



## **Renewable Energy: The facts.**

### **Biomass**

#### **What is biomass?**

There are two main types:

1. Animal wastes and by-products of the food industry: These can be converted into methane, but are not covered in this fact-sheet.
2. Crops which are grown specifically for their energy content are known as biomass. In the U.K, common sources are wood and straw. Willow is becoming particularly popular as a biomass crop, and can be harvested on a regular basis. This type of biomass is covered in this fact-sheet.

#### **How is the biomass used?**

Although it is possible to process biomass in a number of ways, 'direct' burning is still the most common. The most common forms of fuel are woodchips, wood pellets or logs. Wood pellets are good for use in auto-feed systems, but manufacturing facilities in the U.K are still somewhat limited. Wood chips are becoming more widely available as forestry-based enterprises expand. Moisture content must be carefully controlled, however, to ensure efficient and clean burning.

#### **Is biomass a good thing? Surely burning is damaging to the environment?**

Burning biomass is regarded as 'carbon neutral' by some, as the CO<sub>2</sub> released in burning it is equal to the CO<sub>2</sub> consumed as it grows. This tends to ignore the energy used in cutting, processing and moving the timber, but it is undoubtedly a low-carbon, if not zero-carbon, fuel source. If local supplies of timber are used, there is an environmental benefit in cutting the amount of road transport used and, potentially, a contribution to local employment. Finally, if the use of wood for heating cuts down the amount which is disposed of in landfill, it is a long-term benefit to us all. Wood-burning can, however, have environmentally detrimental effects, particularly if unsuitable fuel is burned.

#### **Can I get a wood-fuelled boiler for my central heating system?**

Yes. A number of models are being produced which are efficient and easy to use. You will have to ensure that you have sufficient dry storage to allow you to stockpile fuel as required.

### **I live in a smokeless zone. Can I use a wood-fuelled boiler?**

Some types are permitted. Consult your local authority.

### **Can I get a grant?**

Sadly no. The low Carbon Buildings Programme finally closed on 24<sup>th</sup> May 2010.

Local schemes offering further discounts may also exist. Contact your local Energy Saving Trust Advice Centre on 0800 512012.

### **\*Hot news\*!**

The Department of Energy and Climate Change has issued a consultation document on the 'Renewable Heat Initiative' (RHI).

This will mean that you could be paid for renewably-generated heat from April 2011. The figure in the consultation paper is 9p per kWh for solid biomass but debate suggests that all RHI tariffs could well reduce in the light of national expenditure cuts. As we update this fact-sheet (Nov 2010) an announcement is awaited. See:

<http://www.decc.gov.uk/en/content/cms/consultations/rhi/rhi.aspx>

Such installations must be done with Microgeneration Certification Scheme (MCS)-approved equipment by an MCS-approved installer.

**For further advice on this and other renewable energy technologies contact SYEC on 0114 258 4574 or [info@syec.co.uk](mailto:info@syec.co.uk)**