

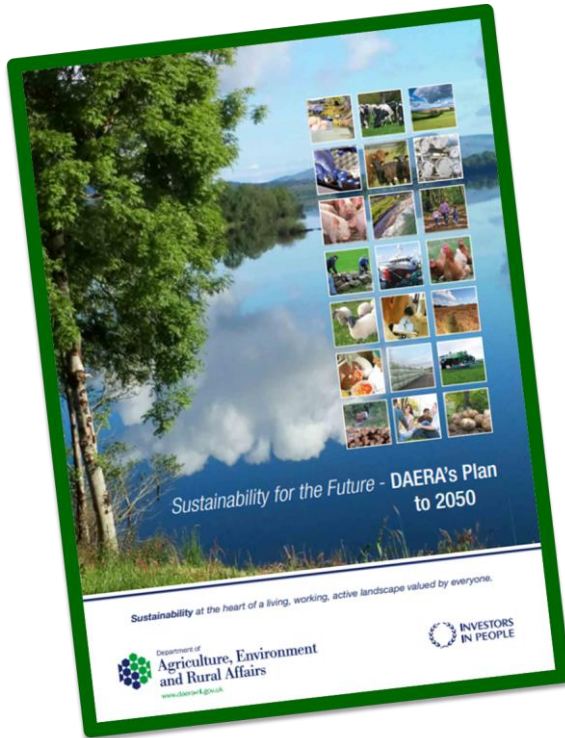
Shared Island Bioeconomy Demonstration Initiative

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DAERA's Vision



‘Sustainability at the heart of a living, working, active landscape valued by everyone.’ The NI agri-food, fisheries and aquaculture sectors have sustainable growth potential and can play a significant part in addressing many of the long-term environment and climate change challenges we currently face

Transformative Bioeconomy

- A strong bioeconomy could transform the way we address challenges in food, fuel, chemicals, materials, energy, waste, environment and health and remove our reliance on finite fossil fuels.
- Increasing importance of the bioeconomy in terms of Green Growth and its value in growing the economy's Gross Value Added and potential for job creation.



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Anaerobic Digestion in Northern Ireland

- Over 80 AD plants generating approximately 52 mW of energy in 2023
- 71 of these plants primarily agri fed, majority are 500kWh in size with 8 between 500 kWh – 5Mwh
- Two AD plants in NI already producing biomethane, first gas grid injection due Q4 2023
- Private investments planned in CO2 capture and biofertiliser production in 2024 and plans for large scale centralised biorefineries using agri and domestic material over the next 3-4 years
- KPMG estimate 6.3TWh of biomethane could be generated from indigenous feedstocks located within 10km of the existing NI Gas Network
- The Centre for Advanced Sustainable Energy (CASE) found that Northern Ireland has the resources to produce over 6.12 TWh of biomethane per annum from agricultural manures and silage from underutilised grassland
- This equates to 82% of the Northern Ireland gas distribution network demand in 2021.
- Biogas contributed 6.3% of renewable electricity produced in NI from June 2022 - June 2023

Example: Sustainable Solutions

New SBRI competition aims to identify practical solutions for livestock waste

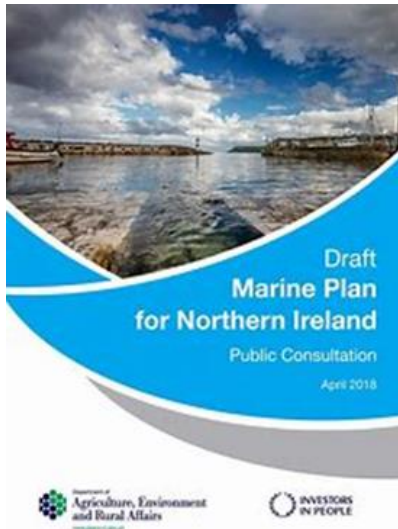


£600,000 awarded to six NI companies to fund feasibility studies into sustainable solutions for livestock slurry during the period January – August 2023

Core aim of this DAERA led project was to reduce surplus phosphorus and ensure efficient recycling of organic nutrients within Northern Ireland agriculture whilst contributing to climate targets.



Opportunities in the Bioeconomy



- In Northern Ireland the Transformative Bioeconomy is reported to have contributed 17.4% of the total regional GVA
- Estimated that more than 13,000 jobs could be created by 2030, if Northern Ireland moved to a circular economy
- The bioeconomy is one of the focus sectors for the Draft Circular Economy strategy.



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Thank you for your attention



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