

**FIVE RIVERS Multi Academy Trust**



**Five Rivers Multi Academy Trust**

**Energy Management Policy**

Policy start date: September 2017

Policy review date: September 2018



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### 1.0 INTRODUCTION

Five Rivers Multi Academy Trust recognises that, as a major user of energy, it has an important role to play in helping to tackle climate change by significantly reducing its carbon footprint. We are committed to responsible energy management and high standards in energy efficiency. It is in the Trust's best interest to reduce the amount of money it spends on energy, releasing funds for other purposes. At the same time, reducing energy consumption helps the Trust to reduce its environmental impact.

### 2.0 ENERGY MANAGEMENT POLICY STATEMENT

#### POLICY STATEMENT

Five Rivers Multi Academy Trust is committed to responsible energy and water management as part of an overall environmental strategy.

Whilst maintaining operational goals and providing an acceptable working environment for staff and pupils, the Trust, by efficient management of energy utilisation, aims to:

- minimise energy and water use;
- minimise energy costs;
- minimise environmental impact of harmful emissions;
- minimise the depletion of fossil fuels.

The Trust is committed to achieving best practice benchmark standards in energy efficiency for educational establishments.

The Trust will provide senior level commitment and appropriate cost effective resources to achieve these standards which will contribute to environmental improvement and long term sustainability.



## 3.0 STRATEGIC OBJECTIVES

### Long term:

1. To purchase energy and water at the most competitive and advantageous rates to the Trust.
2. To utilise energy as efficiently as possible by low cost measures (i.e. good housekeeping, enhanced controls).
3. To incorporate energy efficient design where possible to all new buildings, refurbishments and equipment utilising sustainable products.
4. To minimise gaseous emissions and reduce the Trust's carbon footprint.
5. To reduce dependence on fossil fuels by using alternative ambient and renewable forms of energy where it is practical and economic to do so.

### Medium Term:

6. To invest in a rolling programme of energy saving measures which will maximise returns on investment in order to generate funds which can be reinvested in further energy management activities.
7. To introduce a rolling programme of energy awareness drives for staff and students.
8. To procure goods and services from organisations demonstrating a positive commitment to corporate social responsibility and energy efficiency where it is practical and cost effective to do so.

### Short Term:

8. To identify the monthly energy consumption for each building or part building, as required by Part L of the building regulations, by the installation of appropriate metering and developing an energy monitoring and targeting system.
9. To publish clear targets for energy consumption and to report progress on the previous year.
10. To meet with each academy to inform them of their energy consumptions and reinforce targets and other conservation measures.



## 4.0 OPERATING PRINCIPLES

### 4.1 Responsibility Structure

The Facilities Manager has the responsibility, on behalf of the Trust, to develop and update the energy policy and strategy, and to monitor implementation and progress towards achieving annual targets.

The Facilities Manager, working in conjunction with the Executive Leadership Team, will seek final approval and ratification of the energy policy from the Board of Trustees.

The Facilities Manager will also be responsible for developing specific energy saving projects and offering advice on the energy efficiency aspects affecting major capital projects.

The Premises teams within each academy will be responsible for managing the policy, energy monitoring, developing and promoting energy awareness drives throughout their academies. The Premises team will report directly to the Facilities Manager.

Teaching staff and management will be progressively encouraged to promote the reduction of energy consumption to staff and pupils within their respective academies.

The Facilities Manager will assist in the introduction of energy saving initiatives at academy level, and will also facilitate the dissemination of good practice across the Trust.

The installation of physical energy conservation measures and controls are essential. However, it must be recognised that up to 20% of all energy consumption can be influenced by decisions taken by individuals. Therefore, **the efficient use of energy is the responsibility of every member of staff and every pupil.**

### 4.2 Energy Purchase

Where possible, energy, in the form of gas, electricity and water, will be purchased centrally by the Trust at the most competitive rates.

Part of the Trust's electricity will be purchased from renewable sources if the environmental benefits are considered to outweigh any extra cost.

### 4.3 Investment in Energy Efficiency

The Trust will aspire to allocate up to 5% of annual energy/water revenue expenditure each year to invest directly, or by incorporation within capital or improvement projects, in energy efficiency measures and programmes (subject to budget availability and cost effectiveness).



#### **4.4 Monitoring and Targeting**

Use of existing meters and sub-meters will enable an accurate assessment of energy performance at an individual building level, or significant elements of a building (e.g. server room).

Data from meters will be collected on a monthly basis, analysed and manipulated into a series of reports. Performance relative to target will be assessed on an individual building basis, and corrective action will be taken, when appropriate, to reduce avoidable energy waste.

***Energy Performance Certificates will be displayed in key buildings accessed by pupils and members of the general public.***

#### **4.5 Room Booking Diary**

Core operating hours for the majority of Trust buildings are as follows:

Teaching buildings: 7.00am - 6.30pm Monday to Friday

Operation for heating and ventilation outside these core hours is by special arrangement with Senior Management. Approval must be sought from the Principal/Head of School should there be a demand for extending the above access arrangements to meet the requirements of pupils, staff or commercial operations.

#### **4.6 Maintenance and Plant Control**

Energy conversion plant, (boilers, chillers, compressors) distribution systems and equipment with high energy requirements will be regularly maintained to achieve maximum efficiency.

#### **4.7 Awareness Training**

Regular awareness and motivation drives for staff and pupils will promote the benefits of saving energy and will offer advice on how to avoid waste.

Training will be provided for key people who have a significant influence on controlling energy consumption.

#### **4.8 Reporting**

The Premises teams will prepare a monthly report for each building, detailing energy and water consumptions relative to agreed performance levels.



The Facilities Manager will prepare an energy report on request for submission to the Board of Trustees. The report will detail variations from target for each building, and progress in investment projects and other initiatives.

Each academy will be actively encouraged to engage and submit proposals for energy conservation initiatives within their respective buildings.

#### **4.9 Renewable Energy**

Where practical and cost effective, renewable options will be examined to replace fossil fuels.

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## APPENDIX A

### SPACE TEMPERATURE POLICY

#### GENERAL TEMPERATURES

The Trust endeavours to maintain a comfort temperature of between 17°C and 21°C throughout all teaching/office areas and between 15°C and 19°C in sports specific teaching spaces.

#### HEATING PERIODS

Teaching areas:

- Heating hours are optimised to be at comfort temperature from 07.30am to 6.00pm, Monday to Friday, from the start of the autumn term to May 1<sup>st</sup> inclusive.

Office Areas:

- Heating hours are optimised to be at comfort temperature from 8.00am to 5.00pm, Monday to Friday, from the start of the Autumn term to 1 May inclusive.
- Outside stated heating times, the Trust may not be able to heat individual teaching areas or floors unless a zoned or separate heating system is available.
- The heating season may be extended during May and brought forward during September if there are periods where the outside day time temperature does not rise above 16°C.

#### WINTERTIME CONDITIONS (SEPTEMBER TO 1 MAY)

The Trust recognises that, as an educational establishment, the majority of our staff and pupils are sedentary whilst working and learning. Accordingly, we aim to maintain workplace temperatures between 19°C and 21°C (see above).

In accordance with the Workplace (Health, Safety and Welfare) Regulations 1992<sup>1</sup>, the Trust endeavours to maintain a minimum temperature of 16°C

<sup>1</sup> *The Workplace (Health, Safety and Welfare) Regulation 1992, outlines particular heating requirements for workplaces. Regulation 7 specifies that during working hours, workplace temperatures should be 'reasonable'. The regulation defines reasonable, as 'should normally be 16°C'.*

How we can achieve this during wintertime conditions:

- Check room temperatures are not uncomfortably high. If temperatures are over 21°C, turn down the heating where possible.
- If the heating is on, do not reduce the temperature by opening windows.
- In buildings where individual temperature control of heating and opening windows is not possible, extremes of temperature should be reported to the Premises team through existing channels.

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- Ensure internal doors are closed between areas of different temperatures, such as an office and corridor, as this will keep the heat in and reduce cold draughts.
  - Ensure windows and outside doors are closed whilst the heating is on.
  - Ensure radiators are not blocked by heat absorbing furniture or files.
  - Anticipate weather conditions and determine the type of clothing you should wear each day.
  - Consider keeping a spare jumper in the office for those occasional 'off days' when you may feel chilly.
  - Do not maintain sedentary positions for extensive periods.
  - Avoid draping clothing or other articles over radiators as they absorb the heat being given off.
  - Try to sit where you can feel the radiant heat from the radiator or sunshine.

### **SUMMERTIME CONDITIONS (1 MAY TO START OF AUTUMN TERM)**

As a general rule, the Trust does not control space temperatures from 1 May to the start of the Autumn term as the environmental and financial consequences of doing so are significantly high. Room occupants are therefore asked to cope with any occasionally high summertime temperatures by opening windows where possible and using the curtains or blinds that are provided.

The Trust will consider additional cooling possibilities where:

- Natural ventilation is insufficient for oxygen replenishment and air movement.
- The combined effects of the heat input from people, lights, machinery and solar gain cause the room temperature to consistently rise above 28°C and where all other options have been exploited.

How we can achieve this during summertime conditions:

- Ensure that cooling is not on at the same time as heating.
- In buildings where individual temperature control of cooling systems and opening windows is not possible, extremes of temperature should be reported to the Premises teams through existing channels.
- Switch off unnecessary equipment and lighting whenever possible to reduce unwanted heat gains.
- Enable the energy saving feature on your PC monitor to switch off after a period of inactivity (5 minutes). Remember simply moving the mouse will reactivate the monitor.
- Avoid the use of inappropriate equipment (fridges and kettles) within teaching/office areas to reduce unwanted heat gains.

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- Adjust blinds to keep out direct sunlight.
  - If your room is feeling stuffy, renew the air by fully opening a large window where possible.

## **OUT OF HOURS HEATING/COOLING**

In general, the Trust does not provide out of hours (weekend/evening) heating or cooling for teaching and office space unless there have been specific requests made via the appropriate channels.

However, out of hours heating and cooling can be requested for activities such as weekend conferences, night classes or private functions. The Trust reserves the right to charge for the additional costs of this service.

When considering requests, the Trust will need the following information:

- Rooms, floors or buildings requiring heating/cooling.
- Expected occupancy hours.
- The start and end date for which heating/cooling is required.

All requests should be made to the Facilities Manager at least **7 days** in advance of the expected start date.

## **PERSONAL COMFORT**

If you do experience continued periods of uncomfortable office temperatures (below 19°C or 28°C and above), please report the problem to the Premises team.

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## APPENDIX B

### OUTLINE ENERGY SAVING CHECKLIST

#### Publicity

- Is there an adequate supply of publicity material?
- Are appropriate messages displayed around the Academies?
- Are staff aware of energy costs in the Academies?

#### Lighting

- Encourage staff to turn off lighting when leaving a room.
- Ensure light switches are easily identifiable.
- Are light switches properly labelled?
- Is the best use being made of daylight?
- Is there scope for automatic lighting controls?
- Can fluorescent lamps be replaced?

#### Heating

- Are buildings under or over heated resulting in windows being opened or supplementary electric heating being used?
- Do staff know of the heating controls in their areas, how they function and whether they are located in the correct positions?
- Are radiators or fan convectors blocked by furniture?
- Are there problems with draughts from poorly sealed doors and windows?
- Are there areas heated but not occupied?
- Are occupants appropriately clothed?
- Is there scope for thermostatic radiator valves?
- Are computers etc. located adjacent to room temperature sensors?
- Are room sensors covered or subject to solar gain?

#### Water

- Are staff and students aware that water is metered?
- Is there scope for percussion taps, flow restrictors, WC cistern dams, urinal controls?

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- Are dripping taps and other water leaks reported promptly?
  - Restrict the use of local kettles

### **Cooling**

- Is cooling necessary?
- Are fan coil units blocked by furniture?
- Do staff know of the cooling controls in their areas, how they function and whether they are located in the correct positions?
- Are there areas cooled but not occupied?

### **Electrical Equipment**

- Whenever office equipment is purchased, is energy and water consumption considered in addition to capital costs? e.g. 'A' rated white goods.
- Is there scope for using water heaters to replace kettles?
- Has the intelligent energy saving software been activated on each PC, where possible?
- Are there procedures for switching off PCs, printers, photocopiers etc. at the end of normal school/office hours?
- Are staff aware of power saver buttons on photocopiers?
- Promote the use of coloured stickers which can be used to identify which equipment should be left on 24 hours/day and which can be switched off
- Can high energy using equipment be better scheduled or co-ordinated with other Departments (e.g. use of kettles)?
- Is there scope for timers to be fitted to equipment (e.g. photocopiers)?
- Could motor controllers be fitted to refrigerators/freezers?
- Can better use be made of cheap rate night time electricity without compromising safety standards?
- Restrict the use of local kettles or electric fan convectors

### **General**

- Has a specific energy saving checklist been developed for the Academy?
- Conduct "out of hours" survey at evenings and weekends to check heating, lighting, electrical equipment.
- Are the locations of meters/sub meters known?

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## **Catering**

- Can staff be trained locally in energy efficiency practices?
- Check seals on ovens, fridges/freezers.