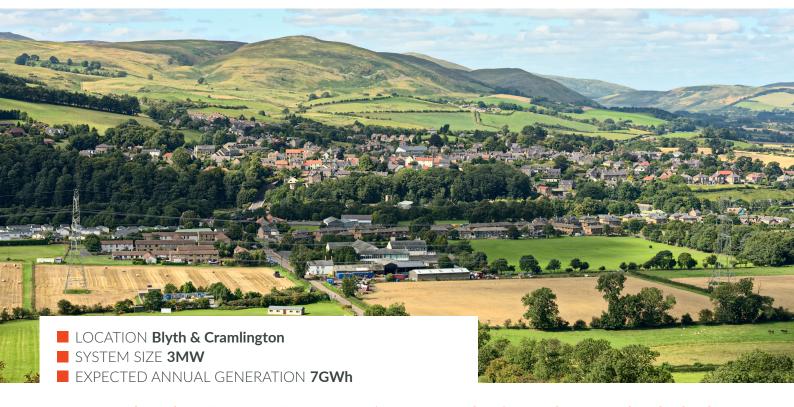
RENEWABLE HEATNorthumberland County Council





Locogen conducted a BEIS HNDU Energy Mapping & Masterplanning Study for Northumberland County Council (NCC) in April-July 2020.

Locogen conducted a BEIS HNDU Energy Mapping & Masterplanning Study for Northumberland County Council (NCC) to align with NCC's target to become carbon neutral by 2030 and deliver on fuel poverty alleviation and job creation pledges.Locogen estimated all thermal and electrical loads for buildings including social housing, public, commercial and industrial spaces. The quality in data varied greatly between buildings, therefore Locogen used a combination of metered half-hourly data, monthly billing, publicly available postcode data, EPCs and TM46 benchmarks to map out the energy use across the two towns.

Future demands were also incorporated into the study and demand profiles adjusted for all buildings considering potential for retrofit or increased efficiency. Locogen then identified, quantified and mapped renewable energy sources for heating, cooling and power provision.

Options appraisals for seven identified DHN clusters were conducted which assessed the techno-economic viability of 3rd, 4th and 5th generation DHNs. Three of the identified clusters were considered to be viable to progress forward to the detailed feasibility stage. One option involved using mine water in a 5th generation DHN to supply key public buildings and possible future buildings as part of a town centre rejuvenation project.

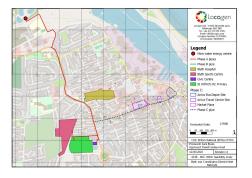
Locogen's renewable heat practice comprises a multi-disciplinary team of consultants with extensive expertise across technologies. These technologies include district heating networks, heat pumps and biomass systems.

Our service portfolio is comprehensive, encompassing every stage of the renewable heat project:

 Options appraisal; Feasibility; Design; Technical review; Owner's engineer; Project management; Installation; Commissioning; Asset management

Such is the expertise of our renewable heat practice that, in addition to these activities, our team are often called upon to provide remediation and expert witness services. This involves us in reviewing and assessing some of the most high-profile renewable energy installations in the country and bringing them back to proper working to order to deliver the benefits intended.

Our team also provides due diligence services on renewable heat projects to financial institutions offering non-recourse debt to projects and private equity investors







Locogen – Edinburgh 4 West Silvermills Lane, Stockbridge, Edinburgh, EH3 5BD Tel. +44 (0)131 555 4745 www.locogen.com info@locogen.com Find us on



WHY

LOCOGEN?

Locogen is an internationally recognised and award-winning expert in facilitating the development, construction and operation of renewable energy systems for our partners and clients. Our vision is to see the world powered by 100% distributed renewable and low carbon energy; where everyone has access to affordable, sustainable energy and clean air. We work to realise that vision by providing investment-grade technical and commercial expertise and advisory services to support the development, design, build and operation of renewable energy and low carbon projects in the UK and internationally.

SERVICE AREAS

We operate across all project stages, from site finding, feasibility and options appraisal, all the way through to construction, asset management and decommissioning. These services are delivered via our development, operational services, consultancy and energy services divisions.

DEVELOPMENT

Locogen has been developing renewable energy projects since 2009. We have successfully developed utility and commercial-scale wind and solar farms, along with community hydro projects. We often develop projects in partnership with other organisations, such as private equity investors, landowners, international developers and community groups. We are actively seeking new projects to invest in and we bring considerable experience and expertise to ensure success. We also offer a zero-risk option for landowners, where we lease the site and take full responsibility for every aspect of the development. If you're simply looking for finance, we can help identify the best-fit deal or look at investing in your project ourselves.



OPERATIONAL SERVICES

Our operational services team delivers asset management, operation and maintenance services across a range of renewable technologies. Asset management is key to ensuring the proper operation of your renewable energy asset, maximising revenue streams and boosting return on investment. Securing the right asset performs to your expectations over the course of its lifetime. Locogen has comprehensive asset management packages for wind, solar and hydro projects. Services include performance analysis, maintenance co-ordination, operational administration, regulatory compliance and financial services. We tailor these packages to meet precise needs of individual clients. Our asset management team has an excellent record in minimising downtime, responding quickly to technical issues to maximise generation - and revenues. Our Power Purchase Agreement (PPA) service is free to all asset management clients and secures the best deals available.

ENERGY SERVICES

Our energy services team complements our renewable energy consultancy and development divisions, offering contracting services over a wide range of technologies, including wind, solar, renewable heat and hydro projects. Our team includes experienced consultants, designers, field engineers, electricians and project managers. The renewable energy services team can also act as principal or main contractor, taking full control and responsibility for construction of your renewable energy project.

The team has worked extensively across sectors such as newbuild and social housing, public sector, commercial and community groups. Our experience and expertise ensure these projects are delivered safely, on schedule and to budget.

CONSULTANCY

Our consultancy team provides professional services at every stage in the life of a renewable energy project. At the very earliest stage, we conduct feasibility studies to advise on the viability of the project and perform formal due diligence services to ensure lenders or investors are appraised of all project risks. Our design team will take the project through from survey to complete project design and our consenting services will make sure all proper consents are obtained to allow the project to proceed. We offer expertise in mature technologies, such as wind, solar and renewable heat, and also advise on emerging sectors such as hydrogen, net-zero strategies, energy storage and local energy markets.

Locogen - Edinburgh Office

4 West Silvermills Lane, Stockbridge, Edinburgh, Midlothian, EH3 5BD Tel. +44 (0)131 555 4745 www.locogen.com

info@locogen.com

Find us on in

Locogen - Rennes Office

Espace Enterprise Haut Blosne (2A), 34 Rue Frederic Le Guyader, 35200 Tel. +33 (0)952 41 5243