

Biomass Boilers generally

What is a biomass boiler and how does it differ from other boilers?

It's a boiler that burns a 'renewable fuel' such as wood pellet or wood chip. They operate in a very similar way to conventional oil or gas boilers in that they burn a fuel to heat up water, which is then piped around a building into radiators or blowers. The differences are that they take up more space (to accommodate fuel storage and a large water tank) and they do not use fossil fuels thereby providing a sustainable and carbon reducing form of heating.

Where can biomass boilers be used?

Biomass systems are ideal for most buildings, especially those with high heating and hot water requirements, eg: hospitals, schools, churches, workshops, hotels, golf clubs, swimming pool complexes and leisure clubs.

A new biomass boiler can usually be connected to your existing system with very little or no disruption to your premises. Additionally systems can be put into prefab pods and positioned close to your site if internal space is tight.

Fuels and what Multibio can do

What does Multibio do that other boilers can't?

Multibio boilers are able to use many different types of biomass as fuel. Most other biomass boilers can only use wood. This is because non wood biomass makes more ash and emissions when burned. Multibio boilers have unique characteristics that makes them able to handle these fuels.

What fuels can Multibio burn?

Multibio boilers can burn wood just as well as any biomass boiler plus cereal straws such as rape, oat and wheat, seeds, nut husks, paper, shells, coffee grounds and forestry finings. In short Multibio boilers will be able to burn any biomass product that is both dry enough and small enough to be fed into the boiler chamber.

How do you know that Multibio boilers can burn all these fuels?

These boilers have been in existence and updated over the last decade. They are made in the Czech Republic where extensive testing has been completed successfully on many fuels. In addition we have test data from labs and tests across Europe showing that they have successfully utilised many fuels when installed.

Have you any experience of testing and certification?

In 2013 we successfully tested and applied for exemption for a Multibio boiler 50kw boiler under the clean air act (1993) to burn both wood and olive kernel. This was the first time any biomass boiler had achieved exemption for more than one type of biomass fuel. Accordingly we have a full understanding of the requirements and processes.

Investment for Multibio

Why is investment required?

We need to put the full range of boilers and fuels through extensive laboratory testing in order to gain certification and prove that the boilers can do what we say they can do. Once this is completed we need to extend the exposure of Multibio across the country, community energy sector and renewable industry.

What's stopping Multibio from being launched in the UK without any testing?

Multibio therefore could be launched in the UK immediately however they could only be installed in rural areas and they wouldn't qualify for the government's Renewable heat incentive (RHI) subsidy.

All Multibio boilers are already safe and certified to EU standards (EN 303-5 2012) however in the UK there is air quality legislation that doesn't allow boilers to be installed in most heavily populated areas without additional certification to prove that both the boilers and the fuels to be burned within them are not harmful to air quality.

Potential market for Multibio

What is the likely returns from launching Multibio?

We intend to make a return from the sale and installation of Multibio boiler systems and their ancillaries as well as on-going service and maintenance contracts.

The potential market application is huge. We expect a strong demand from farmers and factories who have both a heat demand and a waste product that would otherwise cost money to dispose of. We already have 4 Multibio boilers on a farm drying grain as an example of this.

In addition we feel that there will be a market from larger householders who have an interest / commitment to reducing their waste streams and carbon footprint whilst increasing their grid-independence and self-sustainability.

Finally there are specific retail applications particular to our product. These centre on places where they wish to promote or enhance their green credentials, remote or temporary retail buildings (i.e. off grid) and where businesses have large amounts of waste to burn and where heat/hot water is at a premium (festivals and shows)

Social and community scope

How is Biomass Energy Coop different than a 'normal' company or business?

We are a community benefit society which means that we conduct business for the benefit of the community. Profits are not distributed among members, or external shareholders, but returned to the community. This means that its profits and focus is to provide goods and services which will benefit communities or social causes.

We are committed to the following objectives which it intends to provide social and community benefit:

- To promote amongst the wider population (with an emphasis on children and young adults) the benefits of multifuel biomass as an alternative to fossil fuels and imported wood biomass. This being done to reduce UK carbon emissions, improve air quality and encourage waste recycling.
- To promote the development of a wide and open understanding of the potential and science of multifuel biomass fuels, their composition, manufacture, transport and energy potential. To disseminate this information for the free use of others. This being done with the co-operation of schools, colleges and universities.
- To promote the increase in number of trained biomass heating engineers and enhance its attraction as a career path for young people.
- To encourage the creation of local biomass energy communities where through collaboration and planning, communities install boilers in various sites in close proximity and develop the supply lines to feed them fuels made from local waste streams. Such networks will encourage deeper community collaboration, reduce heating costs, carbon emissions and waste, promote biomass, provide skills and sustainable employment.