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EBRI
European Bioenergy Research Institute

South Warwickshire Community Interest Company

Development Plan Summary (South Warwickshire, West Midlands, UK)

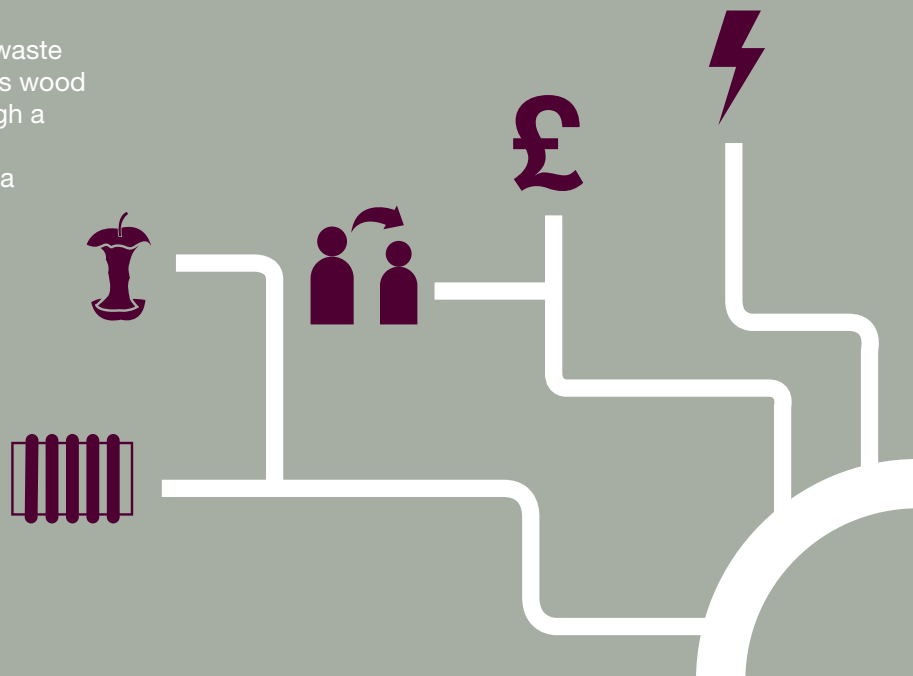
Overview: Support was provided to the South Warwickshire Community Interest Company (SWCIC) to analyse a possible bioenergy opportunity at the South Warwickshire Industrial Estate in the West Midlands. SWCIC were interested in utilising a local supply of compost reject materials for use in a small combined heat and power (CHP) facility.

Proposed project:

Support was provided to SWCIC through the BioenNW project to evaluate the viability of a bioenergy scheme opportunity at the South Warwickshire Industrial Estate site and to explore the potential feedstocks, technologies and applications that could be deployed there. Through the development plan provided to SWCIC, the organisation was also presented with a summary of the key opportunities and risks associated with the proposed scheme.

SWCIC was interested in utilising residue or waste feedstocks instead of virgin material - such as wood chips or pellets - and to process these through a range of possible conversion technologies. The development plan provided SWCIC with a broad overview of the current characteristics of the market, technologies (including combustion, anaerobic digestion and pyrolysis) and next stages to be considered to develop this project.

SWCIC already had information about the proposed site, as well as data on four businesses of a similar size that were independent to properties managed by a SWCIC member. For the purposes of this development plan, it was then possible to utilise the information acquired for one of the independent businesses and extrapolate this to all four.



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Outcome

Due to the heat and power demands for the South Warwickshire Industrial Estate, a waste bioenergy plant could not be sized to meet onsite demand in an economical way. There would be scope to install a larger system than required but the capital and operating costs of a new biomass system installed at the site would have to be recuperated from the displaced electricity and heat usage, generation incentives and possibly by exporting power to the grid (if connected). With few options for utilising the heat at present, this would operate as a power only plant and would therefore be less efficient and economical.

A list of recommendations for SWCIC to move forward with their bioenergy project development was provided.

These included:

- Sources of information on technology options, policy and developments in the UK
- The need to define the scale of the project (for local supply only or grid connection)
- The need to define technology, feedstock supply, project risks and ownership
- Whether to only initially enter the bioenergy supply chain, including reducing organic waste to landfill, energy crop cultivation or collective green energy purchasing.

The findings contained in this report were discussed with SWCIC at a community workshop.

This development plan has been produced through BioenNW – a €7.9m strategic initiative of the European Union 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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