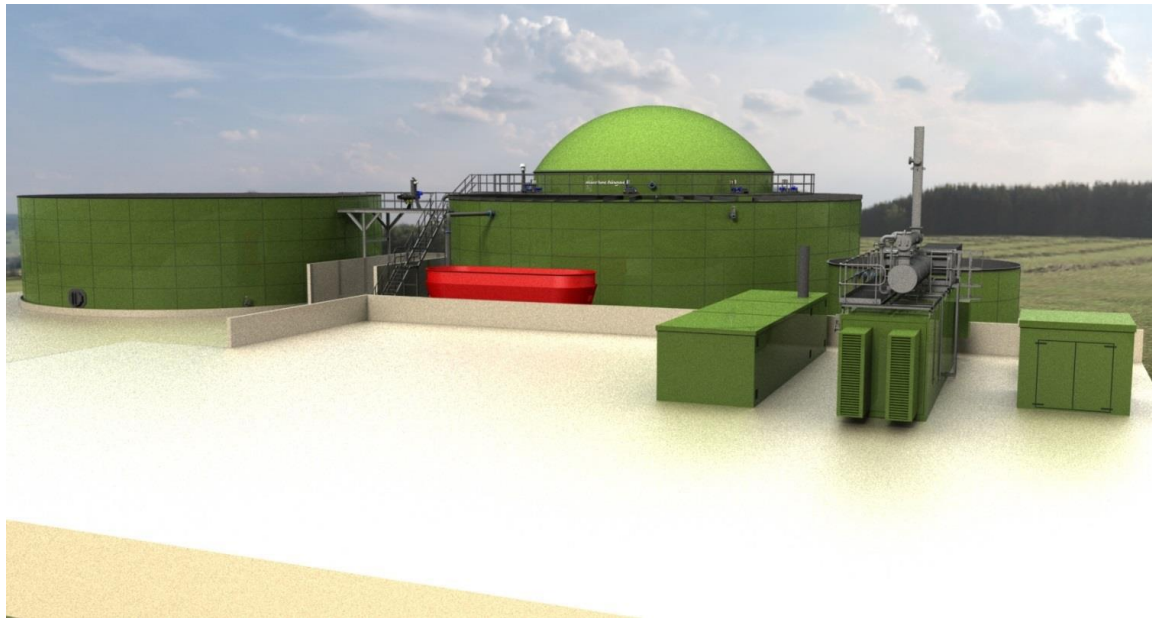


Stragglethorpe Biogas Renewable Energy Project

Stragglethorpe, Notts, NG12 3BA

Background Information

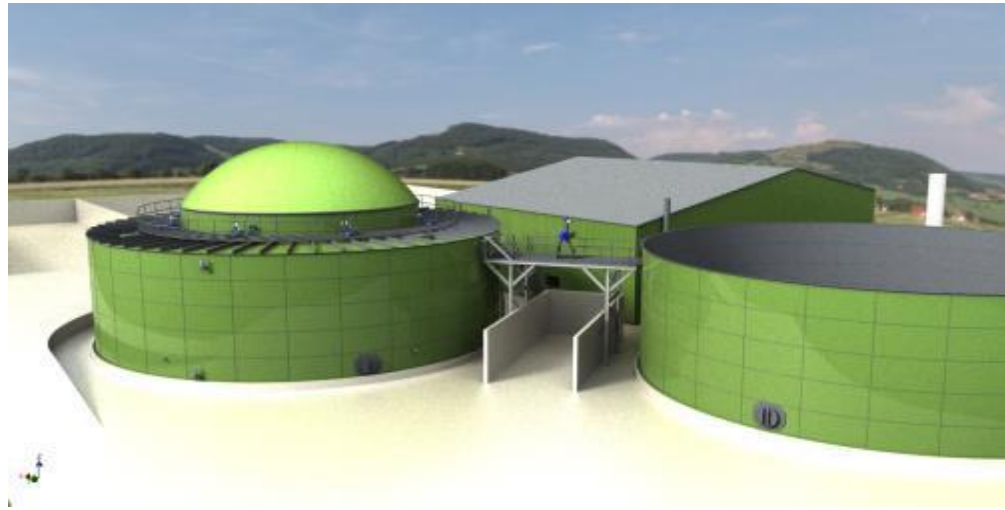
A farm-based facility to generate renewable electricity and heat for local use



What is the Planned Project?

- An extension of current farm operations
- To construct an anaerobic digestion (AD) plant which can:
 - Take in and digest locally grown crops
 - Generate biogas to produce renewable electricity and heat
 - Produce organic fertiliser to be applied to farmland reducing need for mineral & fossil fuel based fertilisers
- Located next to Stragglethorpe Grain Store. Under 1 hectare plot alongside new A46 road.
- Planning application to be submitted to Rushcliffe Borough Council in October, 2014

What will it look like?



- Low profile visual impact in line with existing agricultural activities and buildings
- No noise impact
- Odour controlled within site boundary
- Feedstocks delivered locally, primarily from internal farm roads and A46 slip road.

Feedstock Inputs and Resulting Outputs

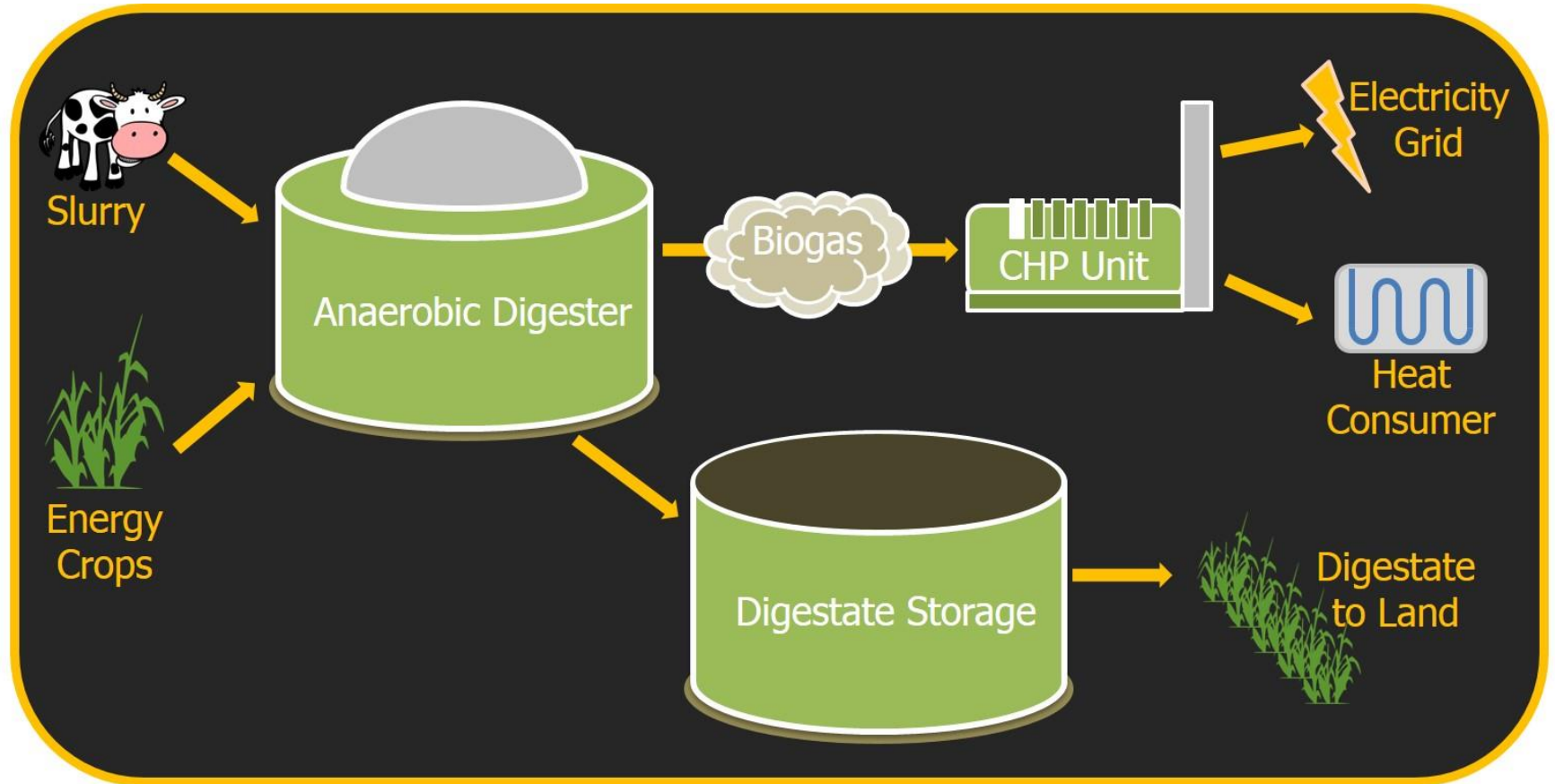
Feedstocks that can be used :

- Maize and whole-crop silage
- Grass silage
- Energy beet
- Other break crops and manures

Outputs :

- Approx 4,000 MWh/year of electricity into the local grid (over 1,000 houses) or local industrial demand
- Approx 4,000 MWh/year of heat for local use
- Organic fertiliser returned to local land to enhance soil structure and fertility

Anaerobic Digestion Process Overview



Benefits

- Support local energy generation on a 24/7 basis
- Creates a virtual cycle, returning the remaining nutrients after energy generation to the soil
- Replace use of fossil fuels and reduce carbon footprint in the community
Total CO₂ emission avoided per year = 2,100 Tonnes (42,000 tonnes over project life)
- Provides renewable electricity into the grid for equivalent of over 1,000 homes
- Renewable source of heat – eg for grain store
- Lower use of inorganic fertilisers based on fossil fuels for local farms
- Improved farm sustainability and rotation in farming operations