clear links to the Way to Sustainable strategy. Every department, both academic and support, will have a dedicated Green Champion who will help ensure University-wide participation.

The University will ensure that all University stakeholders, retail, partners, contractors, and visitors are fully aware of the Energy Policy, and associated procedures; providing education and advice where required.

11. Review

This policy will be reviewed when any legal requirements change or at least once every two years.

<table>
<tr><td colspan="4">Document Control</td></tr>
<tr><td>Version Number</td><td>Date issued</td><td>Author</td><td>Update information</td></tr>
<tr><td>V2</td><td>26th February 2025</td><td>A Thomas,
E Sanderson-Nichols</td><td>Policy Owner changed from James Breckon to Wendy Roberts</td></tr>
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12. Appendix 1: Space Temperature Set Points

Building / Room Type	Internal Temperature Set Point (°C)
Educational Buildings:	
-Corridor	17
-Teaching Laboratory	19
-Research Laboratories	Dependant on local requirements
-Lecture Theatres	19
-Seminar Rooms	19
-Teaching Spaces	19
-Entrance/Lobby's	19
-Toilets	18
-Workshops	18
-Computer Rooms	19
-Conference Rooms	20
Offices:	
-Small office	20
-Open Plan	20
Student Residencies:	
-Normal operating hours	20
-Set back hours (overnight)	16
Library:	
-Stairwells	18
-Workspaces	20
-Reading Areas	20
Commercial:	
Bars/Lounges	19
Concert Hall/Theatre	20
Cinema	20
Circulation Spaces	16
Foyers	18
Conference Centres	
Bathrooms	19
Bedrooms	20
Corridors / Lobby's	19

13. Appendix 2: University Energy Usage; Responsibilities and Guidance

A2.1. Detailed Responsibilities: All Staff and Students:

Staff and Students are expected to turn off equipment under their direct control when not in use and report energy wastage by building services to Estates Service Desk online or at 024 765 75100. Reportable items would include areas of under- or overheating, faulty automatic lighting controls, leaking taps/pipes, constantly flushing toilets or any other issue that results in energy wastage and is outside the control of the end user.

We encourage everyone in the University Community to help others to be energy efficient. Further advice can be found at www.warwick.ac.uk/environment or contact one of the Environmental Sustainability Team via sustainability@warwick.ac.uk.

A2.2. Detailed Responsibilities: Estates Office:

To reduce energy consumption and improve availability of data.

In support of the broad aims described above, the Estates Office will specifically, amongst other things:

- Assist all departments by providing Energy consumption data,
- Support end users in identifying areas of high energy usage and advising on opportunities to make reductions,
- Raise awareness of energy usage amongst all staff, students, and visitors/contractors,
- Demonstrate environmentally responsible behaviour in the workplace and adopt good housekeeping practices,
- Ensure that energy and carbon efficiency is embedded in all decision making,
- Support with the rationalization space to maximize utilisation and minimize energy consumption.

A2.3. Heating: User Guidance

It is difficult to satisfy everyone's needs in terms of thermal comfort and building users will need to take reasonable measures to adapt to local temperatures.

Staff and students are requested to:

- Anticipate how colder weather may affect building temperatures and dress appropriately.
- Consider keeping an additional layer of clothing in the office.
- Take regular breaks from stationary positions.
- Close windows and doors as appropriate to keep heat in the building. Circulation spaces and offices may be at different temperatures and closing doors will help maintain comfortable temperatures.
- Turn off local heating supplies before opening windows in cold weather and report areas of overheating rather than using window opening to manage temperatures.
- Ensure that radiators and heating controls are not obscured by furniture, clothing etc.
- Report observations of over or under heating or heating that is on outside the normal working day to the Estates Service Desk.
- Use local heating controls, including thermostatic radiator valves and electronic interfaces to manage temperatures in alignment with this policy.
- Shut fume sashes in laboratories when not in use.

- Make sure all windows and curtains are closed at the end of the working day.

A2.4. Cooling: User Guidance

Staff and students are requested to:

- Where practicable, open windows to provide cooling when outside air temperatures are below internal temperatures.
- Close windows and doors as appropriate when cooling systems are operational to stop hot air entering.
- Switch off standalone air conditioning outside occupied periods and set temperature controls no lower than 24°C during occupied periods.
- Anticipate how hot weather may affect building temperatures and dress appropriately.
- Report observations of overheating or cooling that is on outside the normal working day to the Estates Service Desk.
- Switch off equipment and lighting whenever possible to reduce unwanted heat gains.
- Avoid the use of inappropriate equipment (fridges and kettles) within academic/office areas to reduce unwanted heat gains.
- Adjust blinds to keep out direct sunlight.

A2.5. Out of Hours Heating and Cooling

Where there is a requirement for heating or cooling outside core occupancy hours users should notify Estates via bms.schedules@warwick.ac.uk providing the space location reference and start and end time of heating, where events are cancelled users are reminded to notify Estates on the email address above. Schedules for the upcoming week are entered on Friday afternoons so users are requested to plan ahead.

A2.6. Hot Water: User Guidance

Staff and Students should use all water responsibly and are encouraged to.

- Report all water wastage, such as leaking taps or continually flushing toilets to the Estates Service Desk.
- Where applicable, evaluate water usage in their research and investigate alternative working practices.
- Take shorter showers.
- Make use of dishwashers where provided and not rinse items before loading.
- Where dishwashers are not provided use a washing up bowl to wash dishes in batches rather than rinsing each individual item.

A2.7. Electricity Usage: Guidance.

a. IT and General Office Equipment

- Turn off equipment when leaving the office for more than 20 minutes and at the end of the day.
- Enable power management features on electrical equipment and power them down whenever possible, particularly on evenings and weekends.
- When specifying new equipment look for energy ratings and energy saving features such as automatic standby modes or time scheduling.

b. Lighting

- Use daylight wherever possible.
- Turn off lighting in unoccupied spaces or when leaving an area if it safe to do so.

- Contact Estates Service Desk where lighting controls (either manual or automatic) are not effectively controlling lighting.

c. Lab Equipment

- Turn off equipment when not in use.
- Maintain equipment to be as efficient as possible (e.g., seals on low temperature freezers)
- Use tags on equipment power supplies to indicate equipment that can be safely turned off.
- When specifying new equipment look for energy ratings and energy saving features – consider how easily equipment can be turned off or put into a standby mode.
- Use best practice guidance from organisations such as LEAF[4]
- Consult Green Champions or LEAF representatives[5] on the selection and management of energy intensive equipment.

[4] https://www.ucl.ac.uk/sustainable/leaf/resources-and-materials