# Estates & Facilities Directorate



# **University Heating and Cooling Policy**

We are committed to achieving Net Zero Carbon by 2030, as set out in the university's corporate strategy "This is Our Time." Building on our past Carbon Management Plans, in 2022 we launched the ambitious Net Zero Carbon Action Plan, which outlines how we will achieve the 2030 strategy target. This will include a range of activities including technical modifications, capital investments and helping staff, students and service delivery partners save energy and carbon.

The carbon impact of our heating is significant. Annually it contributes around 3,000 tonnes  $CO_2$  equivalent (5-year average) which is approximately 48% of our energy related carbon footprint (based on location emission factors). To meet our carbon reduction and climate responsibilities, it is essential that we all understand how we approach heating and cooling, to meet comfort levels whilst managing carbon emissions.

The aim of this Policy is to ensure that the building spaces are at a comfortable working temperature and that excess energy is not being wasted through over heating or over cooling. This can help reduce the impacts of climate change, save the university money (annual gas costs were £500K in 2019/20) and can deliver user wellbeing outcomes.

Temperature control is one of the most cost-effective ways of reducing energy wastage. If left unmanaged, this would increase carbon emissions and costs and impact on our stakeholder's ability to work and learn. For every degree Celsius of extra heat, the amount of carbon and energy cost can increase by up to 8%. Our heating mostly comes from natural gas, a fossil fuel, and we must therefore prevent wastage to reduce our contributions to climate change. All onsite stakeholders must understand and comply with this Policy, which sets out our approach to temperature management and university users' relationships to it.

Consistency in temperature must be achieved across the estate during normal operating hours. Temperature parameters are set, and only where they cannot be met by the existing systems, will supplementary provision be considered. Supplementary systems (e.g., personal heaters/coolers) will increase our carbon and costs. Therefore, use within our estate must be limited to meet our Net Zero target.

This Policy will be reviewed and approved by the Sustainability Management Committee every two years subject to major changes and will be signed off by the Chief Operating Officer.

The temperatures stated in this Policy are in-line with other universities, similar to the University of Greenwich.

# **Heating Season**

The heating season generally runs from mid-October through to late spring. This is dependent on an outside temperature and where we are content that building temperatures are suitable and the daytime outside temperatures exceed 16 degrees the heating systems will be switched off by the BMS.

Building Opening Times are available from the staff services tab of the university portal.

#### **Residential Heating**

#### Heating times residential buildings:

Bedrooms will have no time restriction applied to when electric heaters can be used throughout the heating season.

#### **Residential heating parameters**

 Residential accommodation (bedrooms): Residents shall be able to heat their bedrooms up to 21°C (± 1°C to allow for control variances). Where boost settings are available this will be limited to 23-25°C for 30 minutes (repeat boosts are possible to the maximum temperature). If you need guidance on the use of your heater, please contact your Accommodation team.

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- Circulation spaces shall not be actively heated above 18°C.
- Corridors shall not be actively heated above 16°C.

#### Academic and Administrative Buildings

#### Heating times for academic and administrative buildings

Academic and administrative buildings have time schedules based on their general use. If heating is required out of hours this can be requested via the staff <u>FM Helpdesk</u>

Five working days' notice will be required for these changes to be reviewed and implemented. In exceptional circumstances, this can be implemented earlier. These exceptional circumstances need to be made known to the helpdesk.

#### Academic and administrative buildings heating parameters

- Academic teaching spaces and administrative areas shall not be actively heated to a temperature higher than 20°C (± 1°C to allow for control variances).
- Circulation spaces shall not be actively heated above 18°C.
- Corridors shall not be actively heated above 16°C.

#### Academic and administrative buildings cooling parameters

- Where air conditioning is installed, no area shall be actively cooled to a temperature below 25°C (± 1°C to allow for control variances).
- If the operational need of a space requires air conditioning to be set below 25°C, this can be requested via the FM Services Desk. Five days' notice will be required for these changes to be reviewed and implemented.
- Corridors and circulation space shall not normally have mechanical cooling supplied.

There are very limited exceptions to this Policy's heating and cooling parameters. For example, labs where different temperatures are needed for experiments. This will be agreed with local FM teams.

#### **Supplementary Heaters**

The use of portable electric heaters is strongly discouraged, for health and safety reasons, running costs, environmental impact, and, unless approved by accommodation services, is a breach of the license agreement for residences.

If supplementary heating or cooling is used within our buildings without the knowledge of FM / Maintenance, they would also impact on the normal operation of heating and cooling system. Local thermostats or Building Management System (BMS) controlled devices will determine that the building temperature is sufficient and switch off the heating / cooling to the relevant area which can / will affect other users in that area / building.

Any requests for use of supplementary heaters will need to be submitted to the relevant FM Helpdesk for <u>staff</u> / <u>students</u>.

Five working days' notice will be required for your request to be reviewed and implemented. In exceptional circumstances this can be implemented earlier. These exceptional circumstances need to be made known to the helpdesk.

Where authorised personal purchased heaters or fans are to be used, they must have a current PAT sticker (Portable Appliance Testing) These are issued by Universities Facilities Team, if the appliance needs a PAT. Please see <u>PAT guidance</u> for more information and contact the helpdesk if you have any queries.

When a request for an electric heater is received by the FM Helpdesk, the following steps will be implemented by the maintenance team:

- 1. The area will be checked to see if works are being carried and as part of these works whether it has been necessary to turn the heating off locally. If this is the case, then an electric heater(s) may be provided until the central heating is restored.
- 2. The Building Management System (BMS) will be checked to see if the area is being heated to the correct temperature of 20°C. If the temperature is incorrect, then the temperature setting on the BMS systems for that room/area will be adjusted and the user/s notified.

- 3. If neither of the above points apply, arrange for the heating system to be checked locally by the maintenance team and repaired as necessary. As part of visit the technician will check if windows and doors have been left open.
- 4. If none of the above actions address the issue, then maintenance will arrange for a temperature logger to be placed in the space to monitor the space temperature and the local heating appliances to check operational temperatures. If the temperature at the start of the working day and/or during occupancy is less than 20°C then a portable electric heater may be loaned.

# **Issuing of Supplementary Heaters & Coolers**

Where rooms have been temperature assessed by the FM team and where modifications to the heating/cooling system have not helped meet the heating/cooling threshold, the FM Office can issue a loaned supplementary heater/cooler. These will be numbered, and logged to the room in question, **and will be removed** following the change of season and / or if improvements to the overall system have been implemented.

Where supplementary heaters/coolers are issued, the following, where relevant, must be undertaken (please note if these are not followed, the FM Office will issue a warning and, if it continues, could lead to the unit/s being taken away):

- These heaters/coolers are only used to boost/lower the room temperature until the threshold temperature is reached. Rooms should have thermometers (available from the FM Office) to ensure that this happens. If the unit has a thermostat/control these would help to prevent misuse.
- Where rooms are found to have these units on and doors/windows open, the FM Office will issue a warning to ensure adequate use, or they will be removed (unless special health restrictions are in place e.g., coronavirus).
- Units should be switched off when rooms are vacant for over 30 minutes and particularly overnight (preferably at the plug). Where units have been found to have been left on then the FM Office will give a warning.
- Heaters cannot be used outside the heating season (i.e., not from the start of May to end of October) and coolers are only to be used at times agreed with FM Office.
- Units will be numbered and logged. Following the heating season or fault being rectified, they will be removed, and a fresh request will need to be made the following year, if uncomfortable conditions are again experienced.

#### Heaters/cooling not issued by department or FM Office

Heaters/coolers cannot be brought from home or a shop, as there is a potential risk of fire or electrocution, if these have not been recently tested/checked. Note, this includes halls of residence.

If unauthorised use of heaters/coolers is found, notice will be given that these units will be removed by FM in two weeks' time. This will give the user time to remove the device or update FM Helpdesk of their use. Heater/coolers will be held by FM for one month before they are recycled.

Any requests for use of supplementary heaters will need to be submitted to the FM Helpdesk.

If users feel the room is not meeting the heating/cooling requirement, they must report this using the relevant FM Helpdesk link for <u>staff</u> or <u>students</u>

### Reporting possible energy wastage

To help the university achieve its carbon reduction target, all staff are requested to report over-heating or over-cooling via the <u>FM Helpdesk</u> where you can log a facilities request stating the details of the issue.

Students should report issues to their dedicated FM Helpdesk

The Sustainability Team can likewise be contacted through sustainability@gre.ac.uk

# Useful information to help you meet your comfort levels.

#### Space Heating

The following will help you increase the heating efficiency of the space you occupy:

- 1. Do not open windows when heating is on (unless health restrictions are in place).
- 2. **Close internal doors** between areas of different temperatures, such as an office and corridor. This will reduce cold draughts. Communal areas will be cooler; staff and students should be comfortable in their room/office.
- 3. **Report faults** (e.g., non-closing or draughty windows and doors) to the FM Helpdesk for <u>staff</u> or Accommodation Helpdesk for <u>students</u>.
- 4. The layout of the room's **furniture may impact on the effectiveness** of the heating/cooling system. Ensure furniture is away from heaters/coolers and vents and that these are not covered with items of clothing etc.
- 5. Avoid sitting in a sedentary position for extensive periods. Getting up, stretching your legs, and drinking hot drinks can all help raise the body temperature. Sedentary working is also linked to multiple health conditions. Try to move every 30 minutes and stand for five about minutes in each hour.
- 6. **Wear clothing appropriate** for the external weather conditions. If the weather outside is cold, this will impact internal temperatures. Consider a spare layer to help you adjust according to your comfort.
- 7. Radiators that are fitted with **thermostatic radiator valves (TRVs)** may be adjustable to help regulate the room temperature. The lower the number on the dial, the lower the temperature setting for the room. Where TRVs are locked, your Campus FM team will need to adjust them (see above on contact).
- 8. Turn the TRV down to the frost setting \* or number 1 to reduce the demand on the overall heating system **when you are away from the office/room** for a few days and over weekends. Ensure that TRV's are within reach to adjust.

# Mechanical Cooling / Air Conditioning

The following pointers will help you increase the effectiveness of <u>cooling systems</u> (where installed) or reduce the need for their operation.

- 1. All windows and doors **must be kept closed** in air-conditioned areas.
- 2. Report faults (e.g., non-closing windows and doors) using the relevant FM Helpdesk link for <u>staff</u> or <u>students</u>.
- 3. **Wear clothing appropriate** for the external weather conditions. Consider taking off a layer when hot.
- 4. **Never operate** both heating and cooling systems in a space at the same time. For example, using a personal heater in an air-conditioned space. Instances of this must be reported via the Facilities Request Portal to solve any local issues.
- 5. Adjust blinds to keep out direct sunlight and prevent draughts.
- 6. If you have high and low-level windows, grilles, or vents in your space, ensure these are open to help provide an updraft cooling effect. **However, all windows must be kept closed in air-conditioned areas.**
- 7. The need for cooling can be reduced by switching off non-essential electrical equipment and lighting when not needed.

Additionally, fans can be used in hot weather to improve thermal comfort. If used, they must have a current PAT sticker (Portable Appliance Testing) unless USB or battery powered, and the blades should be checked to make sure they are clean. If the appliance needs a PAT or cleaning or both, please contact the helpdesk.

FM are not responsible for providing fans to faculties or directorates unless there has been a failure in mechanical cooling. Where fans are provided locally, management should consider whether their use might introduce draughts or noise problems for others in the space.

#### If you are still feeling too cold/hot

If you believe it is too hot or too cold in your area and have tried the above measures, you should log a request with the relevant FM Helpdesk for <u>staff</u> or <u>students</u>.

This should be raised under "Reactive Maintenance Internal" and then by selecting the service "Heating Too Hot/Too Cold". **Check with any colleagues** to identify whether they are feeling the same. FM staff will investigate using handheld or calibrated temperature logging devices in the space and gather data. The results will determine the appropriate action to deal with the complaint. If you work in a flexible work environment and if the temperature is uncomfortable for you then move to a warmer/cooler area of your office or building.

#### Please Note:

• The Health & Safety Executive recommend a minimum temperature for sedentary staff at 16°C. For non-sedentary staff it is 13°C. There is no legal maximum temperature for working. (Workplace (Health, Safety and Welfare) Regulations

1992 – Approved Code of Practice and guidance - Regulation 7 - Temperature in indoor workplaces)

• For medical reasons, some people may have different levels of sensitivity to heat and where the line manager approves a request, portable devices may be purchased following the usual procurement procedures for the individual faculty or directorate. However, the line manager must inform FM Office for their records and to check, before proceeding with their purchase, that the introduction of additional heating and cooling devices will not impact on the local heating and cooling system. They will also check whether any of these items are available to loan from the FM Office. When buying fans in particular, it is recommended that, for staff members with a desk-based role, a USB fan, which can be connected to a laptop or desktop PC, is purchased. However, if the staff member does not have a deskbased role, it is recommended that a portable handheld fan is purchased.

Peter Taylor, Chief Operating Officer, 4<sup>th</sup> August 2023.