

Green Energy - Anaerobic Digestion

Introduction

The Anaerobic Digestion industry has grown rapidly in the last couple years, with AD plants doubling since 2011.

Anaerobic digestion (AD) is based on the premise of producing renewable energy from the capture of methane gas produced by the decomposition of manures and plant material (feedstock) under controlled conditions without the presence of oxygen. This biogas can be used to generate electricity and heat, either utilised on the holding or supplied to the national grid or another third party. The remaining organic matter ('digestate') can be used on the land as a fertiliser being rich in N, P and K or as a soil conditioner.

There are various types of feedstock which are suitable for the AD process. These include the following:

- Farm yard manure
- Animal slurry
- Grass silage
- Maize silage
- Food waste



Tackling Climate Change

As a source of green energy AD has the potential to make a contribution to tackling climate change and the reduction of greenhouse gas emissions. There are a number of key targets which have been set through EU directives for the renewable energy and recycling sectors. These include the following:

- cut UK emissions by 80% by 2050
- source 15% of UK energy from renewable means by 2020
- source 10% UK energy used in transport from renewable sources by 2020
- cut UK biodegradable municipal waste sent to landfill to 35% of that produced in 1995

Increased development of renewable energy resources for example is vital to facilitating the delivery of the Government's commitments. Positive planning is therefore fundamental to achieving such growth.

Planning Policy

The new National Planning Policy Framework (NPPF) provides a useful insight into national policy.

Broadly speaking, planning authorities should have a positive strategy to promote energy from renewable and low carbon sources. This is essential to the economic, social and environmental dimensions of sustainable development.

Whilst seeking to maximising green energy opportunities, adverse impacts such as landscape and visual impact must be satisfactorily addressed.

Do I Need Planning Permission?

Planning consent is likely to be required for the larger scale AD installations in particular. Recent changes to permitted development legislation has potentially opened up opportunity for farm-based projects to avoid the need for a planning application. Two key criteria are that the waste is produced on the holding and that there are no protected buildings within 400 metres of the unit. Centralised Anaerobic Digestion (CAD) proposals using organic materials from other industries e.g. food or household waste will continue to require approval from the waste authority at the County Council.

Where consent is required, a detailed justification is required to support your planning application. This may include the need for specialist input relating to clean and dirty water disposal, the risk of airborne pollution, landscape impact, traffic generation and noise, for example.

Regardless of the size and nature of the proposal, consultation with the planning/waste authority and the local community is recommended at an early stage.



Renewable Energy Feed-in-Tariffs (FiTs)

The latest tariff rates are available from the Department of Energy and Climate Change (DECC) website (www.decc.gov.uk).

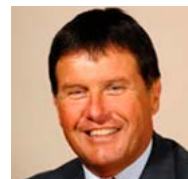


Acorus Services

Acorus consultants can advise on all planning aspects relating to various types of low carbon projects such as PV, wind and anaerobic digestion. Regardless of the scale of the project, we can assist in whatever capacity; sourcing land for clients to rent or purchase, agreeing heads of terms, liaising with the local planning authority and facilitating your planning application. Please contact us to discuss your proposals further.



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