

## Profile View

### Details

**Title:** UK company has developed an environmentally sustainable solution for using waste as a fuel it is seeking global partners via distribution agreement, commercial agency agreement, and /or joint venture.

**POD Reference:** BOUK20210820001

**Summary:** This UK SME has developed a vortex system that allows waste to be converted to heat and the heat generated to be used in a number of different applications, these include electricity generation, and direct heating applications. The company has successful installations in the UK and also in some Asian territories and are now seeking global partners to enable them to achieve sales in international territories via a distribution agreement, commercial agency agreement, and /or joint venture.

**Description:** This UK company was incorporated in 2018 to provide and operate modular solutions that recycle or process waste. The modular solutions can be configured to meet each installations specific needs.

Integral to each installation is the vortex systems that the company has developed, the vortex systems are an advanced thermal conversion technology that produce clean heat from waste substrate. This destroys waste at much higher temperatures; each installation achieves temperatures of 1400/ 1700 degrees Celsius, this is approximately 300 degrees Celsius higher than competitor technologies. The heat produced from the waste conversion process results in a less than 2% solid residue which is inert and recovered to be resold for use in road construction or building materials.

A single vortex installation can destroy up to 8000ton/yr of one or multiple waste streams. All emissions are compliant with global emission regulations and environmental laws including Environment Agency(EA) guidelines (UK) and Industrial Emissions Directive (IED) 2010/75/EU.

Installations that have been commissioned include providing waste management and energy generation on hospital sites for medical waste, tyres, car frag (the 5% of a car that cannot be recycled), and Poly Urethane (PU) dust.

The company would like to speak to partners who would be interested in distributors in the above-mentioned sectors or partners looking to

manufacture the technology in their own territories, they would also consider a joint venture partnership.

It is envisaged that a future partner will be a waste specialist with large process waste streams who wish to introduce this new technology in their country. The company would like to speak to partners from the waste management/ energy sectors who would be interested in becoming distributors of the pre-manufactured modular system; or partners looking to act as an agent to act for the UK company on a commission basis via a commercial agency agreement in their own territories. Partners will have clients or connection to the waste to energy sector in their region.

A distribution agreement would also be considered with partners currently working in following sectors waste to energy, the circular economy, or renewable energy.

The UK company would also consider a joint venture partnership in which, the potential partner is expected to contribute to further development of the installations including supply of specific local contacts and long-term service activities.

#### Advantages and Innovations:

The company provides a circular environment social governance solution using waste as a fuel to generate for use in electricity generation.

The solutions are centred around benefiting the environment by recycling, reducing waste and using it as a fuel.

Environmental friendly compliant with all global emission regulations and environmental laws including EA guidelines and IED directive 2010/75/EU.

Efficient and environmentally friendly form of waste disposal consuming 100% of waste, producing 2% solid residue which is inert safe and eligible for resale without further treatment.

The high temperatures used negate the need for expensive secondary flue gas abatement system.

Each vortex system only contains 6 moving parts requiring minimal service over longer intervals.

#### Technical Specification or Expertise Sought:

The company is seeking partners who have existing expertise in processing large scale waste streams.

#### Stage of Development:

Already on the market

**Comments**

Regarding Stage of Development: The company have installed and are running plants in the UK and Asia

IPR status::  
 Design Rights  
 Exclusive Rights  
 Other  
 Secret Know-how  
 Trade Marks

**Keywords**

Technology 03002 Process Plant Engineering  
 Keywords: 04002005 Generators, electric engines and power converters  
 04002011 Micro-generation and grid connection  
 04002012 Other energy related machinery  
 10003002 Incineration and Pyrolysis  
 Market Keywords: 06007001 Other energy production  
 08004004 Other pollution and recycling related  
 09008004 Other utilities and related firms  
 NACE Keywords: D.35.1.1 Production of electricity

**Partner Sought**

Type and Role of Partner Sought: The company is seeking to extend it's global research and is seeking a partner who will work with them to identify new installations in their territory.  
 It is envisaged that potential global partners will be waste specialists or companies with large process waste streams. This collaboration is envisaged to be either via a distribution services agreement, commercial agency agreement and/ or joint venture.

Type and Size of Partner Sought: >500  
 >500 MNE  
 251-500  
 R&D Institution  
 SME <10  
 SME 51-250  
 University  
 Type of Partnership: Commercial agency agreement  
 Distribution services agreement  
 Considered: Joint venture agreement

**Client**

Type and Size of Client: Industry SME <= 10  
Year Established: 2018  
Turnover (euro): <1M  
Already Engaged in Trans-National Cooperation: Yes  
Languages Spoken: English  
Client Country: United Kingdom

## Dissemination

Relevant Sector: Environment  
Groups: Intelligent Energy

