

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 LOUGH ERNE RESORT SIGNED UP

Lough Erne Resort, a luxury hotel and golf destination in County Fermanagh, joined the Mid South West (MSW) Net Zero Transformation Programme to future-proof its operations and respond to the growing demand for sustainability in hospitality.

The leadership team recognised that reducing environmental impact is both a business priority and a key expectation of guests, investors, and staff. Through the programme, the resort measured its carbon footprint and identified practical strategies to cut emissions.

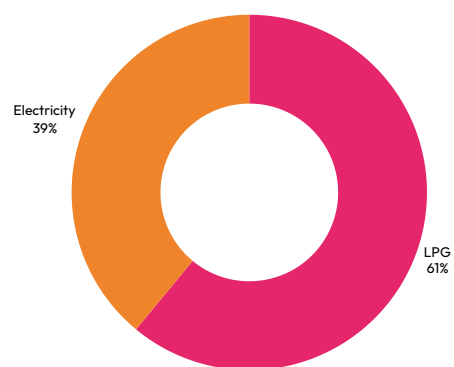
STEP 1: CARBON FOOTPRINT ASSESSMENT & INITIAL FINDINGS

Using the financial control boundary approach (i.e. assessing emissions from operations over which the organisation has financial control), Lough Erne Resort carried out a comprehensive carbon footprint assessment to better understand the environmental impact of its operations.

The assessment revealed total Scope 1 and 2 emissions of 882.56 tonnes of CO₂ equivalent (TCO₂e).

Within Scope 1, liquefied petroleum gas (LPG) was identified as the primary source, contributing 61% of emissions, while electricity use accounted for the remaining 39% under Scope 2.

At the time of the assessment, Scope 3 emissions had not yet been calculated. To develop a complete carbon reduction strategy that includes supply chain and other indirect emissions, a full review of all 15 Scope 3 categories will be necessary.



WHAT ARE SCOPE 1, 2 & 3?

1

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 2: OPPORTUNITIES FOR EMISSION REDUCTIONS

The assessment highlighted several opportunities for Lough Erne Resort to reduce its emissions significantly. These include replacing fossil fuels with low-carbon alternatives, adopting green energy supply contracts, and installing renewable energy systems.

Together, these measures can help the resort transition to a cleaner, more resilient operational model.

THE KEY PROPOSED PROJECTS INCLUDE:

Switch to BioLPG

Replacing LPG with BioLPG would result in a like-for-like fuel change that could reduce emissions by approximately 99%, according to the 2024 UK Carbon Emission Factors.

Green Electricity Supply

Transitioning to a green energy contract could deliver savings of 343.84 TCO₂e annually, contributing significantly to Scope 2 emission reductions.

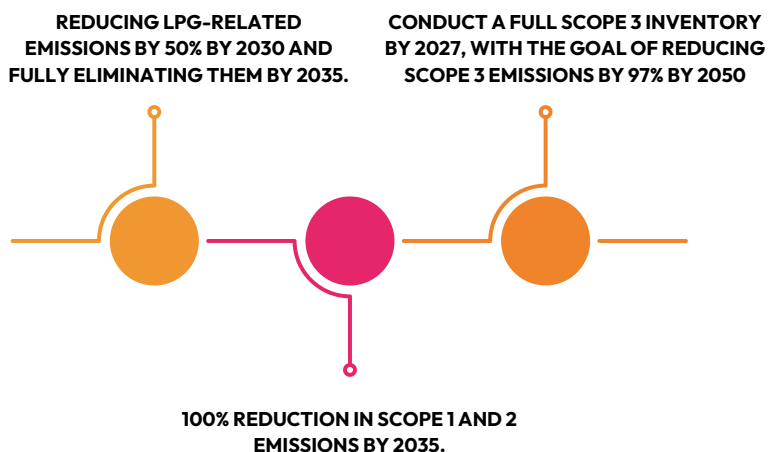
Solar PV Installation

Installing a 300kWp solar PV system is projected to save an additional 52.95 TCO₂e each year, while also reducing reliance on grid electricity.

STEP 3: SCOPE 1 AND SCOPE 2 NET ZERO TRAJECTORY

Lough Erne Resort has been advised to review the full emissions report and appendices, begin developing a Scope 3 inventory to map supply chain and indirect emissions, and monitor Scope 1 and 2 emissions monthly through the Carbonfit platform.

The resort should also engage both internal and external stakeholders to embed a culture of sustainability and carry out annual reviews to measure emissions intensity and progress toward reduction targets.



SUSTAINABLE TOURISM IN ACTION

Lough Erne Resort's dedication to sustainability highlights a broader shift within the luxury hospitality sector—recognising that exceptional guest experiences can and should go hand in hand with environmental responsibility.

Through its involvement in the MSW Net Zero Transformation Programme and collaboration with Carbonfit, the resort has laid a strong foundation for its journey to net zero.

With a clear emissions profile, targeted reduction initiatives, and a defined action plan, Lough Erne Resort is well-placed to be a leader in sustainable tourism in Northern Ireland and beyond.



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