1900 tonnes of dog poop a day…but what to do with all that poop?

There are around eight and a half million dogs in the UK. If each dog produces say 8 oz a day then very prudently that tots up to approx 1900 tonnes a day...or a mind blowing six hundred and ninety three thousand tonnes (693,000 tonnes) per annum. But that's small fry to the USA…they create around 11 million tonnes a year!

As we already know (see Article 1) the UK disposes 80% of dog waste into landfill. The remaining 20% is incinerated. But you would think that there must a better solution for this 'by product'. We need innovation to make this problem into a useful commodity.

Here are a few innovations, but none have made it into the main stream yet…

Lamp powered by methane from Dog Poop

Hopefully in time there will be more schemes using small scale anaerobic digesters to produce energy from organic wastes, like the dog-poop-powered street lamp in **this article** which will run for 2 hours on 10 bags of dog waste.

The dog-park biogas process is relatively simple: Pet owners stoop and scoop using a biodegradable bag, and toss bags into a methane digester. Microbes and water in the septic tanks work in an oxygen-free zone breaking down the dog poo; methane gas is released, rises and is ready to be used as energy.

The poo poo power project

Ms Océane Izard, a young Swiss designer, created the Poo Poo Power: a machine that transform dog's faeces into electricity and could be used in your own home! Fecal matter as renewable energy is not new but the trend is still at an embryonic stage. This project however did not make it past the concept stages.

Installing a digester in park

Local Authorities may want to take a look at this. This is a 2012 feasibility study looking at installing an anaerobic digester in a park in Thurston County (USA) for dog waste management and education

While the current pet waste management system protected human health and water quality, it contributed both organic waste and plastic bags to the local landfill. This feasibility study examined the potential of establishing an anaerobic digester for dog waste at Hawk's Prairie Off-leash Area.

The study aimed to green the park by reducing over 15,000 pounds of dog waste and associated plastic bags to the landfill each year, aswell as upcycling the waste into bioenergy and potentially compost.

It was also envisaged that the unit would also serve as a tool for providing education and outreach related to the importance of cleaning up after dogs to protect human health and water quality.

It was projected that the estimated cost for the first year would be $30,776, which included the purchase of the digester, installation, digestible bags, monitoring, analytical testing, interpretive signage, outreach and evaluation.

Dog waste as a additive to other energy-to-waste streams

The potential of dog waste to produce biogas and/or enhance the biogas productivity of some other animal and plant wastes was investigated. Two waste combinations of dog waste with field grass (DG), dog waste with cow dung (DC) and one single waste type of dog waste alone (D), were used in the investigations for comparing the potential of dog waste for biogas production.

The result of the proximate and microbial analyses revealed that dog waste has high potential for biogas production since it is a good blend for other waste types such as field grass and cow dung!