

Sustainable Outcomes

Clean technology - Waste not, want not

The murky world of anaerobic digestion has often been considered an “**also-ran**” in the world of clean technology. But could the ugly duckling in fact be a swan? Some of today’s advocates are proclaiming that biogas could be no less than an **energy revolution**, with the potential to provide up to **50%** of the UK’s residential gas demand in the near future.

In its recent report, “**The potential for Renewable Gas in the UK**”, National Grid plc identified that “**biogas**” (gas from waste) could provide up to 50% of the UK’s residential gas demand. Given that potentially suitable sources of biogas waste include sewage, manure, food, wood, and household waste, anaerobic digestion (AD) is seen as one of the principal technologies to support this potential “**energy revolution**”.

AD is not a new technology, indeed it has been used in the wastewater treatment industry for decades. It is however a relative newcomer to the field of household and industry waste management, albeit one in which **DEFRA** is showing considerable support through both its policies and its funding.

Despite this, we are not yet seeing large numbers of AD plants under construction across the UK. This is partly because the public sector, despite its mandated targets for waste recycling, recovery and reduction, is hampered by procurement requirements to engage waste support through a competitive tendering process. This process can be exceptionally slow, and to date only **3 of the 18 Local Authorities** with signed PFI waste management contracts in place have operational facilities.

In contrast, the private sector does not yet have any mandatory targets for waste management, so investment in renewable energy technology is solely a business decision. Perception, however, is the key concern here, and whilst many food producers would appear to be ideal candidates for AD, brand taint arising from direct association with waste management activities is still seen as a major hurdle.

AD technology companies wishing to build their own plants therefore face a number of obstacles. Raising finance is hard without guaranteed waste inputs (providing both the **'fuel'** and revenue from disposal fees), as well as offtake contracts for the biogas. Conversely waste producers will often not commit to a disposal route until a plant is built and operating, or has at the very least secured planning permission and an operating permit.

Successfully entering the waste management market therefore requires expertise across a range of disciplines, although for those companies that do succeed, the returns can be incredibly attractive. At **Trip**os we are currently working closely with such a new entrant to help it to overcome these barriers and reap the rewards of its efforts, and will keep you informed of progress!

For further information on AD, waste management or other cleantech issues, please contact Steve Sumner at steve.sumner@triposconsulting.com.