



Carbon Reduction Plan

ACORN WEB OFFSET LIMITED February 2025

About Acorn Web Offset Limited

Acorn Web is a specialist A4 and A5 printer that is passionate about producing high quality products and best-in-class customer service. Established 45 years and operating from one of the UK's lowest cost production facilities, Acorn has invested heavily in technology and machinery. At the core of our values is the belief that print shouldn't harm the environment. We are actively involved in several initiatives dedicated to promoting sustainability in printing. Through innovative strategies and practices, our goal is to transform the print industry into a more environmentally responsible landscape.

All of the A4 and A5 products that are produced by Acorn Web are manufactured using sustainably sourced paper on the latest generation of printing press installed in 2019. This has a significantly reduced carbon impact due to technological improvements in its drive systems, improved drying efficiencies and the use of free cooling within the chilling system.

Commitment to achieving Net Zero

Acorn Web Offset Limited is committed to achieving Net Zero emissions by 2050.

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BASELINE EMISSIONS FOOTPRINT

Baseline Year:

1st October 2023 - 31st September 2024

Additional Details relating to the Baseline Emissions calculations:

This is the first year of public carbon reporting for Acorn Web and therefore forms the baseline year of emissions for monitoring. Our footprint is based on an operational control boundary of activities. All sites and activities take place in the UK.

Our Scope 1 and Scope 2 carbon emissions are reported from primary data sources. The data used in the estimations for the Scope 3 baseline contains a significant proportion of primary data and is as accurate as the sources allowed at the time.

All emissions calculations follow the GHG Protocol Standard for approved calculation methodologies. We are undertaking a continual process of improving the quality of our internal data, which may result in a recalculation of the baseline in the future.

Baseline year emissions:

EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	1,145
Scope 2	1,142
Scope 3 Cat 4 - Upstream Transport & Distribution Cat 5 - Waste Generated in Operations Cat 6 - Business Travel Cat 7 - Employee Commute Cat 9 - Downstream Transport & Distribution	2,460
TOTAL EMISSIONS	4,746

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EMISSIONS REDUCTION TARGETS

This is the first publicly reported carbon footprint for Acorn Web, and the first carbon reduction target to be published. We have set our 2024 financial year (FY24) as our baseline year, in order to target and measure emissions reduction going forward. The company has however been actively reducing its carbon emissions for a number of years, without fully effective quantification. Some of the projects completed are detailed below.

Acorn Web use ClimateCalc - an online carbon calculator verified by the British Printing Industries Federation (BPIF) to monitor its greenhouse gas emissions per client order/job. This is a different footprint boundary to that provided here. However any reductions in our organisational carbon footprint, will also impact the client job carbon footprint(s) measured via ClimateCalc.

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

- **Net Zero by 2050 across all Scopes**

We project that carbon emissions will decrease over the next five years to 3,569 tCO₂e by the end of FY2029. This is a reduction of 25% against our baseline, utilising a market-based reporting approach for Scope 2 emissions.

The target trajectory can be seen in the graph below:



52% of our baseline carbon emissions are an indirect result of our activities. At this stage in our carbon reduction journey therefore, we anticipate that we will need to offset a level of residual emissions from Scope 3 in 2050 to achieve net zero. This will be reviewed on an annual basis as technologies and facilities may emerge over time that enable a 2050 reduction trajectory of closer to zero emissions.

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CARBON REDUCTION PROJECTS

The following environmental management measures and projects have been completed or implemented over recent years. The carbon emission reduction achieved by these schemes cannot be fully quantified, however the measures will be in effect when performing the contract and the ongoing impact will be monitored against our FY24 baseline.

Site Improvements

The business has held ISO 14001 certification for its Environmental Management System (EMS) since 2009. The EMS provides a framework for the business to deliver continual improvement in energy efficiency and carbon reduction.

Intelligent LEDs with PIR sensors that respond to both movement and changing outside light were installed in both factory units to assist with energy reduction. In addition, voltage optimisation was commissioned during early 2024. These investments have saved approximately 251,000 kWh per annum and 52 tCO₂e.

In 2023 we installed 6 rapid EV chargers to help our staff move towards using electric vehicles for their commute to site.

There is currently a plan in place to install a new variable speed compressor. It is anticipated that the new configuration will reduce our energy usage by 64,800 kWh, saving 13 tCO₂e.

We are also currently reviewing the installation of a solar panel array, with the potential to save 46 tCO₂e associated with electricity consumption per year.

Process Improvements

In 2023 Acorn Web upgraded its plate processors. This with a switch to Energy Elite Eco printing plates has contributed to huge savings and helped achieve some of our environmental targets. 1 million litres of water per year have been saved and 18,000 litres of chemistry too.

The multi camera colour system and dynamic cut-off control of our Lithoman 32pp web offset press reduces to a minimum the amount of paper required to print magazine products. Since its installation this has been saving on average 650 tonnes of paper waste each year.

In 2025 a new state of the art sheetfed cover press will reduce energy consumption replacing continental UV drying with LED UV. This alongside an innovative quality system will help to deliver significant reductions in paper waste.

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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 standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting².

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) Standard³.

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

Signed on behalf of the Leadership Team:

A handwritten signature in black ink, appearing to read 'MRB', written over a blue horizontal line.

.....
Mark Roberts, Managing Director

Date: 18.03.2025
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¹ <https://ghgprotocol.org/corporate-standard>

² <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

³ <https://ghgprotocol.org/standards/scope-3-standard>