

# Methane Capture and Use from Dairy Farms in Cornwall, UK



United Kingdom / Europe



## PROJECT DESCRIPTION

- A methane capture and use system is being piloted in Cornwall by Bennamann, supported by Cornwall Council. In this pilot project, three dairy farms have repurposed an existing slurry pit with an impermeable cover to capture fugitive methane. A mobile purification system processes and compresses the biogas into fuel-grade biomethane on-site, for use in tractors, trucks, or generators.
- In this circular process, fugitive methane from farm slurry is converted into energy, significantly reducing greenhouse gas emissions and providing additional income for farmers.
- Work by IFEAA showed potential to extend this approach to meet up to 1/3 of the county's natural gas demand. Cornwall Council has funded a Net Zero Methane Hub, coordinated by IFEAA, to accelerate adoption of the approach.

## RESULTS ACHIEVED

- The capture of, on average, 170 kg of methane per cow per year which can be used to replace fossil fuels on and off farms.
- Methane emissions captured from farm slurry lagoons have exceeded Intergovernmental Panel on Climate Change inventory estimates; accurate measurement is needed to understand the difference.
- Benefits for farmers include reduced fossil fuel, reduced fertilizer usage and costs, and improved soil health and grass yield.
- Reductions in carbon footprint of nearly 90%, bringing farms a step closer to Net Zero.

## PARTNERS INVOLVED IN PROJECT

- International Fugitive Emissions Abatement Association (IFEAA)
- Bennamann
- Cornwall Council

LEARN MORE

