

Wood fuelled appliances are best suited to properties without access to the mains gas network. The cost of buying wood fuel is usually comparable to oil and the costs of running a wood fuelled appliance should be less than LPG or electric heating systems.

Open fireplaces are very inefficient as 80% of the heat generated is lost up the chimney. For this reason other wood fuelled systems are better suited to heating your house and can usually be incorporated into an existing central heating and hot water system.



Important safety notes



Modern houses tend to be more airtight than older properties so it may be necessary to add an external air supply to ensure that wood fuel combusts safely.

Chimneys in older properties may need to be lined. You also need to have a dry and easily accessible area to store your wood fuel.

Wood fuelled boilers and stoves should be kept clean and swept regularly to remove ash and other deposits from the chimney.

What to check before installing a wood fuelled system

Installer - needs to be HETAS registered.

Planning - building or extending chimneys, external flues and

outbuildings for boilers or storage may require planning permission.

Flues and Smokeless Zones - There are currently no smoke control areas in Cornwall.

System options

- 1) Boilers that provide heating and hot water for your entire home.
- 2) Stand-alone stoves which heat individual rooms. Some stoves are compatible with back boilers to provide hot water, although this will mean that fuel is being burnt quicker.

FUEL TYPES

Logs These require little processing other than letting it dry - or season - until the moisture content falls from 50% to 20%. Drier wood burns hotter and produces less smoke and tar

than wood with a higher moisture content.

Chips Usually derived from forest or untreated timber waste, chips are usually used for larger scale applications.

Pellets and briquettes Produced from compressed sawdust by-products from wood manufacturing processes, these are more efficient, can require less storage space and produce less ash than logs or chips.

TECHNOLOGY TYPES

Stoves Log and pellet stoves are between 60-90% efficient. Log burning stoves require regular manual refuelling whereas pellet stoves can provide automatic metering and feeding of pellets.

Stand-alone ceramic heaters are a form of storage heaters. They absorb the heat produced by the stove and release the heat over many hours after the fire has gone out.

Boiler systems Log and pellet boilers are ideally suited for connection to an existing central heating system and can achieve efficiencies of up to 90%.

Log boilers are loaded by hand and typically need to be fuelled every one to three days and are usually sited in a separate boiler room. Output of different models ranges from 5-50kW.

Wood is often described as a 'carbon neutral' fuel because trees convert CO₂ (that is present in the air) into their woody tissue, which when eventually burnt is released back into the air. As long as suitable replacement trees are planted, this process can be continuous and is therefore a sustainable energy resource

Pellet boilers are fed via an integral hopper. Larger models can be screw fed from silos outside the house. Integrated silos can supply enough fuel for up to a week.

Multi-fuelled boilers can use a variety of wood fuels including logs, sawdust and woodchips.

RENEWABLE HEAT INCENTIVE (RHI)

You may be able to receive payments for the heat you generate through the government's proposed Renewable Heat Incentive. Savings on annual fuel bills will vary depending on the fuel type replaced.

Cornwall's Independent Energy Experts

Our services to help householders in Cornwall and Devon enjoy warmer, energy efficient homes include:

- › Insulation and heating solutions
- › Energy efficiency advice and surveys
- › Planning for renewables services
- › Condensation and mould services
- › Help to understand and reduce energy bills

In certain circumstances we can access funding for services - call us to discuss your needs.



For advice
call Freephone
0800 954 1956

Community Energy Plus

3-4 East Pool, Tolvaddon Energy Park, Camborne TR14 0HX

Telephone 0800 954 1956 **Visit** www.cep.org.uk

Email enquiries@cep.org.uk

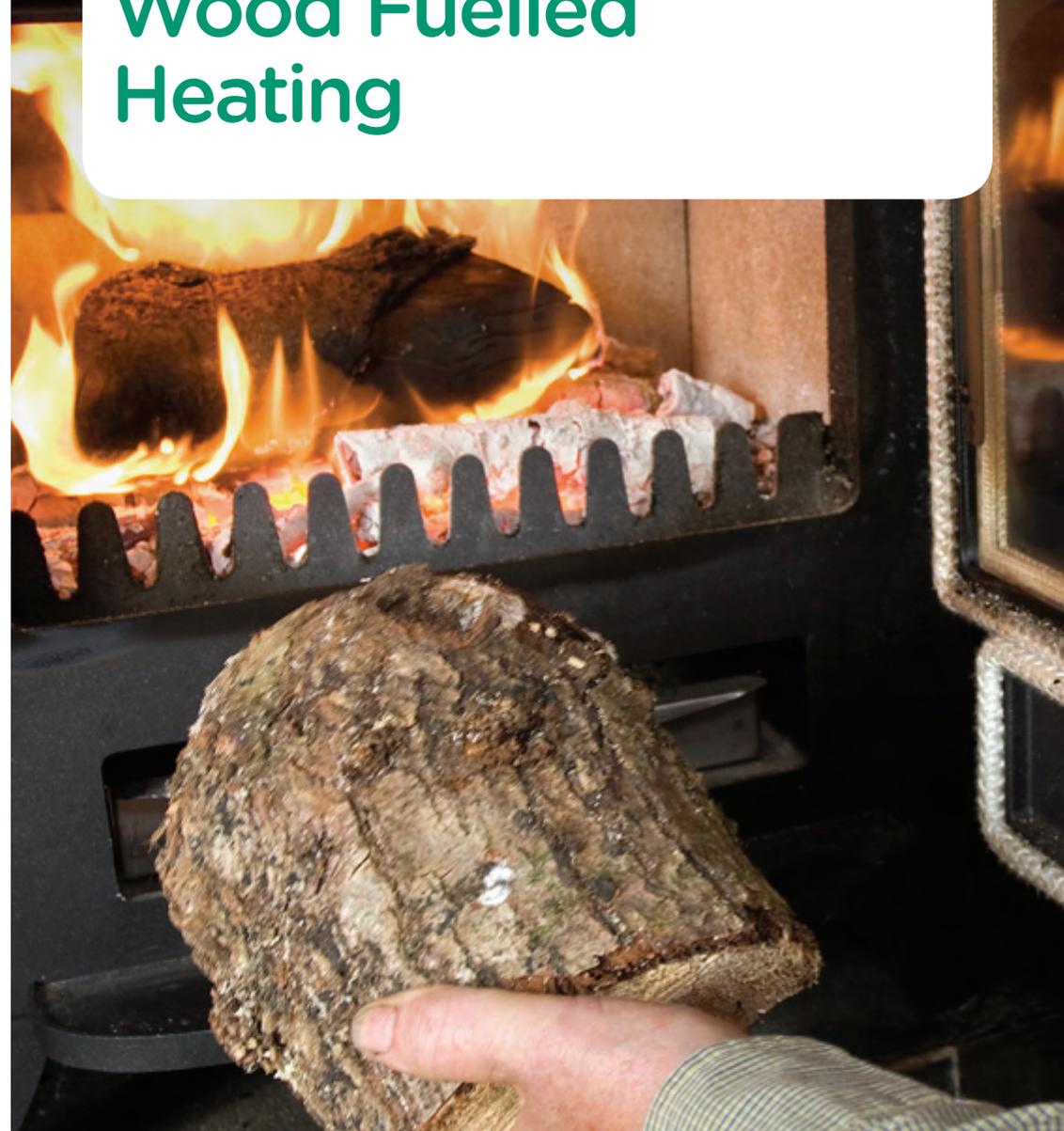
Registered charity: 1068990



COMMUNITY
ENERGY PLUS

A Simple Guide
for Householders

Wood Fuelled Heating



©Copyright Community Energy Plus July 2012

Call **0800 954 1956** Visit **www.cep.org.uk**