

Wood Fuelled Heating (Biomass)

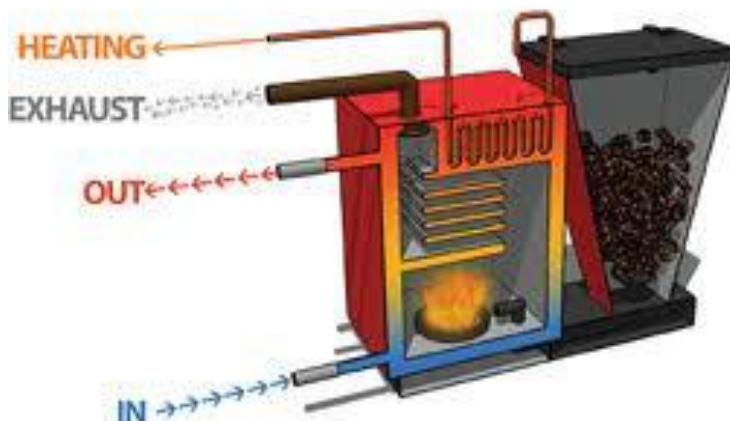
Wood fuel is often referred to as biomass, bioenergy or biofuel. Biomass is produced from organic materials, either directly from plants or indirectly from industrial, commercial, domestic or agricultural products. It is considered to be a carbon neutral fuel. Wood fuel includes forest products, untreated wood products, energy crops and short rotation coppice (SRC), e.g. willow. Small-scale domestic applications of wood fuel usually take the form of wood pellets, wood chips and wood logs.

Homes can either use stand-alone stoves providing space heating for a single room, or boilers connected to central heating and hot water systems. Stoves (which can often be fitted with a back boiler to provide water heating) can be fuelled by logs or pellets but only pellets are suitable for automatic feed. Boiler systems are suitable for pellets, logs or chips. Many boilers will dual-fire both wood chips and pellets, although the wood chip boilers need larger hoppers to provide the same time interval between refuelling. Boilers can be designed with an integral hot water energy storage or accumulator tank that stores water up to 90° C.

The vent material must be specifically designed for wood fuel appliances and there must be sufficient air movement for proper operation of the stove. Chimneys can be fitted with a lined flue. Wood can only be burnt on exempted domestic appliances, under the Clean Air Act. Installation must comply with the appropriate safety, planning and building regulations (e.g. Part J of the Building Regulations).

The cost for boilers varies depending on the fuel choice and payback depends both on the fuel being used and the fuel being replaced.

Consideration must be given to storage space for the fuel, appropriate access to the boiler for loading and availability of local fuel supplies. It is both more cost-effective and sustainable when a local fuel source is used.



Suite 4a
Ingram House
227 Ingram
Street
Glasgow
G1 1DA

Tel: 0141 226
3064

Fax: 0141 221
2788

Email:
eas@eas.org.uk

Website:
www.eas.org.uk

*"Working to
end fuel
poverty and
achieve
warm, dry
homes for
all."*