



FLEXIBUSTER™



“Imagine a world where waste is the fuel, where there are no more diesel generators, where everyone can produce their own power from their own waste, that’s the world we are trying to create”.



Sandra Sassow **CEO at SEaB Energy**

MAKE YOUR OWN GREEN ENERGY ON-SITE

SEaB Energy is the first to market a patented, highly mobile energy generator that uses a microbial process to turn organic waste into energy and revenue. At the same time it eliminates the necessity and associated costs of transport and disposal of waste.

- Transforms food waste into energy, water and revenue
- Eliminates the cost of waste disposal
- Reduces your carbon footprint and complements net-zero/carbon neutrality ambitions
- Each unit has the ability to handle between 500kg and 2500kg of food waste per day
- A cost – effective renewable energy generation and waste management solution

Our multi award-winning Flexibuster™ is designed and engineered to support like-minded retail, wholesale, hospitality and food manufacturing organisations to make their own green energy on-site.

- Short pay-back period
- Modular design
- Plug and play rapid installation
- Worldwide delivery
- Remote monitoring & management
- Low maintenance, rugged and reliable design
- 2 year manufacturers warranty

THE PROBLEM

"Around 1.3 billion tonnes of food produced globally for human consumption is either lost or wasted every year"

Source **The FAO**



Tonnes of food waste already sent to landfill by the UK this year.



The increasing pressure on landfill sites is driving up the cost of waste management.



Traditional ways of dealing with this bio-waste are not sustainable.



Hauling this waste in trucks, with engines that get just 3mpg, to centralised facilities adds cost and increases the carbon footprint of the waste.

THE SOLUTION

Our patented process extracts maximum energy from the waste stream in the form of Biogas which is then used to fuel a CHP engine to provide electricity and heat. Because of the built-in pasteurisation process, Flexibuster™ can process a wide range of feed-stocks in a completely safe, odour free environment.



MOUTH
Biowaste is loaded,
chopped and mixed

**COMMAND
UNIT**
Digestate is stored;
fertiliser is pasteurised

DIGESTER
Biowaste is digested,
biogas is produced

GAS HOLDER
Biogas storage

CHP
Biogas is consumed to produce
energy and heat

VALUES FROM OUR SMALLEST FLEXIBUSTER™

FLEXIBUSTER™

Flexibuster™: The multi-award winning technology from SEaB Energy that is delivered to site ready for plug-and-play installation, which turns your organic waste into energy right where the waste is generated and the energy is required.

This is our largest 2.5t/day unit



SYSTEM LAYOUT

- 3 - 7 20ft shipping containers made up of:
 - 1 command unit
 - 1 - 5 digesters, depending on type and quantity of waste
 - 1 gas holder
- Waste Input Mouth Unit (10ft container)
- Combined Heat & Power Unit (CHP)
- Minimum footprint 11x12m

CONTROL & OPERATION

- Easy operation with different mouth options for site specific loading and feeding
- Control System with Remote Monitoring & Management
- Fully automated process - interaction limited to loading the waste and offloading the fertiliser

STANDARDS & CERTIFICATION

- PAS 110
- DSEAR / CE
- T24/25 waste exemption licence in UK
- UL Compliant

WASTE = OPPORTUNITY

Our containerised anaerobic digesters (AD) are fully automated and remotely managed. You tip your food waste into the mouth at one end and simply leave the rest to Flexibuster™.

State-of-the-art sensors and controls will automatically prepare this material for digestion and control the flow of the material through the system.



A logical and sustainable on-site process to capture the energy that remains in food waste.



Reduce or eliminate the cost of food waste disposal and external site processing requirements.



Transform waste into heat, electricity, water and rich organic fertiliser on-site.



Provides an additional revenue stream through selling surplus energy water & organic fertiliser.

“SEaB Energy’s FLEXIBUSTER™ has been a revelation in the way we now manage our food waste. It ticks all our important recycling and sustainability boxes as well as health, safety and cleanliness”.



Steve Axton **Maintenance Manager at Best Western Hotel**





Many like-minded businesses are already benefiting from the power of Flexibuster™, creating their own energy, eliminating costs of waste disposal and reducing their carbon footprint.

When the Portuguese supermarket chain Continente explored innovative ways to reduce their operating costs and carbon footprint, SEaB Energy's Flexibuster™ technology provided a unique solution to their objectives.

ANNUAL FIGURES



182 T



123,000 kWh



56,000 kWh



150 T

"The investment in this pioneering waste-to-energy project reflects Continente's relentless focus on adopting sustainable development measures. We believe in a green economy and the efficient long-term use of natural resources."

José Fortunato Director at Continente

IS THE FLEXIBUSTER™ RIGHT FOR YOUR BUSINESS?

DO YOU HAVE THE RIGHT WASTE?

Our systems can process:

- Any food waste
- Sewage
- Animal slurries
- Some compostable materials

We cannot deal with:

- Wood chips
- Big bones
- Any type of inorganic waste

ARE THERE ANY BY-PRODUCTS?

Yes, there is liquid fertiliser, a valuable organic product for agricultural and landscape application, high in nitrogen and phosphates. Alternatively, you can add an extra 20ft container for a dewatering system and have bagged dry fertiliser and grey water.

DO YOU PRODUCE ENOUGH WASTE?

You need a minimum of 400kg of organic waste per day for the basic unit to pay back in an attractive number of years.

Our systems come in 5 sizes and can process up to 2.5 tonnes of waste per day.

DO YOU HAVE ENOUGH SPACE?

You need good access for delivery of the system and space for 3 x 20ft shipping containers (expanded up to 7 x 20ft shipping containers for larger site requirements).

ARE THERE ANY LOCAL REGULATIONS?

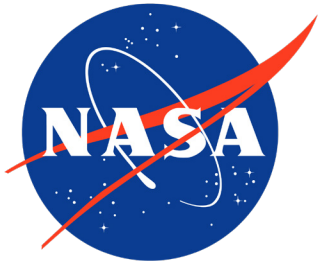
Environmental regulations differ by country but local planners are sympathetic towards micro AD as the technology is mobile, so planning is less of an issue.

WILL I BE ABLE TO MAINTAIN IT?

The system is designed for automated operation and remote management. Annual planned maintenance is conducted by an approved service engineer.

AWARD WINNING & GAME CHANGING TECHNOLOGY

SEaB Energy was selected from over five hundred applicants by the NASA backed sustainability initiative, 'LAUNCH: Beyond Waste,' as a provider of a global game-changing technology to address climate change.



FUNDING, PRESS, ACCELERATORS & AWARDS



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How much green energy could your business create from your food waste?

We would welcome the opportunity to provide some indicative insight into the potential cost reductions, carbon savings and energy outputs for your business based on your current volume of organic food waste.



UK: +44 (0)20 3003 5086 | USA: +1 202 599 4003



sales@seabenergy.com



LONDON OFFICE

63 St Mary Axe
London
EC3A 8AA
UK

NEW YORK OFFICE

48 Wall Street
Suite 1100
New York
NY 10005
USA

PRODUCTION IN:

UK
EU
USA

