

Glenmore Farming Group and Connective Energy: Driving Renewable Energy with Biomethane

CASE STUDY



Nestled in Ballybofey, Donegal, in Ireland, Glenmore Farming Group is pioneering sustainable agriculture through its renewable energy arm, Connective Energy.

A COMMITMENT TO BIOMETHANE PRODUCTION

At the heart of Glenmore Farming Group's operations is a biogas facility that transforms organic waste - like farm slurry and poultry litter - into biomethane, green CO₂, and bio-fertilizer.

Connective Energy's operations are rooted in the principles of sustainability and environmental stewardship, with a particular focus on biomethane production. Biomethane, also known as renewable natural gas (RNG), is molecularly identical to natural gas and can be injected into the gas grid or used as vehicle fuel, providing a sustainable energy source.

90,000 tons
of organic waste
processed

20,000 tons
of CO₂ emissions
reductions

10,000 MWh
of renewable
electricity generated
- enough to power
2,500 homes

...every year



Contributing to decarbonisation and Irish energy security

Connective Energy employs several methods to ensure that the biomethane it produces is effectively utilized, including reducing its own reliance on fossil fuels and contributing to Irish energy security.

- **Road Transport:** The biomethane produced from Glenmore Estate is transported via road in specially designed modules, ensuring that it is economically and efficiently delivered to various consumption sites. One of those key end consumers is transportation itself under the Renewable Transport Fuel Obligation (RTFO). A significant portion of the biomethane produced in Ireland is being used as a low-carbon transport fuel for heavy-duty trucks and buses.
- **Pipeline Injection:** The biomethane is injected directly into the national gas grid, successfully decarbonizing it without any changes needed to the existing natural gas ecosystem.
- **Local Utilization:** At Glenmore Estate, biogas is used on-site for generating electricity and heat. This allows Glenmore to produce the energy that powers its own operations and reduces the need for external energy to be transported in.



Connective Energy and Hexagon Agility, a decade long partnership distributing biomethane

When strategizing on how to best utilize their new energy in 2016, Connective Energy selected Hexagon Agility as their supplier-of-choice for transportation.

"With the nearest grid injection hundreds of kilometers from our biomethane plant, Hexagon Agility's Mobile Pipeline® has been a key enabler. Hexagon's modules are particularly advantageous because they offer high capacity and are significantly lighter than any other product on the market. This reduces the number of trips needed, making the process more cost-effective and environmentally friendly."

Karol McElhinney

CEO, Glenmore Farming Group and Connective Energy

About Mobile Pipeline®

Hexagon Agility's Mobile Pipeline® solutions use lightweight Type 4 composite cylinders and are the industry benchmark in gas transportation.

Hexagon Agility's modules offer the most storage capacity of any composite cylinders on the market, which is crucial to minimizing the number of trips and the amount of mileage to transport biomethane. With biomethane production sites largely operating in rural areas and off-grid areas, Mobile Pipeline® is the key to unlocking this vital renewable energy source.

"We communicated with several existing users of Mobile Pipeline® modules, who shared their positive experiences of working with Hexagon Agility and using their equipment before making our decision. We were impressed by Hexagon Agility's excellent customer service and technical knowledge throughout the procurement process. Now, a decade into the relationship, it has been an excellent partnership!"

Karol McElhinney

CEO, Glenmore Farming Group and Connective Energy

For more information about
our Mobile Pipeline solutions:

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