

University of South Wales Prifysgol De Cymru



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Creative



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Professional

SPACE TEMPERATURE POLICY

Guidance for heating and cooling our buildings

Estates and Facilities

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CONTENTS

1.0	Introduction	P 3
2.0	Space Temperature Limits	P 3
3.0	Heating Policy	P 4
4.0	Portable Electric Heaters	P 4
5.0	Cooling Policy	P 5
6.0	How you can help	P 6
7.0	Appendix	P 7



University of South Wales Space Temperature Policy

1. Introduction

1.1. The University of South Wales spends a significant amount on energy costs; currently totalling around £3m per year. Gas and electric make up the majority of this cost, around 89%. This is mainly the result of heating, cooling and using electrical equipment within our buildings. This policy has been created to provide guidance on the thermal comfort levels expected around the University, while considering the impact on the University's carbon footprint and energy costs as in line with our Energy Management Policy.

2. Space Temperature Limits

2.1. The University aims to provide a thermal comfort level that satisfies the majority of occupants as in line with Health and Safety Executive (HSE) guidance. Target temperatures have been set for the various areas around the University. These are detailed in Table 1, and are in line with the Chartered Institute of Building Service Engineers (CIBSE) guidelines for operating buildings, Sports England as well as the HSE approved code of practice stating that "the minimum temperature in a workplace should normally be at least 16 degrees Celsius. If the work involves rigorous physical effort, the temperature should be at least 13 degrees Celsius."

	Winter target temperature	Summer target temperature
Teaching Spaces		
Computer rooms/labs	19-21°C	<27°C
Conference / board / meeting rooms	19-21°C	<27°C
Teaching Spaces	19-21°C	<27°C
General building areas		
Entrance hall/lobby	19-21°C	<27°C
Commercial Kitchens	15-18°C	<28°C
Corridors	16-18°C	<28°C
Toilets	16-18°C	<28°C
Waiting areas/rooms	19-21°C	<27°C
Store rooms	15°C	<27°C
Libraries		
Library	19-21°C	<27°C
Sports Areas		
Changing Rooms / clinic and treatment areas	20-22°C	<27°C
Sports Hall	16-18°C	<27°C
Gym Area	16-18°C	<27°C
Offices		



Executive	19-21°C	<27°C
General	19-21°C	<27°C
Open Plan	19-21°C	<27°C
Meeting rooms	19-21°C	<27°C
Residential Accommodation	19-21°C when occupied	<27°C

Table 1: Target Temperature Ranges

3. Heating Policy

- 3.1. The University heating season generally runs from 1st October to 1st May each year. The heating season may be extended depending on the weather forecast. In the weeks before and after the heating season, the forecast will be monitored closely by the Estates staff and a decision will be made to turn on the heating if it is deemed necessary. Alternatively, the heating season may be reduced if there are five or more consecutive working days where outside daytime temperature is above 20°C.
- 3.2. Normal heating hours are optimised to be at working temperature between 8.00am and 6.00pm Monday to Friday. The University will provide out of hours heating to the Library and scheduled lectures/timetabled spaces as necessary. Heating will also be provided if necessary during summer examinations.
- 3.3. Student halls of residence will be heated as necessary to meet the temperature ranges in this policy.

4. Portable Electric Heaters

- 4.1. The use of portable electric heaters is strongly discouraged. To comply with health and safety and to reduce fire risk, all temporary heaters and AC units on University campuses must be PAT tested. Only approved heaters issued by the Estates and Facilities Department shall be used at our campuses and must be oil filled heaters. Heaters pose a significant fire risk and any unauthorised heaters may be removed by the maintenance team. All temporary heaters and AC units must be authorised by the Maintenance Manager. If your area is consistently hot or cold, please put a request on the Estates Helpdesk. A member of Estates maintenance will take temperature readings to gain an understanding of the average temperature within the area. Then an investigation will be undertaken to understand the cause and consider the best solution.
- 4.2. A portable heater may be provided in exceptional cases where the space user has an underlying medical condition that requires a working environment temperature higher than the agreed University space temperature policy. In such cases, a portable



heater will only be provided once the staff members Head of School/Department has confirmed that there is an underlying medical condition in writing to the Maintenance Manager.

5. Cooling Policy

- 5.1. The University shall provide cooling only for research purposes and for specific activities where cooling is required to maintain/control certain temperatures and humidity. The University does not provide comfort cooling. Any additional requirement for cooling must be outlined in a business case and provided to the Maintenance Manager for consideration. Any decision must be authorised by the Director of Estates and Facilities, taking into account the energy cost, maintenance cost and legislative carbon reduction implications.
- 5.2. The target peak temperature for most University space in summer is 27°C. It is understood that some spaces may overheat, particularly in summer months. However, air conditioning will not be installed for cooling these spaces during these rare overheating events. Air conditioning uses around twice as much energy as natural ventilation. Therefore, low energy solutions may be more appropriate than the installation of comfort cooling in many instances e.g. the use of desk fans, open windows, cool drinks, appropriate clothing etc.
- 5.3. The University will not fund the installation of air conditioning systems unless they are required:
 - by regulation or enforceable code of practice
 - by specific items of equipment such as a server room or laboratory
 - because natural ventilation alone is insufficient to cool
 - because occupants and/or equipment consistently raise the ambient temperature to above 27°C over a period of a week
- 5.4. If it is deemed that cooling needs to be installed then the Estates team will need to agree on the cooling strategy before detailed design begins. All installed cooling equipment should:
 - be as energy efficient as possible
 - interface with the building management system
 - contain refrigerant gases that comply with relevant legislation
- 5.5. Portable air conditioning units are not permitted for use in university buildings unless they are installed with an extract duct or a facility to remove the heat absorbed away from the area to be cooled. Desk fans may be used if they have been PAT tested.



5.6. Where air conditioning is installed, the space temperature will be set to no lower than 27°C and the system should be set to only provide cooling when the space is occupied. All doors and windows of the conditioned space should remain closed and no personal heaters should be in operation to warm up a cooled space. The settings and timings on the AC unit will be set and managed by Estates staff only, and settings will be password protected.

6. How you can help save energy and increase your comfort levels around the University

6.1. There are several measures that staff and students can take to limit the extremes of temperature and help save energy:

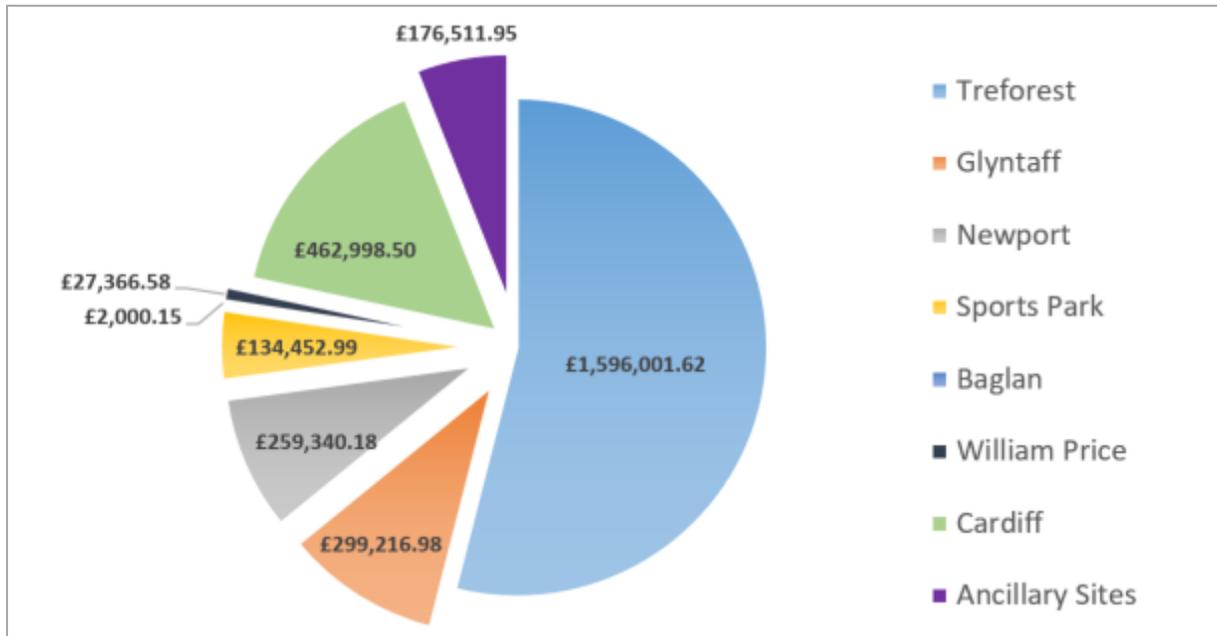
- Dress appropriately for the weather, each additional layer can improve comfort by 2-3°C
- Drink hot or cold drinks depending on the conditions
- Use windows appropriately
- Make use of window blinds and curtains in hot weather to reduce solar gain
- Make use of flexible working hours where appropriate to avoid extremes of temperature
- Take regular breaks
- Ensure rooms are not over occupied
- Site workstations away from heat or cold sources
- Switch off unnecessary electrical equipment and lighting particularly in the summer as these can contribute significantly to heat gains
- Report any problems with heating or cooling to the Estates Helpdesk

This policy has been endorsed by the University Vice Chancellor and is communicated to all staff and students whose activities influence our energy usage.



7. Appendix

7.1. USW utility spend per campus 2017/2018



7.2. USW utility spend and percentage share per utility

