NET ZERO TRANSFORMATION PROGRAMME CASE STUDY



THE NET ZERO TRANSFORMATION PROGRAMME

The Mid South West (MSW) Region (Armagh City, Banbridge & Craigavon, Fermanagh & Omagh and Mid Ulster District Council areas) Net Zero Transformation Programme, funded by Innovate UK, is designed to help local SMEs within the Region reduce carbon emissions and work towards net-zero.

This programme provides participating businesses with access to:

- Carbon reporting software, expert workshops, and tailored decarbonisation plans.
- Guidance on low-carbon technologies, funding options, and operational efficiency.
- Tools to achieve sustainability goals and enhance market competitiveness.
- Insights to identify key emission sources and implement energy-efficient practices.
- Support for exploring renewable energy solutions.
- Focus on understanding and addressing Scope 1 and Scope 2 emissions.

WHY MACZERO SIGNED UP?

For MacZero, participating in the programme presented a valuable opportunity to improve operational efficiency, access advanced green technology, and gain a competitive edge. Additionally, the programme offered access to expert guidance from carbonfit on low-carbon technologies, waste management improvements, and decarbonisation strategies tailored to the unique challenges and opportunities within construction.

ORLA MCAVOY CORR, DIRECTOR, MAC ZERO ADDS:

"We're experts in the design, manufacture and provision of modular buildings which ultimately offer our clients sustainable buildings that are airtight and built for the future.

We have helped thousands of pupils to #movetozero with new modular extensions to schools throughout Ireland, and as a business, the time was right to engage with MSW Region on the Net Zero Transformation Programme to create our own sustainable plan to enable Mac Zero to #movetozero.

By participating in the MSW Net Zero Transformation programme, we worked with carbonfit to complete comprehensive assessments of our emissions. We now have baseline measurements, a plan and a timeline, which will significantly reduce our emissions.

Our journey on the programme has been really positive for us as a business and left us with a clear and tangible action plan. The tracking of emissions and need for a sustainability plan will soon be required by all businesses, and the MSW Net Zero Transformation programme offers companies a clear route in which to achieve this."

For more information scan this QR code:



WHAT ARE SCOPE 1, 2 & 3?

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SCOPE 1 INCLUDES DIRECT EMISSIONS FROM OWNED OR CONTROLLED SOURCES, SUCH AS ON- SITE HEATING OR COMPANY-OWNED VEHICLES. 2

SCOPE 2 REFERS TO INDIRECT EMISSIONS FROM PURCHASED ELECTRICITY OR OTHER UTILITIES THAT POWER THE BUSINESS'S OPERATIONS. 3

SCOPE 3 EMISSIONS ARE INDIRECT GREENHOUSE GAS (GHG) EMISSIONS THAT OCCUR IN A COMPANY'S VALUE CHAIN, BUT ARE NOT PRODUCED BY THE COMPANY ITSELF.

*TCo2e – tonnes of carbon dioxide equivalent





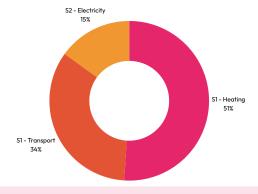






STEP 1: CARBON FOOTPRINT ASSESSMENT & INITIAL FINDINGS

An initial Carbon Footprint Assessment enabled, MacZero's emissions sources to be assessed. Automated calculations identified that Scope 1 heating accounted for 51% of emissions, transport for 34%, and Scope 2 electricity for 15%. Fossil fuel consumption for on-site Heating emerged as the primary focus for impactful emission reductions. The initial findings have provided MacZero with clear targets for implementing emissions reductions where they will make the most difference.



STEP 2: OPPORTUNITIES FOR EMISSION REDUCTIONS

In facilitated 1:1 workshops with Carbon Reduction Engineers MacZero reviewed recommended actions aimed at reducing Scope 1 and 2 emissions. This collaborative process highlighted critical opportunities for the business to lower current emissions by up to 70%.

MacZero received guidance on funding options, grants, and supplementary materials to support their journey towards sustainability. Recommended actions included:

- Continuous Monitoring and tracking of Scope 1 and 2 emissions to build on the information completed to date with monthly update to Carbonfit platform.
- Engage with stakeholders to share the targets and goals of the carbon reduction plan to build a culture of net zero champions.
- Complete an annual review of intensity metric and carbon reductions in line with actual targets set for near- and long-term net zero goals.
- Switch to a 100% renewable energy supply.

STEP 3: SCOPE 1 & 2 NET ZERO TRAJECTORY

Following an in-depth analysis of MacZero's carbon footprint data, a roadmap for achieving net-zero emissions was established:

Current Baseline:

• Combined Scope 1 and Scope 2 emissions stand at $53.14\ TCO_2e^*$

REDUCE SCOPE 1 AND 2 EMISSIONS BY 100% BY 2035 AIMING FOR A 97% REDUCTION OF ALL EMISSIONS BY 2050.

CALCULATE SCOPE 3 EMISSIONS BY 2026

PROGRESS POST-PROGRAMME COMPLETION

Upon completing the programme, MacZero has achieved several key milestones:

- Confirmed that heating is the major source of carbon emissions.
- Identified potential savings with a projected 70% reduction in Scope 1 and 2 Emissions
- Secured full verification of Scope 1 and 2 carbon footprint certifications.
- Completed a robust Carbon Reduction Plan.
- Successfully engaged their team, ensuring commitment to continue their journey to net-zero emissions.

Through the MSW Net Zero Transformation Programme, MacZero is positioned to lead in sustainable manufacturing practices, demonstrating the value of proactive environmental responsibility while setting an example within the industry.



For more information scan this QR code







