

# AGRICULTURE PROJECT OPPORTUNITY

## Community Owned/Operated, Small-Scale Anaerobic Digestion

### North Kilworth, Leicestershire, United Kingdom

#### WYG Environment

#### OVERVIEW OF AGRICULTURE PROJECT:

The project involves developing a community led joint-venture (JV) company to set up and run a community AD plant. Potential partners would be local food producers (including abattoir and brewery), and local farmer(s). We propose to investigate the technical, economic, regulatory and legal barriers to such a model, and how they can be overcome. The innovation is that this will be a JV led by a community owned company, with buy-in from the community, local organic waste producers, local farmer(s), and a business/site that can utilize renewable heat. This innovative JV model will benefit both local food and beverage companies, local farmers, and the local community.

**PROJECT EXPECTED START DATE: Mid-2013**

**ESTIMATED ANNUAL EMISSION REDUCTIONS: Not yet estimated**

#### PROJECT DETAILS

- **Site Name:** North Kilworth Community Interest Company AD plant
- **Geographic Location:** North Kilworth, Leicestershire, UK
- **Type of feed stock(s):** Various wastes (biodegradable municipal, agricultural, abattoir, commercial/industrial organics)
- **Proposed technology and/or system components:** depackaging, pretreatment, anaerobic digestion, combined heat and power, digestate de-watering and storage
- **Committed developer:** North Kilworth Community Interest Company

#### IMPETUS FOR PROJECT

- Costs to transport organic wastes to treatment facilities are rising. Presently, there are uncontrolled emissions from untreated animal slurries, emissions from transporting wastes and fertilizer, and electrical losses in transmission of power to rural areas.
- De-centralization of wastes treatment and energy production has environmental benefits, by treating wastes where they arise, and producing energy where it is needed. The rising cost of energy means this ideal is becoming increasingly economically attractive. Good quality digestate is beneficial to land, recycling organic material and supplementing inorganic fertilizers. Land application can boost soil quality, boosting yields in the long term and saving fertilizer costs in the short term.

#### PROJECT HIGHLIGHTS

If successful, this project will:

- Benefit the local food/drinks production industry by reducing waste disposal costs and providing low-cost renewable heat.
- Benefit farmers by boosting yields and reducing fertilizer costs.
- Increase efficiency, save costs, create income, and potentially boost output from all businesses involved.
- Reduce the greenhouse gas emissions from all partners, farms and factories by minimizing the distances that it is necessary to transport wastes and fertilizers.
- Provide a successful/profitable model for community AD could be applicable in towns and villages throughout the UK.



#### FOR MORE INFORMATION

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