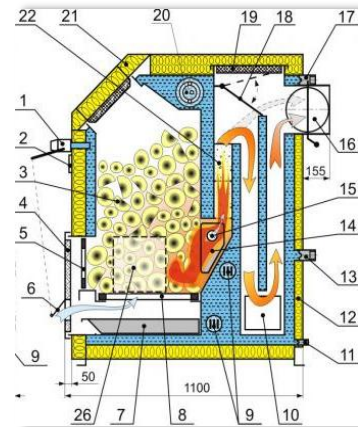


For Biomass boiler solutions see:

www.kalvisboilers.co.uk

07833 464253



- ❖ Reduce your heating costs by up to 95%.
- ❖ Remove your dependency on oil or gas.
- ❖ Payback period can be as little as 2 years.

- ❖ Burn Logs, waste wood, pellets or woodchip.
- ❖ Automatic or manual fill.
- ❖ Easily integrated into existing systems.

Heating your home with biomass:

Biomass is a renewable energy source which is derived from living or recently living organisms, such as wood, waste, and alcohol fuels.

A biomass boiler offers many benefits over more common Oil and Gas boilers:

- Reduced heating bills: A biomass boiler can significantly reduce your heating bill. If you have your own wood source savings of up to 95% can be achieved.
- Long term supply: The availability of fossil fuels is limited and the price fluctuates due to worldwide supply and demand. Wood is a locally available, renewable and sustainable heating source that can easily replace fossil fuels such as coal, peat and oil and gas/LPG.
- Low Emissions: Wood is a clean and environmentally safe fuel. Wood fuel is 'carbon neutral', releasing the equivalent amount of CO₂ in combustion as absorbed when it grew. Even considering the complete carbon cycle the net emissions from modern wood combustion systems are very low.
- Improved woodland management: Creating a market for wood gives an incentive to woodland owners to manage their woods. Woodlands benefit from thinning which in turn benefits wildlife.
- Local Economic Benefits: Wood energy is a cost effective local fuel source. In most cases money spent on wood fuel stays within the local community.

Biomass fuel comparison:

Fuel	Advantages	Disadvantages
Logs, wood or waste wood	Very low fuel cost. Lowest capital cost of installed boiler system. Logs can be stored and transported conveniently. Readily available. Very little additions within the carbon cycle. (Little or no processing required)	Frequent boiler stoking required. (every 2-8 hours) Systems featuring thermal storage preferable. Fuel storage area required. (Although this can be outside but preferably under cover.)
Wood chip	Low fuel cost. Automated boiler stoking possible. Easy to produce locally. Easy handling. Generally suited to larger installations e.g. over 50kw output.	Careful handling and storage required. (To prevent moisture absorption.) Highest capital cost of boiler and storage equipment. Specialist chipper required for self production.
Wood pellets	Very low user input required. Medium capital costs due to the drier and more homogeneous nature of the fuel. Denser fuel means reduced storage space and easier transport. Most suitable for medium appliances up to 50kW.	More expensive than wood or wood chip. Thermal storage cylinder not required for pellet firing operation.

Kalvis Domestic multi-fuel boilers

We currently supply 3 main types of central heating boilers to the domestic market. These are conventional manually loaded multi-fuel **central heating boilers**, fully automated **wood pellet firing boilers** and larger **automated fuel supply boilers**. Each type of boiler has its own set of features:

Multi-fuel boiler (Manually filled): These boilers can offer an economic and environmentally friendly way of heating your home. The Kalvis boilers all feature generous fuel capacity and water capacity, offering long periods between refills and often not requiring large thermal storage tanks. They are designed for long life, efficient and safe operation.



Wood pellet firing boilers: These boilers supply a reliable, automated heat source that requires very little servicing and supervision. They only need to be attended approximately once a week for ash cleaning and pellet filling. They are efficient and use a proven Swedish manufactured PellIX burner, hopper and feed system. They offer optimal combustion at minimal firing. Also after removing the PellIX burner unit (<1 minute job) these boilers can fire logs or other solid fuels. Kalvis pellet boiler systems have a similar installed cost to oil or gas fired systems but have significantly lower running costs.



Automated fuel supply boilers: These boilers are generally used for efficient heating of larger houses or small business premises. They are modern fully automated boilers capable of working for extended periods without supervision. They can burn wood pellets, peat pellets or small wood chips. Similar to the pellet boilers most our systems can easily be changed over to burn logs and waste wood etc when required.



Kalvis 6MPP pellet boiler c/w 500 litre Thermal storage cylinder.



Control panel for automatic changeover of combi and biomass boiler and controlling of backup power supply.

Kalvis also manufactures air heaters, central heating boiler stoves, sauna furnaces or much larger industrial boilers now up to 1MW. For the full product range see www.kalvisboilers.co.uk

Typical installations and cost: (Please see website for photos)

System type		Benefits	Installed cost from:
1	Replace existing boiler with a 20kW multi fuel boiler . <i>Suitable for 2-3 bedroom house.</i>	Very low heating and hot water costs	£2,500
2	Integrate 20kW multi fuel boiler in to existing oil fired central heating. <i>Suitable for 2-3 bedroom house.</i>	Very low heating and hot water costs. Fully automatic boiler changeover.	£3,500
3	Integrate 20kW multi fuel boiler complete with 1100 litre thermal storage cylinder in to existing oil fired central heating . <i>Suitable for 2-3 bedroom house.</i>	Very low heating and hot water costs. Higher efficiency than above. (Particularly if burning waste wood.) Large amounts of Domestic Hot Water available. Less boiler stoking required. Can supply heating and DHW in morning without stoking.	£5,750
4	Replace existing boiler with 25kW wood pellet boiler complete with 1000 litre thermal storage cylinder and solar coils. <i>Suitable for 3-4 bedroom house particularly new build.</i>	Fully automatic. Low heating and hot water costs. Can burn logs etc as well as pellets.	£7,000
5	Integrate 30kW multi fuel boiler in to existing oil fired central heating. <i>Suitable for 3-4 bedroom house.</i>	As 2.	£4,250
6	Integrate 30kW multi fuel boiler complete with 1600 litre thermal storage cylinder in to existing oil fired central heating. <i>Suitable for 3-4 bedroom house.</i>	As 3.	
7	Integrate 50kW multi fuel boiler complete with 2000 litre thermal storage cylinder in to existing oil fired central heating. Solar heating coils installed. <i>Suitable for 4-5 bedroom house.</i>	As 3. K-3-50 boiler has large easy open loading hatch and easier servicing.	£9,500
8	Integrate 50kW wood chip boiler complete with 2000 litre thermal storage cylinder in to existing oil fired central heating. Solar heating coils installed. <i>Suitable for 4-5 bedroom house.</i>	As 7. Automatic stoking.	£10,000

All costs plus VAT at applicable rate.

Options:

Fully automatic PelIX Swedish pellet burner available to fit most systems.	25kW	£1500
	35kW	£2500
Automatic backup power supply. (Enables central heating to continue in event of power loss)		£450
Automated Wood chip burners fitted to existing systems.		£POA
Various sizes of thermal storage cylinders and solar options available.		£POA

What we can do for you:

Biomass boilers:	Plumbing services:
<ul style="list-style-type: none">• Biomass boiler installations carried out UK wide. Burn Logs, pellets or woodchip.	<ul style="list-style-type: none">• Regular plumbing services carried out, including repairs, troubleshooting and design.
<ul style="list-style-type: none">• Biomass boilers integrated into ANY system.	<ul style="list-style-type: none">• System performance enhancements a speciality.
<ul style="list-style-type: none">• Biomass consultancy and grant application work undertaken.	<ul style="list-style-type: none">• Borehole pump installation.
<ul style="list-style-type: none">• Bespoke Control panels designed and installed for effective and efficient control of complete system.	<ul style="list-style-type: none">• Oil boiler repair work.
<ul style="list-style-type: none">• Fully plumbed and wired integrated packages supplied for easy installation.	<ul style="list-style-type: none">• Central heating systems installed.
<ul style="list-style-type: none">• Many boilers in stock for immediate installation.	<ul style="list-style-type: none">• Lead flashing and lead repair work.

STOP PRESS:

Demonstration boilers running on site near Maud, Peterhead. AB42 4QF.

Many boilers and integrated boiler packages in stock for fast installation.

Up to 50% Grants available and applications completed on your behalf see:

www.usewoodfuel.co.uk/ScottishBiomassHeatScheme.stm

We have recently been awarded the contract to install a 950kW biomass boiler at New Deer, Aberdeenshire. This boiler will be used mainly for drying grain and after installation will see fuel costs drop from approx £35/hr to £10/hr! See <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Energy-sources/19185/20805/BioSupport/SBHS2Results>

Special 2010 New year offers:

Fully integrated 20kW (70,000BTU) boiler package. Can be connected to **any** existing heating system. Includes: **20kw log boiler** with **1000litre thermal store**, control panel, 2 x heat exchangers (Hot water & solar/heating) from: £4,000.

Fully integrated 50kW (170,000BTU) boiler package. Can be connected to **any** existing heating system. Includes: **50kw log boiler** with **2000litre thermal store**, control panel, 2 x heat exchangers (Hot water & solar/heating) from: £8,000.



Turblown Ltd, Maud, Peterhead. AB42 4QF. 01771 644042

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