



■ LOCATION **Graham's Glenfield, Cowdenbeath**

Image courtesy of Clearfleau Group Limited

Locogen assessed a bioenergy investment for Graham's Dairy at their Glenfield site in Cowdenbeath.

Seeking funding from the Scottish Low Carbon Infrastructure Transition Programme (LCITP), Locogen were asked by Graham's Dairy to assess a bioenergy investment on their Fife cheese factory. An investment that if implemented, would be a groundbreaking achievement for the Scottish dairy industry.

The project is located on Graham's Glenfield site in Cowdenbeath. A site Locogen have a long-standing involvement with having conducted feasibility work there in 2010. Now in the hands of Graham's since 2015, the Bridge of Allan based company wanted a new bioenergy plant for the creamery site that would provide low carbon heat and power.

To support the LCITP project, Locogen were asked by Graham's to assess the site for its bioenergy output by inspecting the site's heating and cooling systems as well as its energy usage and efficiency. Locogen's work was used to assist the design and optimise the integration of low carbon heat and power into the site's existing systems.

Graham's is keen to build sustainable practices into the family business and, to support the Scottish Government's energy strategy, managing director Robert Graham is actively working to achieve net zero carbon across every area of the business.

The proposed work on the creamery site would certainly provide a great step towards this goal as it maximises the renewable energy available. The proposed plan would use whey and other residues from cheese making to fuel the on-site bioenergy facility. Meanwhile, the biogas produced from the facility would be used to generate low carbon heat and power for onsite usage throughout the site - bringing the process full circle.

Locogen are delighted to have provided the assessment for this site and thank others in the project team, including bioenergy consultancy Foodchains, for their contribution.



This project marks a huge improvement towards zero carbon manufacturing for the dairy sector. A change, Senior Engineer, David Ferguson, believes could be mirrored in other industries:

"This project demonstrates Graham's commitment to achieving net zero carbon emissions across its organisation. If implemented, the project would provide significant waste and energy reductions as well as an excellent example to other businesses currently considering their decarbonisation strategies".