



# Carbon Reduction Plan

Supplier name: Star Academies

Publication date: 09 November 2023

## Commitment to achieving Net Zero

Star Academies is committed to achieving Net Zero emissions by 2050

## Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

<b>Baseline Year: 2020</b>	
<b>Additional Details relating to the Baseline Emissions calculations.</b>	
This is the first year that Star Academies is reporting on its carbon emissions externally. We have however, assessed our emissions from 2020 as a reference point against which emissions reduction can be measured.	
<b>Baseline year emissions:</b>	
<b>EMISSIONS</b>	<b>TOTAL (tCO<sub>2</sub>e)</b>
<b>Scope 1</b>	<b>2,800 gas</b>
<b>Scope 2</b>	<b>1,456 electricity</b>
<b>Scope 3 (Included Sources)</b>	<b>66.95</b> Scope 3 emissions include: <ul style="list-style-type: none"><li>• Business travel in employee-owned vehicles</li><li>• Mini-bus travel at schools</li></ul>
<b>Total Emissions</b>	<b>4,322.95</b>

## Current Emissions Reporting

Reporting Year: 2023	
EMISSIONS	TOTAL (tCO <sub>2</sub> e)
Scope 1	3,165.82 gas*
Scope 2	0 electricity**
Scope 3 (Included Sources)	87.26*** Scope 3 emissions include: <ul style="list-style-type: none"><li>• Business travel in employee-owned vehicles</li><li>• Mini-bus travel at schools</li></ul>
Total Emissions	3,253.12

### Notes:

\* The increase in gas carbon in 2022/23 is attributable to an increase in the number of schools with pupil numbers rising from 18,236 to 21,149. These numbers include several large secondary academies and primary academies in existing buildings that joined the Trust.

\*\* Electricity reduced overall with a switch to 100% renewable energy sources.

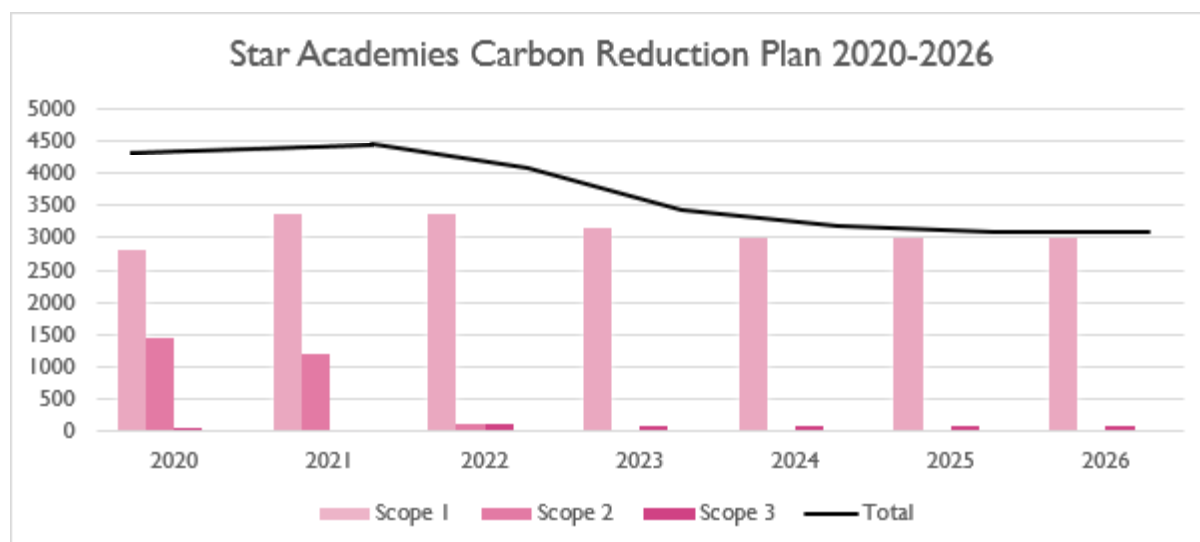
\*\*\* The increase in scope 3 emissions can be attributed to the COVID-19 pandemic and the resumption of site visit which were suspended during lockdowns.

## Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

We project that carbon emissions from the Trust's current school estate will decrease over the next three years to **3,000 tCO<sub>2</sub>e** by **2026**. This is a reduction of **14.5%**. At this stage it is not possible to calculate the expected overall increase from the projected capital pipeline of works, with the Trust's overall estate projected to grow by an additional nine schools over the next six years.

Progress will be charted against the targets illustrated in the graph below:



## Carbon Reduction Projects

### Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented prior to the 2020 baseline. The carbon emission reduction achieved by these schemes equate to **27 tCO2e**, a **0.6%**ge reduction against the 2020 baseline and the measures will be in effect when performing the contract

- A programme of bulb replacement with LED across the entire estate; this expected to be complete by 2024
- Replacement of outdated boilers with more efficient models, supplemented by a stringent maintenance regime to ensure ongoing efficiency
- Window replacements with more thermally efficient hermetically sealed products that also increase airtightness

In the future we hope to implement further measures such as:

- Greener employee commuting
- Reduced paper usage by increasing digital technology use across all schools and central office
- Day time cleaning in winter to reduce the energy by minimising after school operating hours
- Increased use of video conferencing between Star Academies central team and individual schools
- 'Power down' initiatives in schools to prevent screens, IT equipment and other electrical items being left on standby overnight and at weekends
- Replacing opaque blinds with translucent anti-glare blinds on south facing facades to negate the need for artificial light on bright sunny days in teaching spaces
- Introduction of electric vehicle charging points across Star's entire school estate, with supplementary provision at new schools beyond the Local Authority mandatory requirements
- Continued development of School Travel Plans to reduce parental car usage, mitigated by walking buses, safe cycling and car share opportunities

- Improved building fabric solutions when refurbishing and upgrading school premises, especially improved roof insulation to drive down U-values across older estate structures
- 'Down by a degree' strategy in schools with heating systems operating up to two degrees below current temperatures. The impact of this on wellbeing will be negligible within learning environments but over a year will provide valuable gas carbon reductions
- Introduction of battery storage to sites that have solar arrays to capture energy when schools are unoccupied
- Smart metering to be installed over the next ten years, allowing greater interrogation at individual schools of how energy is being used
- Installation of photovoltaic systems where possible to supplement existing electricity supplies and reduce reliance on national grid suppliers
- Upgrade building management and control systems and make use of Smart technology to optimise energy usage
- Consideration of central and regional government grant funded schemes aimed at carbon reduction such as Salix

It is Star's intention to introduce targets for suppliers when procuring services including catering, educational resources and waste collection.

Long term replacement of gas boilers will require an infrastructure change that facilitates the use of air source and ground source heat pumps for both hot water and environmental controls.

## Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

### Signed on behalf of the Supplier:

Date: 9 November 2023

Signed: 

Sir Mufti Hamid Patel CBE

Chief Executive