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 INOVA GATES SIGNED UP

Inova Gates is a specialist manufacturer of bespoke, high-performance gate systems for commercial, residential, and industrial applications. Known for their commitment to quality craftsmanship and innovation, the company operates at the intersection of construction and advanced manufacturing.

Inova Gates joined the MSW Net Zero Transformation Programme as part of a strategic move to enhance sustainability and prepare the business for the future. The leadership team recognised the growing importance of reducing environmental impact within the construction and manufacturing sectors. By taking part, the company aimed to better understand its carbon footprint and identify practical steps to lower emissions. This decision also reflects a broader shift in customer expectations and market trends that increasingly value environmentally responsible suppliers.

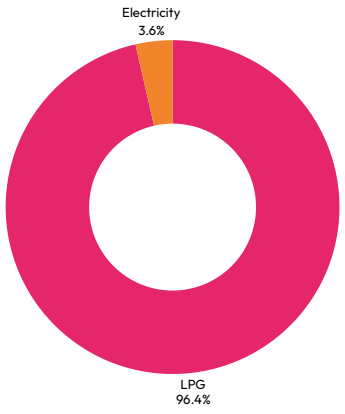
STEP 1: CARBON FOOTPRINT ASSESSMENT & INITIAL FINDINGS

Through the programme, Inova Gates applied the operational boundary approach to assess greenhouse gas emissions across Scope 1 and 2 emissions. The operational boundary approach sets which emissions from owned or controlled operations are included in carbon footprint calculations.

The carbon footprint analysis found that the company's total Scope 1 and 2 emissions amounted to 312.55 tonnes of CO_2 equivalent (TCO_2e), with an emissions intensity of 22.33 TCO_2e per full-time employee.

Scope 1 emissions were dominated by Liquefied Petroleum Gas (LPG) usage, which accounted for 64% of total emissions, followed by road diesel at 28%. Scope 2 emissions—derived from electricity consumption—comprised 4% of the total Scope 1 and 2 footprint.

Scope 3 emissions were not yet calculated and were flagged for future review, requiring a detailed inventory across the 15 categories outlined in the Greenhouse Gas Protocol.



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 identified significant opportunities for carbon reduction, many of which involve transitioning away from fossil fuels to cleaner alternatives. The company was encouraged to explore changes in fuel sourcing, energy procurement, and renewable energy installation. These strategies aim to reduce reliance on high-emission energy sources while maintaining operational efficiency and quality of service.

THE KEY PROPOSED PROJECTS INCLUDE:

HVO Fuel Replacement

- Replace road diesel with HVO: 73.77 TCO_2e saved.
- Replace diesel used in machinery: 8.25 TCO_2e saved.
- Replace burning oil with HVO: 3.26 TCO_2e saved.

BioLPG Transition

- Replace conventional LPG with BioLPG: 198.86 TCO_2e saved.

Green Electricity Initiatives

- Switch to a green energy contract: 11.16 TCO_2e saved.
- Install a 60kWP photovoltaic (PV) system: 10.59 TCO_2e saved, potentially providing 98% of the company's electricity needs.

STEP 3: SCOPE 1 AND SCOPE 2 NET ZERO TRAJECTORY

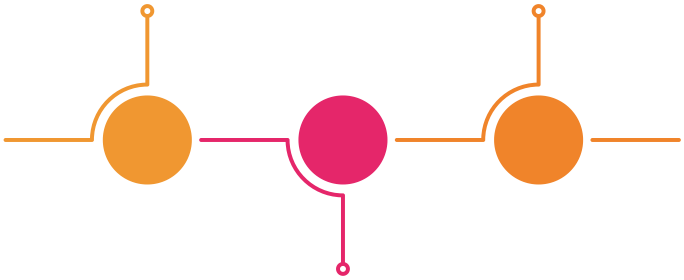
Inova Gates has developed a clear trajectory to achieve net zero emissions across Scope 1 and 2.

The company has committed to reducing LPG-related emissions by 50% by 2030 and fully eliminating them by 2035.

Furthermore, the overall goal is to achieve a 100% reduction in Scope 1 and 2 emissions by 2035.

REDUCING LPG-RELATED EMISSIONS BY 50% BY 2030 AND FULLY ELIMINATING THEM BY 2035.

CONDUCT A FULL SCOPE 3 INVENTORY BY 2027, WITH THE GOAL OF REDUCING SCOPE 3 EMISSIONS BY 97% BY 2050



100% REDUCTION IN SCOPE 1 AND 2 EMISSIONS BY 2035.

ENHANCING EMISSIONS STRATEGY AND STAKEHOLDER ENGAGEMENT

Additional strategic actions include tracking fuel consumption for site machinery and transport separately, which will improve the accuracy of future emission calculations.

The company will also conduct a full Scope 3 inventory by 2027, with the goal of reducing Scope 3 emissions by 97% by 2050.

Regular monitoring through the Carbonfit platform and annual reviews of carbon intensity metrics will help track progress and ensure alignment with targets.

Internal stakeholder engagement is also a key part of the strategy, fostering a culture of accountability and continuous improvement.

For more information scan this QR code