Aston University
Birmingham

EBRI
European Bioenergy Research Institute

St Francis Group Atlas project

Development Plan Summary (Tyseley area, Birmingham, UK)

Overview: The Atlas project is sponsored by the St Francis Group, a subsidiary of DSM Demolition Ltd, an established demolition and remediation company based in Birmingham. It was this involvement with recycling and building materials that led to an interest in the recycling of other residue materials. For the St Francis Group, a particular area of interest is the conversion of waste into energy and the processing of municipal solid waste (MSW), along with commercial and industrial waste generated by nearby factories, into a fuel product.

The waste and energy industries are undergoing a prolonged period of parallel, structured change in the UK. For energy, the national mix of energy generation is moving towards more distributed, smaller scale generation and a greater deployment of renewable and low carbon technologies. Part of this picture is the deployment of high efficiency co-generation and tri-generation systems and a greater focus on the efficient use of heat. The waste industry has been driven to innovate by aggressive long-term rises in landfill tax, increasing raw material costs and strain on supply. Municipality led targets for recycling along with commercially led standards for environmental performance in industry have also driven the concepts of resource efficiency and extraction of value from waste into societal practice.

www.bioenergy-nw.eu

Project detail: The support provided to the St Francis Group by the BioenNW project included a guide to the business case requirements in developing a bioenergy project on the site. The development plan reviewed a range of technology types which could be suitable for application at the proposed Atlas site in the Tyseley area of Birmingham. Indicative appraisals were produced for anaerobic digestion, gasification and autoclave technologies. The range of feedstocks and outputs appropriate for the Tyseley area were researched, compared, and used as the basis of the assumptions in indicative appraisals for each technology types.

Outcome: A high level financial assessment of the technologies, under the given assumptions and scale, produced a positive return and payback period within the term of the project's life. The plan also included an analysis of the key sensitivities of the technologies modelled. As there were multiple potential options for the Atlas project, the report was produced so that it was possible to consider these technologies not as individual potential solutions but as an integrated solution. This was not modelled but would likely be beneficial in improving the investment viability through the increased value extracted from the selected feedstock(s).

This development plan is part of BioenNW, a €7.9m strategic initiative of the INTERREG IVB North West Europe Programme (2011-2015). BioenNW is led by the European Bioenergy Research Institute at Aston University, UK and sees 11 partners working together to deliver small-scale bioenergy schemes throughout North West Europe.

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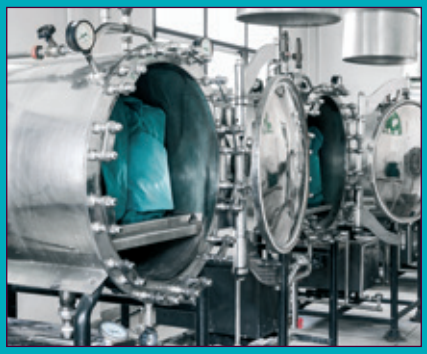

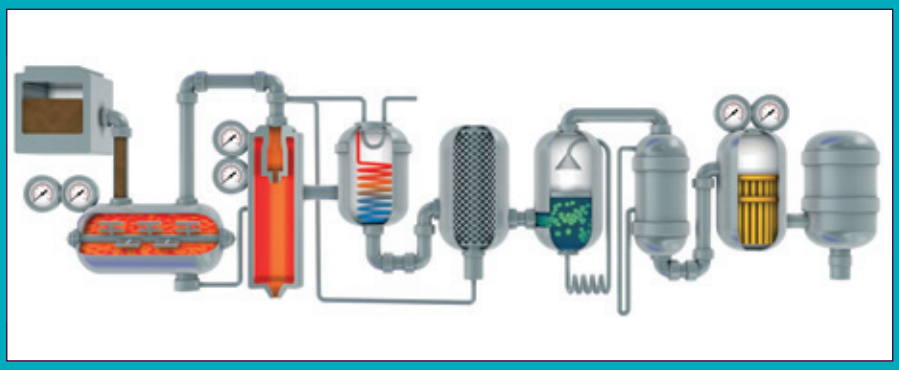

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