

Bedminster has Solution to Ireland's Waste and Energy Issues

By Collette Devlin

Ireland has become more environmentally aware – the average person on the street, celebrities and even the huge multinationals are conscious of doing their part to help reduce and repair the damage we have done to our world.

Communities are taking action to make their towns and cities a greener place to live. They expect the solutions procured by local governments to perform highly – particularly in the key areas of renewable energy, diversion from landfill and carbon footprint. But it seems this is not the case in Dublin city.

The Bedminster BioEnergy Solution facility is considered to process a zero environmental value material in municipal solid waste. Its objective is to add environmental value to this material by recovering the largest part, the biodegradable component, and sending other materials for recycling such as scrap steel and aluminium. By recovering and recycling these materials, the greater carbon footprint of their manufacture from virgin raw material can be calculated and offset.

In addition, the diversion from landfill of pyrolysed BioMass minimises greenhouse gas emissions and this significantly enhances carbon footprint performance. Similarly, the electricity exported from the facility will be sold and will

therefore offset CO₂ generation at a typical power station, thus saving more fossil fuels.

Although Bedminster International is headquartered in Dublin, it does not have a plant here. It continues to work to secure waste streams and planning permissions, the key components required to establish such facilities. Meanwhile Dublin City Council has been granted permission to build a large incinerator in Ringsend, which seems to fly in the face of environmental best practice.

With offices in Boston and London, Bedminster has been signing agreements with strategic partners all around the world, while continuing to explain to local authorities here that there is an alternative to the incinerator.

'Local Government is relying on 10 to 15-year-old, out-of-date local and regional plans. Can you imagine the carbon footprint from the 1,000 trucks that will be travelling in and out of Ringsend every day to the proposed incinerator?' asks Pearse O'Kane, CEO of Bedminster. 'We have a state-of-the-art Carbon Negative solution and it seems nobody wants to know,' he adds.

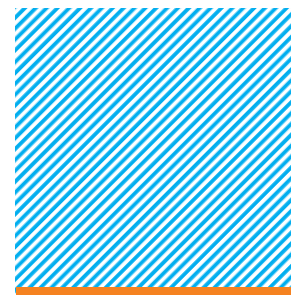
Mr. O'Kane further explained that if Dublin used the Bedminster BioEnergy Solution, then consumers would only need one bin and only one truck would be needed to collect all the City's rubbish that would also not need sorting in advance of processing.

'We are not asking Local Government for a cent. We will build, operate and finance the facility ourselves. All we ask for is that the Local Authority let us have the waste,' says Mr. O'Kane.

Reducing our carbon footprint is perhaps one of the most important steps we can take to save our environment. Bedminster International is dedicated to this cause, which is at the core of their business. Tests show that for every tonne of waste processed by Bedminster, a tonne of CO₂ equivalent is prevented from entering the atmosphere. Another way of looking at this is; for every 100,000 tonnes of waste processed by Bedminster, this would be equivalent to taking more than 36,000 cars off the road.

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SO HOW DOES IT WORK?

The Bedminster BioEnergy Technology can be configured to produce either a BioEnergy or compost material. In each case, the initial part of the process uses the patented Bedminster Digester to efficiently separate the waste into biodegradable and non-biodegradable fractions.

Waste is received onto a tipping floor where any oversized items are removed before being transferred, unshredded, to the Bedminster Digester.

In two days the Digester breaks down the biodegradable material by a combination of microbial and mechanical activity, to form a consistent BioMass material less than 12mm x 25mm (1inch) in size that can be easily separated from the non-biodegradable fraction that remains essentially whole.

This is achieved by passing the output from the Digester over a trommel screen; in this case the biodegradable fraction drops through the trommel and the unshredded material such as plastic bags, bottles, cans and similar items pass over the screen.

The overs are passed through magnetic and eddy current separators so that metals can be recovered for recycling, whilst the balance of synthetic material, mainly comprising plastic and non-biodegradable textiles, is baled and transported for further processing/recycling.



Dealing with our waste is a huge problem