

NET ZERO TRANSITION PLAN



WHERE LEARNING IS UNSTOPPABLE AND ASPIRATIONS HAVE NO LIMITS

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Review Date: December 2027

A handwritten signature in black ink, appearing to be "Mayleen Atima", is written over a faint, light blue circular watermark.

Signed:

Chair of Trustees: Mayleen Atima

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Policy Updates

Version	Date	Description of Changes	Initials
V1.0	04/12/24	New policy	ES/AHR

1. Introduction

Purpose

Orwell Multi Academy Trust (OMAT) is committed to achieving net zero emissions by 2040. This plan outlines our approach to reducing carbon emissions across all seven primary schools, demonstrating our dedication to environmental responsibility and sustainability. By aligning with local and national climate goals, we aim to inspire and educate our pupils and communities about the importance of environmental responsibility.

Scope

This transition plan covers the following sites operated by Orwell Multi Academy Trust:

- Brooklands Primary School, Brantham
- Grace Cook Primary School and Nursery, Stowmarket
- Grange Community Primary School, Felixstowe
- Halifax Primary School, Ipswich
- Handford Hall Primary School, Ipswich
- Springfield Infant School and Nursery, Ipswich
- The Willows Primary School, Ipswich

This transition plan includes consideration of buildings, facilities, and operational activities that contribute to greenhouse gas emissions.

Target Goals

- **CO2 Emissions Reduction:** Reduce emissions from gas consumption by 75% by 2030 and achieve 100% reduction by 2040.
 - Phase out fossil fuel-based heating systems by transitioning to renewable alternatives, such as heat pumps.
 - Explore opportunities to further reduce emissions through energy conservation measures.
- **Intensity Ratio:** Reduce tonnes CO2 per pupil to 0.2 by 2030 and to 0 by 2040.
 - Develop programs to actively involve students in carbon reduction activities, such as energy-saving campaigns and waste reduction initiatives.

2. Current Emissions Baseline

Base Year

The base year for measuring emissions is September 2023 to August 2024. This period was chosen to establish a reliable benchmark against which progress can be measured.

Emissions Overview

Our emissions are primarily generated from:

- **Gas Consumption:** Heating and cooking across school sites.
- **Petrol and Diesel Travel:** Staff mileage claims, school transport, and deliveries.
- **Electricity Consumption:** Although all electricity is sourced from renewables, efforts to optimise electricity use are ongoing.

Carbon Footprint Assessment

The Streamlined Energy and Carbon Report for Sept 2023 to August 2024 can be found in Appendix 1. Key findings:

- **Total emissions:** 160.56 gross emissions in metric tonnes CO₂e.
- **Intensity ratio for September 2023 to August 2024:** 0.9 tonnes CO₂ per pupil.
- **Breakdown:**
 - **Gas consumption:** 159.29 metric tonnes CO₂e
 - **Travel:** 1.27 metric tonnes CO₂e

3. Key Actions and Milestones

Milestone	Description	Action	Target Date	Responsible Team
Energy Efficiency	Implement energy saving measures in buildings	Install LED lighting at Handford Hall to improve energy efficiency and reduce electricity usage.	By 2025	Headteacher
		Add insulation (roof and wall) at all schools except Grange and Grace Cook.	By 2026	Headteacher
		Replace older gas boilers with high-efficiency models to reduce fuel consumption.	By 2028	Headteacher
		Transition from gas cooking equipment to electric cookers across all applicable schools.	By 2029	Headteacher
		Install automatic water-heating systems and energy-efficient taps in all schools.	By 2027	Headteacher
Renewable Energy	Source 100% renewable energy	Source 100% renewable electricity for all sites (currently achieved).	Achieved	SST and Energy Team
		Conduct feasibility studies for additional solar panel installations at three more school sites.	By 2026	SST
Waste Management	Achieve zero waste to landfill	Introduce food waste separation systems and partner with waste management firms for composting.	By 2025	Headteacher
		Implement comprehensive recycling programmes, including paper, plastic, and e-waste recycling.	By 2025	Headteacher
		Reduce paper usage by transitioning to digital resources for teaching and administrative tasks.	By 2026	Headteacher
Supply Chain Collaboration	Engage suppliers on carbon reduction targets	Work with suppliers to reduce packaging and implement packaging return schemes.	By 2026	SST
		Include carbon offset and reduction requirements in procurement processes to incentivise sustainable practices.	By 2027	SST

4. Emissions Reduction Strategies

Energy Efficiency Improvements

- **Lighting:** Transition all schools to LED lighting systems, prioritising high-consumption areas such as assembly halls and classrooms.
- **Insulation:** Improve insulation in buildings to reduce heat loss, targeting walls, roofs, and windows.
- **Heating Systems:** Replace inefficient gas boilers with modern, high-efficiency models and explore transitioning to heat pump systems.
- **Cooking Equipment:** Phase out gas-based kitchen appliances and replace them with electric alternatives that are energy-efficient.
- **Water Heating:** Upgrade water heating systems with automatic and low-energy alternatives to minimise unnecessary energy usage.

Renewable Energy Adoption

- Install additional solar panels to increase on-site renewable energy generation.
- Maintain current 100% renewable electricity sourcing and explore contracts with local green energy suppliers.
- Expand the installation of electric vehicle (EV) chargers to accommodate staff and visitor needs, encouraging EV adoption.

Sustainable Transport Solutions

- Promote the use of public transportation, carpooling, and cycling among staff and parents.
- Offer electric vehicle salary sacrifice scheme to staff.
- Organise awareness campaigns to reduce the dependency on personal vehicle use.

Waste Reduction Initiatives

- Educate staff and students about recycling practices through workshops and campaigns.
- Collaborate with catering contractor to reduce food waste and implement waste tracking systems.
- Invest in durable and reusable teaching materials to reduce single-use items and paper printouts.

Supply Chain Engagement

- Engage with suppliers to co-develop solutions that minimise packaging waste.

- Establish procurement policies that prioritise suppliers with credible carbon reduction commitments.
- Optimise delivery schedules to consolidate shipments across the Trust and minimise transportation emissions.

5. Metrics and Reporting

Key Performance Indicators (KPIs)

- Annual percentage reduction in total CO2 emissions, aiming for a 10% reduction year-on-year to align with 75% reduction by 2030 and 100% by 2040.
- Percentage of schools using LED lighting, with a target of 100% adoption by 2026.
- Number of solar panels installed and renewable energy generated on-site, with an annual increase of at least 20% renewable energy capacity by 2030.
- Reduction in waste sent to landfill, targeting a 50% reduction by 2025 and achieving zero waste to landfill by 2030.
- Intensity ratio improvement (tonnes CO2 per pupil), aiming for a decrease to 0.5 by 2025, 0.2 by 2030, and 0 by 2040.
- Increase in the number of electric vehicle chargers installed, with a target of 50% more chargers by 2026.
- Supplier engagement metrics, tracking the percentage of suppliers meeting sustainability criteria, with a goal of 75% compliance by 2027.

Reporting Frequency

Updates will be provided annually and shared with Trustees following the completion of the SECR and financial year-end. Reports will include progress on all KPIs and milestone achievements.

Data Collection Methods

- Monthly monitoring of energy usage through smart meters and utility bills.
- Tracking vehicle mileage and emissions through staff claims and fleet logs.
- Waste audit reports from contractors.
- Surveys to assess engagement with and adherence to waste reduction and recycling practices.

6. Governance and Accountability

Leadership Oversight

- **CEO:** Oversees the strategy and ensures alignment with organisational goals, with a quarterly review process to assess progress and address challenges.
- **CFO:** Collects data and produces the annual report by October each year, ensuring data accuracy and compliance with SECR requirements.
- **Trustees:** Receive the annual report in October, review progress against targets, and approve financing for proposed projects for the following year by December.

Project Teams

- **Executive Leadership Team:** Implements key actions outlined in the plan, with biannual progress meetings to monitor milestones and address roadblocks.
- **Site Teams:** Conduct day-to-day operational changes, such as implementing energy-saving measures and waste management practices, with monthly check-ins to track actions.
- **Shared Services Team:** Collaborates with external partners and suppliers, ensuring procurement aligns with sustainability targets, with supplier engagement reviewed quarterly.

Stakeholder Engagement

- **Staff Engagement:** Incorporate sustainability practices into professional development programs, with training sessions held once a year.
- **Pupil Engagement:** Incorporate sustainability practices into lessons.
- **Transparency:** Publish the transition plan and annual progress reports on the OMAT website every October to ensure accessibility and transparency for all stakeholders.

7. Risk Assessment and Mitigation

Risk Identification and Mitigation Strategies

Risk	Likelihood	Mitigation Strategy	Likelihood post Mitigation
Financial constraints: Limited budget for implementing large scale projects.	High	Apply for government grants and explore partnerships with sustainability organisations	Medium
Technological Delays: Availability and affordability of new technologies.	Medium	Conduct thorough research and establish contingency plans for technological delays	Low
Behavioural Challenges: Resistance from staff or suppliers	Medium	Develop training and incentive programs to encourage adoption of new practices	Low
Regulatory Changes: Evolving environmental regulations affecting timelines or strategies.	Medium	Regularly review and adjust plans to align with updated regulations	Low

8. Continuous Improvement

Reviewing and Updating Process

- Conduct annual reviews of emissions data, milestones, and KPIs.
- Engage external consultants for independent assessments and suggestions.
- Establish a feedback loop with staff and stakeholders to identify improvement opportunities.

Innovation and Technology

- Research advanced renewable energy systems, such as battery storage for solar power.
- Research AI optimisation tools to enhance building efficiency.
- Investigate carbon capture solutions for potential application in schools.

9. Glossary of Terms

Net Zero: Achieving a balance between emitted and removed greenhouse gases.

Intensity Ratio: A metric representing emissions per unit of activity (Tonnes of CO₂ per pupil).

Renewable Energy: Energy sourced from natural processes that are replenished constantly, such as wind or solar power.

10. Appendix 1 – Streamlined Energy and Carbon Report

Streamlined Energy and Carbon Reporting

UK Greenhouse gas emissions and energy use data for 1 September 2023 to 31 August 2024

Energy consumption used to calculate emissions (kWh)	1,289,828
Gas [kWh]	870,925
Oil [kWh]	0
LPG [kWh]	0
Electricity [kWh]	0
Electricity Renewables [kWh]	412,189
Transport Fuel [kWh]	6,714
Scope 1 emissions in metric tonnes CO₂e	159.29
Gas consumption	159.29
Oil consumption	0.00
LPG consumption	0.00
Owned transport – mini-buses	0.00
Scope 2 emissions in metric tonnes CO₂e	0.00
Purchased electricity	0.00
Purchased electricity renewables	0.00
Scope 3 emissions in metric tonnes CO₂e	1.27
Business travel in employee owned vehicles [petrol / diesel]	1.27
Business travel in employee owned vehicles [electric]	0.00
Total gross emissions in metric tonnes CO₂e	160.56
Total number of students within the trust	1,961.00
Intensity ratio Tonnes CO₂e per pupil	0.08

Quantification and Reporting Methodology

We have followed the 2019 HM Government Environmental Reporting Guidelines. We have also used the GHG Reporting Protocol – Corporate Standard and have used the 2023 UK Government's Conversion Factors for Company Reporting.

Intensity measurement

The intensity measure we are using as a trust assessed the Tonnes of CO₂e emitted per pupil and in our accounts for 2022 - 2023 the intensity ratio was:

0.09