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SevernWye
energy agency

A guide to

wood-fuelled heating



SevernWye energy advice

Types of wood-fuelled heating

Wood-fuelled heating systems burn wood pellets, chips or logs to provide warmth in a single room or to power central heating and hot water. There are two main types:

1) Wood burning stoves generally burn logs or pellets to heat a single room. They can be fitted with a back boiler to provide heating and hot water as well.

2) Wood fuelled boilers burn logs, pellets or chips, and are usually used to power a central heating and hot water system.



References

*For details of the references used in this document please scan the QR image, visit **www.warmandwell.co.uk/warm-and-well/advice-materials.html** or call us on 0800 500 30 76



A wood burning stove



A pellet boiler

The benefits of wood fuelled heating

Although the price of fuel varies considerably, wood fuelled heating is often cheaper than other heating options and, if you install a wood fuelled boiler, you may also be paid for the heat you generate through the Government's Renewable Heat Incentive (RHI).

So long as you source your wood from a renewable source, where trees are replanted, wood fuelled heating is also an environmentally friendly way of heating your home. This is because the carbon dioxide emitted when wood is burned is the same amount that was absorbed by the tree over its lifetime. There will be some carbon emissions caused by the growing, processing and transportation of the fuel, but as long as the fuel is sourced locally, these are much lower than the emissions from fossil fuels.



Costs

Stoves
A wood burning stove will typically cost between £400 and £2,000*[1]. Pellet stoves are significantly more expensive.

Boilers
An automatic-feed pellet boiler is likely to cost between £9,000 and £21,000 depending on the size of system you require. This includes flue, fuel store and installation. Manually fed log boilers are usually slightly cheaper*[2].

Fuel
Fuel costs depend on the amount of fuel you are buying and how far it has to travel to reach you. It is cheaper to buy in bulk and, if you are able to store large amounts of fuel, the cost can be kept to around £255 per tonne in most parts of the country*[3].



Logs are often available at lower cost than pellets and if you have room to store more than a year's worth of logs you can save money by buying unseasoned logs and letting them season for a year.

You can search for local wood suppliers at: **www.nef.org.uk/wood-fuel-equipment-suppliers**.

Alternatively, give one of our friendly advisors a call on **0800 500 30 76** and they will be able to point you in the right direction.

Savings
How much money you are likely to save will depend, to a large degree, on the type of heating you will be replacing. If you replace an older gas heating system with a wood-burning system you might pay up to £183 a year more, but if you are replacing an old electric heating system you could save as much as £280 per year.

The Renewable Heat Incentive (RHI)

You may also receive payment for the heat you produce from a wood boiler or a stove with a back boiler through the government's Renewable Heat Incentive (RHI). This is currently 6.54p per kWh. This rate applies until 31st March 2018, unless a high number of systems are installed – if this is the case the rate may be reduced.

The government brought in an annual heat demand limit of 25,000KWh per household in spring 2017

In order to qualify, you must use fuel sourced from a set list of suppliers which can be found at **www.gov.uk/find-fuel-supplier**. This is to ensure that the fuel comes from a certified sustainable source.

It is advisable to check whether your intended supplier is registered on this list before entering into a long term supply contract.

Bear in mind that not all fuels supplied by these companies may be registered as they may supply more than one type of fuel. Therefore, you should also check that the specific fuel is registered.

You must also use a Microgeneration Certification Scheme (MCS) approved product and installer.



The following table shows the expected fuel savings and RHI payments from installing a pellet central heating system in a typical three bedroom semi-detached house with basic insulation.

Existing systems	Fuel bills savings (£/year)	Renewable Heat Incentive (RHI) payment (£/year) until 31st March (unless a high number of systems are installed)
Gas	-£28 to -£268 (loss not saving)	£528
Electricity (electric storage heaters)	£387	
Oil	-£235 to -£372 (loss not saving)	
LPG	£204 to £439	
Coal	£141	

Choosing a wood fuelled heating system

Things to consider

Type of system
Wood fuelled boilers can be used in place of a gas or oil boiler to run your central heating and provide hot water for hot taps and showers. They can therefore heat the whole house.

Stoves are usually used to heat a single room. They may also have a back boiler to provide hot water. **Stoves are not eligible for RHI payments unless it is a pellet stove with a back boiler.**

As you would expect, wood fuelled boilers are much more expensive than stoves.

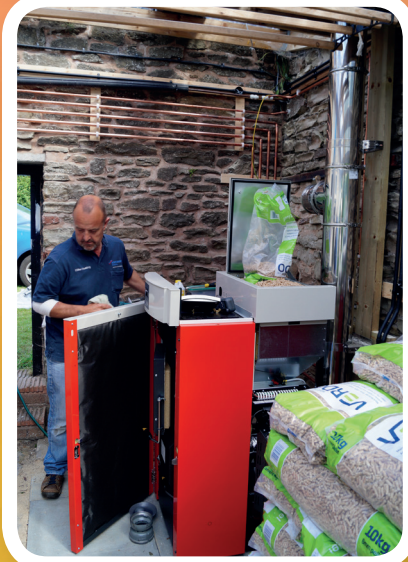


Type of fuel
Wood chips are generally only used to heat larger buildings or groups of houses.

Pellets are much easier to use and control than logs. Pellet boilers often have automatic feed systems so that you don't have to keep manually adding fuel.

Log burning stoves and boilers have to be filled by hand. However, logs may work out cheaper than pellets if you have a good local supply.

Providing fuel
It is worth bearing in mind what local supplies of fuel are available and which companies are able to deliver to your area.



You need to consider whether you have space for the boiler and fuel

Space
Wood boilers are generally larger than gas or oil boilers and you will need space to store the fuel. You also need to consider access to this storage area for deliveries.

Flue
You will need a flue to extract the waste gases. You may be able to use an existing chimney but it is likely to need a new lining to make it suitable for use with a wood fuelled system.

Planning permission
You may not need planning permission but you should always check just in case.

Building regulations
All new wood heating systems have to comply with building regulations. The best way of ensuring this is to use an appropriately qualified installer.

Maintenance

Wood burning boilers and stoves need to be kept clean and swept regularly to remove any ash. The ash bin will also need emptying about once a week on average. Some boilers compress the ash so that it doesn't need to be emptied as often.

Some appliances have self-cleaning systems. If not, they will need to be shut down periodically and cleaned by hand.

The chimney and flue should be swept at least twice a year, once before first use in autumn to check that it hasn't been blocked by nesting birds or other obstructions, and once in the spring to ensure that soot deposits aren't left resting in the chimney whilst it's not in use.

Finding an installer

Severn Wye run a website called Link to Energy that allows you to search for suitably qualified local installers.

To get started, simply visit **www.linktoenergy.org.uk** and enter your postcode or town. Alternatively, you can call our advice line on **0800 500 30 76** and one of our advisors can provide further guidance and make referrals to suitable companies on your behalf.

We would always recommend getting a few quotes when you are considering having work done.

link to energy

connecting with local tradespeople

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Severn Wye Energy Agency is a not-for-profit company and charity (charity no. 1083812), established in 1999 under the European Commission SAVE programme to promote sustainable energy and affordable warmth through partnership, awareness-raising, innovation and strategic action.

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Severn Wye Energy Agency

Unit 15 Highnam Business Centre, Highnam, Gloucester GL2 8DN

01452 835 060 | info@severnwye.org.uk | @Severn_Wye | www.severnwye.org.uk

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Warm and Well has been running for over 10 years and has helped thousands of people tackle their energy bills and make their homes more comfortable. Our friendly advisors provide free advice on reducing energy use and on the grants and incentives available.

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warm&well@severnwye.org.uk

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This fact sheet is part of a series that includes information on heating and hot water, home power generation, lighting and electrical appliances and reducing heat loss.
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