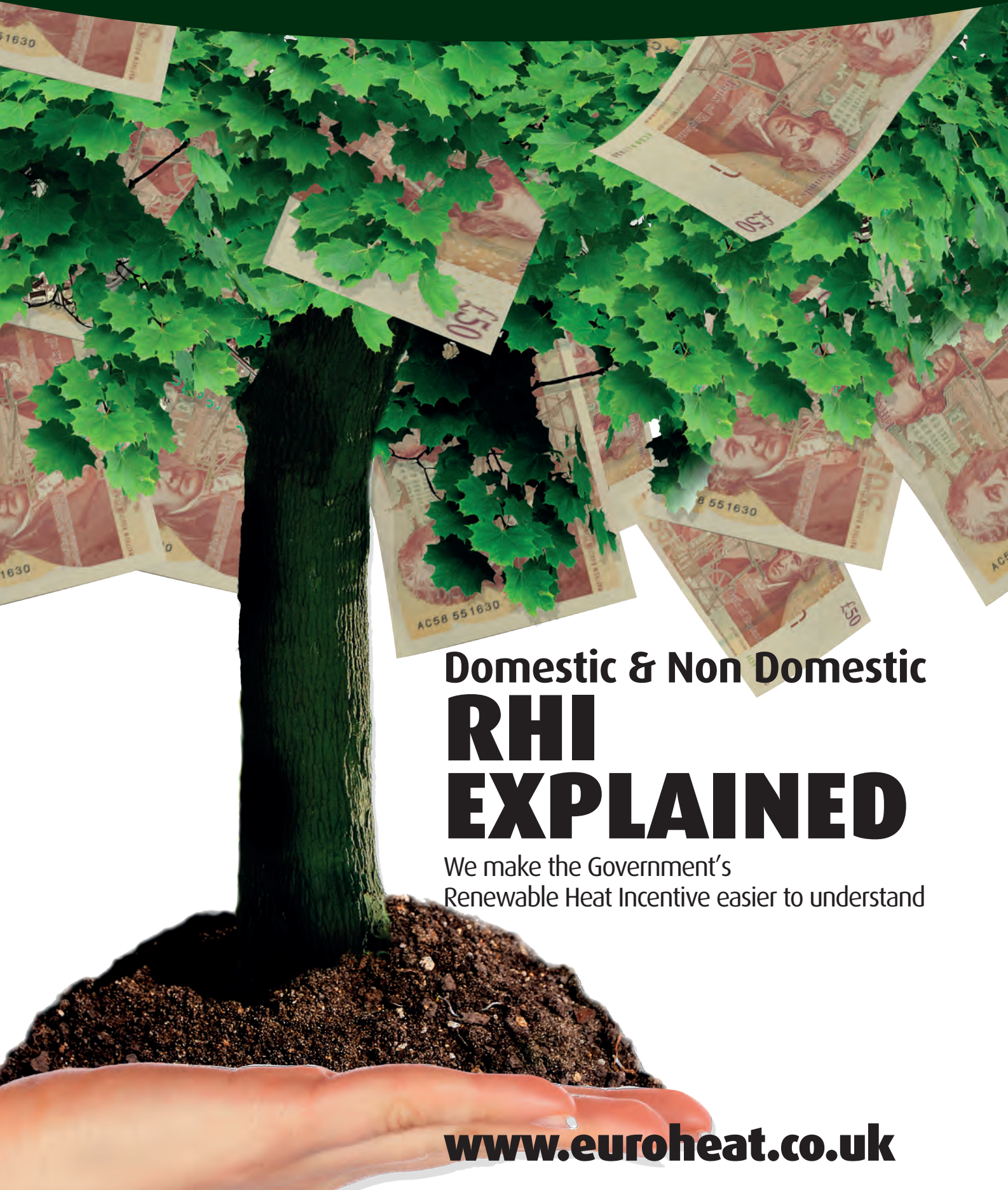


April 2015


Euroheat
Natural Energy Company



Domestic & Non Domestic **RHI** **EXPLAINED**

We make the Government's
Renewable Heat Incentive easier to understand

www.euroheat.co.uk



What is the Renewable Heat Incentive?

The Renewable Heat Incentive, or RHI for short, is the world's first longterm financial support programme for renewable heat. The RHI pays participants of the scheme that generate and use renewable energy to heat their buildings.

The UK Government expects the RHI to make a significant contribution towards their 2020 ambition of having 12 per cent of heating coming from renewable sources.

The scheme is separated into two schemes; the Domestic Renewable Heat Incentive for heating domestic

properties, and the Non Domestic Renewable Heat Incentive for heating other buildings such as offices and warehouses, or for process heating.

This short document aims to outline the financial benefits of installing a biomass boiler, for both domestic and commercial customers.



Clear, honest advice from the country's leading supplier

With over twenty years experience, and well over a thousand successful biomass installations, we understand that installing a biomass boiler can seem a big step. That's why we offer all of the technical advice and support you will need - from choosing a suitable boiler and fuel to suit your needs, to how to make the most from the RHI scheme.

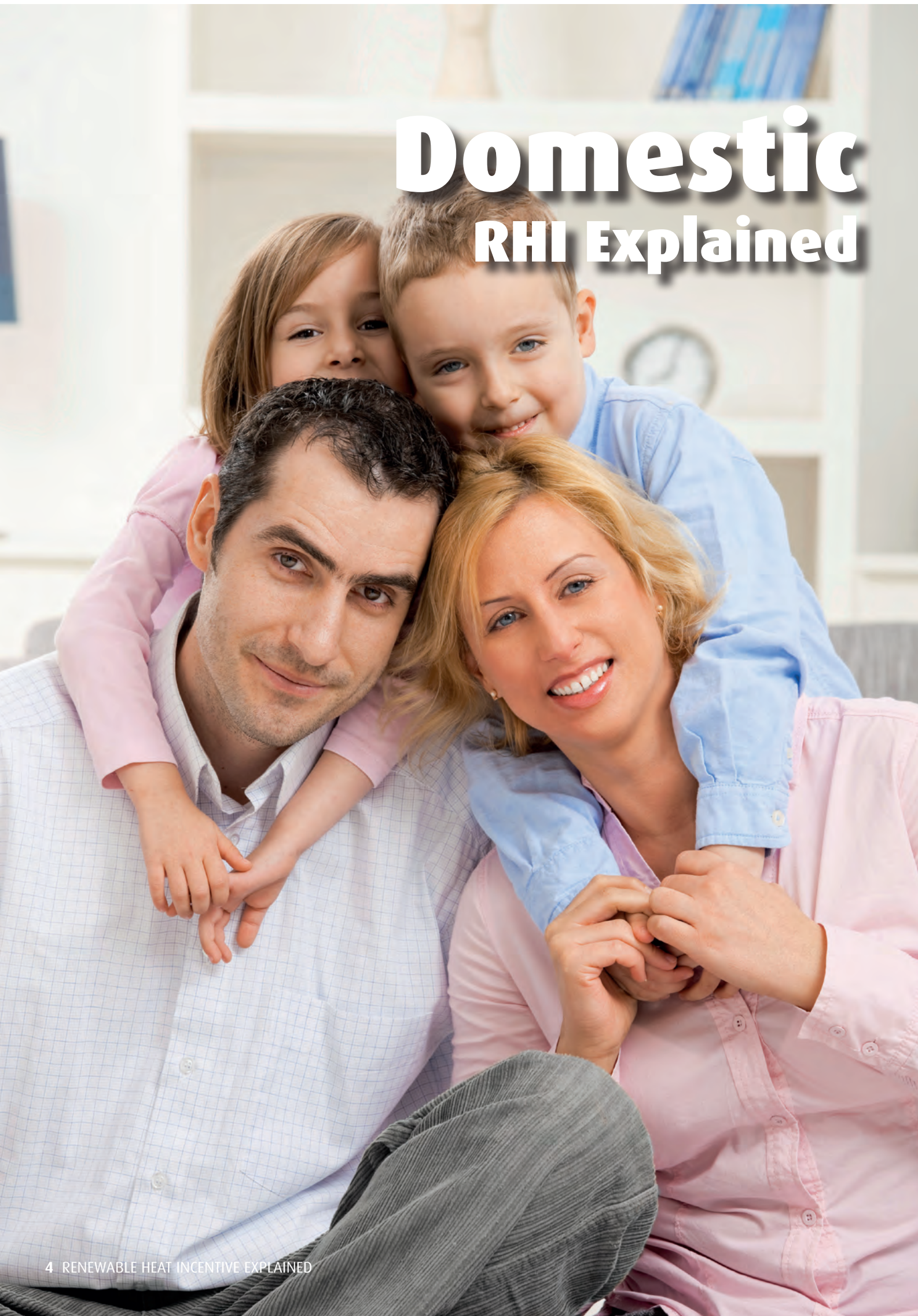
If you would like to view our biomass boilers first hand, our approved installation partners will happily take you to one of their previous installations. If you prefer, you can contact Euroheat directly on **01885 491100** and arrange to visit our Biomass Showroom where we have the widest range of working wood log, chip and pellet boilers in the country.



Why should you be interested?

- In addition to the significant RHI payments from the Government, substantial savings can be made by switching from heating your home or premises from fossil fuels, to a form of wood biomass.
- It is ecologically sound to use wood biomass as a fuel, it is cleaner and offers independence from utility companies.
- Wood biomass offers solutions for every home and lifestyle, from the automated benefits of wood pellet and chip, to the pure economic benefits of wood log.

Domestic RHI Explained



The Domestic Renewable Heat Incentive

The biomass case for the homeowner



The Domestic Renewable Heat Incentive is a Government scheme to promote the use of renewable heating

in domestic properties.

The scheme is open to households both on and off the gas grid, although those people off mains gas will see the biggest fuel savings and therefore the best return on their investment.

Key to applying to the Domestic RHI is your renewable heating system must be for a single home in a property that can obtain a domestic Energy Performance Certificate (EPC).

The Domestic RHI scheme works alongside the Green Deal, which aims to make homes more energy efficient. As a result, before becoming eligible for the RHI, you must have a Green Deal Assessment undertaken

on your property and install loft and/or cavity wall insulation if it's recommended in the report.

The Domestic RHI scheme pays homeowners 11p/kWh for the renewable heat used in their home.

This payment is made quarterly and for a period of 7 years.

See our RHI calculator on our web site at www.euroheat.co.uk



Quick guide to system eligibility criteria

- You must be the owner of the biomass system and own or occupy the property it is in.
- The property should have a current EPC and Green Deal Assessment to be eligible.
- All heating systems must provide space and/or hot water heating through a liquid medium (ie. radiators/under floor heating).
- The renewable heating system must be Microgeneration Certification Scheme (MCS) certified or equivalent.
- The product must be listed on the Ofgem "Product eligibility list" which can be found on the Ofgem website.



TDA warms home and outdoor swimming pool in the garden of England

Key facts

Installer

C Watkins
Plumbing & Heating

Application

A biomass boiler to heat a domestic property and swimming pool in Kent

Previous Heating

LPG

Boiler

SHT TDA 40 dual fuel boiler with a hopper

Fuel Type

Wood Log/Wood Pellet

Estimated Fuel Saving

£4,500 per annum

Estimated RHI Payment

£7,881 per annum

Fed up with the rising costs of oil, the owner of this rural property in Kent decided it was time to change. After investigating the various options available to heat both the home and outdoor swimming pool, the customer opted for the SHT TDA Thermodual, a dual fuel boiler capable of running on either wood logs or wood pellets. The customer loved the idea of using locally sourced wood logs in the boiler to provide the most cost effective means of heating, whilst the pellet burning capabilities of the boiler meant the boiler would continue to run, even if they were away from home or simply did not want to fuel it with logs.

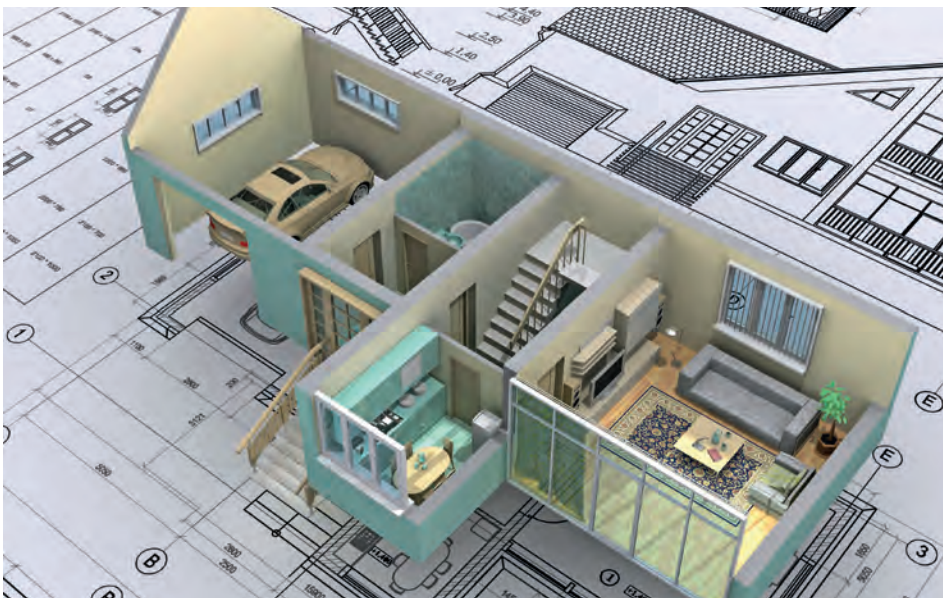
The SHT TDA Thermodual 40

The TDA Thermodual 40 is a unique boiler capable of running on wood log or pellets, utilising a lambda controller to ensure the boiler is always operating at the highest levels of efficiency. Ignition of the logs is automatic, utilising a ceramic ignition element to start their combustion and ensure only a short start up period until the boiler is at full working temperature. If no logs have been loaded the boiler will automatically run on wood pellets

Benefits and Savings

Installing a biomass boiler from Euroheat eliminates the reliance on fossil fuels, resulting in a reduced carbon footprint. Along with the environmental benefits, heating with biomass has some very attractive financial incentives with an estimated £4,500 saving on fuel per annum along with an estimated RHI payment of £7,881 per annum.





A guide to system and boiler sizing under the Domestic RHI scheme

The Domestic RHI scheme limits individual boiler sizes to 45 kW, although boilers can be installed in a cascade to provide solutions to domestic properties with higher heat requirements. The system installed must be capable of meeting the heat demand of the property as calculated under the Microgeneration Certification Scheme methodology, although it is not necessary if the entire peak heat load is covered by the biomass system.

Example 1

A five bedroom property with a 33 kW peak heat load.

Solution 1

A HDG Compact 35kW wood pellet boiler is installed.

Solution 2

An SHT PNA Thermocomfort 30 kW pellet boiler is installed, along with a 3 kW electrical immersion.

Example 2

A twelve bedroom house with a 70 kW peak heat load.

Solution 1

Two HDG Compact 35 kW wood chip/pellet boilers are installed in cascade.

Solution 2

A HDG Compact 45 kW wood chip/pellet boiler is installed, along with a 25 kW oil boiler to provide for peak heat load.

Example 3

A fifteen bedroom house with a 90 kW peak heat load.

Solution 1

Two HDG Compact 45 kW wood chip/pellet boilers are installed in cascade.

Solution 2

A HDG Compact 45 kW wood chip/pellet boiler is installed, along with a 45 kW oil boiler to provide for peak heat load.





How much will the Government pay me for installing a wood biomass boiler?

What shall I do next?

Simply call **01885 491100** and talk to one of our biomass team. They will ask a few questions to obtain a 'feel' for your project. They are basic questions such as; How many rooms do you have? What is the size of your home? Where will the boiler will be situated?

If possible they will offer a recommendation of the type of system which would be suitable and give estimated costs and timescales. if required they can arrange for your local Installation partner to contact you to discuss your requirements further.

	Average sized 3 bed	Larger 4 -5 bed home	Larger 6-7 bed home	Grand period home
EPC kWh	25,000	50,000	75,000	100,000
Year 1	£2,233	£4,465	£6,698	£8,930
Year 2	£2,277	£4,554	£6,831	£9,109
Year 3	£2,323	£4,645	£6,968	£9,291
Year 4	£2,369	£4,738	£7,107	£9,477
Year 5	£2,417	£4,833	£7,250	£9,666
Year 6	£2,465	£4,930	£7,395	£9,859
Year 7	£2,514	£5,028	£7,542	£10,057
Total	£16,597	£33,194	£49,791	£66,388


The table explained


The amount shown in the box shows the approximate RHI based upon the installation size and assuming the heat is produced solely from the biomass installation. Where no backup or supplementary fossil fuel heating system is used, the exact payment will depend upon the deemed energy usage for the property as determined by the Energy Performance Certificate. Where a backup or supplementary fossil fuel heating system is used, the exact payment will be determined by a heat meter installed on the biomass system and capped at the deemed energy amount determined by the Energy Performance Certificate.







By installing a biomass boiler from Euroheat how much money could I save on fuel per year?

Fuel saving on ten bedroom house				
	Fuel	Log	Chip	Pellet
	Oil	£3,600	£3,150	£1,800
	LPG	£4,950	£4,500	£3,150
	Electricity	£6,750	£6,300	£4,950

Fuel saving on six bedroom house				
	Fuel	Log	Chip	Pellet
	Oil	£2,400	£2,100	£1,200
	LPG	£3,300	£3,300	£2,100
	Electricity	£4,500	£4,200	£3,300

Fuel saving on four bedroom house				
	Fuel	Log	Chip	Pellet
	Oil	£1,800	£1,575	£900
	LPG	£2,475	£2,250	£675
	Electricity	£3,375	£3,150	£2,475

Fuel saving on three bedroom house				
	Fuel	Log	Chip	Pellet
	Oil	£1,200	£1,050	£600
	LPG	£1,650	£1,500	£1,050
	Electricity	£2,250	£2,100	£1,650



The table explained

The amount shown in the box shows the potential saving from switching from the fossil fuel as listed on the left hand column, to one of the three biomass fuels as listed in the top row.

For a quick reference, we have used figures for a ten, six, four, and three bedroom house. Exact figures will depend on the exact size and efficiency of your home. For example, a poorly insulated three bedroom home could use as much energy as a well insulated four or five bedroom home.

The tables are for guidance only and based upon current average fuel costs.

Non Domestic RHI Explained



Non-domestic Renewable Heat Incentive

The biomass case for businesses and other organisations



The Non Domestic Renewable Heat Incentive (RHI) is a Government scheme to provide financial incentives to increase the uptake of biomass heating systems. The scheme is open to the non domestic sector and this includes industrial, commercial, public sector and not-for-profit organisations. Examples of eligible installations include schools, workshops, care homes, offices and district heating schemes where one boiler serves multiple homes.

The scheme is open to organisations both on and off the gas grid, although those people off mains gas will see the biggest fuel savings and therefore the best return on their investment.

The Non Domestic RHI scheme currently pays 6.8p/kWh for the renewable heat used. This payment is made quarterly based upon heat meter readings of the energy produced and for a period of 20 years, please see page 13 for detail or our web site for up to date figures www.euroheat.co.uk



Green credentials and financial rewards for your organisation

The green credentials on offer with wood biomass heating need little introduction. They are an ecologically sound investment for the future, providing energy from a sustainable source without impacting on the environment. In generating your energy needs with wood biomass, your organisation can go along way to meeting its corporate social responsibility targets.

We understand that in addition to their green credentials, your biomass investment needs to make long-term financial sense. That's why we offer the HDG range of boilers from Germany, offering the highest reliability and efficiencies, longest durability and minimum of user input and maintenance. Its only by considering all of these factors that you can truly cost your installation.

Why Euroheat?

Last year Euroheat commissioned over 400 biomass installations across the UK and has over a 1,000 successful wood biomass installations to date.

We supply the highest quality wood burning biomass boilers, which offer not only quality engineering but also durability and longevity. Euroheat can offer not only experience but expert guidance with all aspects of purchase from the initial consultation, through design, heat metering, application process and commissioning.

Call us today on **01885 491100** and we will explain how biomass can help you. Or see our comprehensive website at

www.euroheat.co.uk



What type of business can apply for Renewable Heat Incentive?

If you are a commercial business heating your premises, or use heat as part of an industrial process then you will be eligible.

Small businesses

Bed and breakfasts

Light industry

Retail shops

Small holdings

Garden centres

Surgeries/care homes

Restaurants/cafes

Golf clubs

Heavy industry

Offices

Council offices

Schools & colleges

Holiday homes

Hospitals

Universities

Stately homes

Government buildings

Leisure centres

Agricultural/farms

Community centres

Horticultural

Leisure centres

Stadiums



How much incentive will the business receive?

This is how much the Government will pay you back each year for the next 20 years. Table with 5 year totals.

Year	Boiler Size									
	800 kW	600 kW	400 kW	199 kW	100 kW	80 kW	65 kW	50 kW	38 kW	25 kW
1	£53,611	£40,208	£26,806	£15,349	£7,713	£6,171	£5,014	£3,857	£2,931	£1,928
2	£54,683	£41,013	£27,342	£15,656	£7,867	£6,294	£5,114	£3,934	£2,990	£1,967
3	£55,777	£41,833	£27,889	£15,969	£8,025	£6,420	£5,216	£4,012	£3,049	£2,006
4	£56,893	£42,669	£28,446	£16,289	£8,185	£6,548	£5,320	£4,093	£3,110	£2,046
5	£58,030	£43,523	£29,015	£16,614	£8,349	£6,679	£5,427	£4,174	£3,173	£2,087
5 Year total	£278,995	£209,246	£139,497	£79,878	£40,140	£32,112	£26,091	£20,070	£15,253	£10,035
6	£59,191	£44,393	£29,596	£16,947	£8,516	£6,813	£5,535	£4,258	£3,236	£2,129
7	£60,375	£45,281	£30,187	£17,286	£8,686	£6,949	£5,646	£4,343	£3,301	£2,172
8	£61,582	£46,187	£30,791	£17,631	£8,860	£7,088	£5,759	£4,430	£3,367	£2,215
9	£62,814	£47,111	£31,407	£17,984	£9,037	£7,230	£5,874	£4,519	£3,434	£2,259
10	£64,070	£48,053	£32,035	£18,344	£9,218	£7,374	£5,992	£4,609	£3,503	£2,304
10 Year total	£587,028	£440,271	£293,514	£168,070	£84,457	£67,566	£54,897	£42,229	£32,094	£21,114
11	£65,352	£49,014	£32,676	£18,711	£9,402	£7,522	£6,112	£4,701	£3,573	£2,351
12	£66,659	£49,994	£33,329	£19,085	£9,590	£7,672	£6,234	£4,795	£3,644	£2,398
13	£67,992	£50,994	£33,996	£19,467	£9,782	£7,826	£6,358	£4,891	£3,717	£2,446
14	£69,352	£52,014	£34,676	£19,856	£9,978	£7,982	£6,486	£4,989	£3,792	£2,494
15	£70,739	£53,054	£35,369	£20,253	£10,177	£8,142	£6,615	£5,089	£3,867	£2,544
15 Year total	£927,121	£695,341	£463,560	£265,441	£133,387	£106,710	£86,702	£66,694	£50,687	£33,347
16	£72,154	£54,115	£36,077	£20,658	£10,381	£8,305	£6,748	£5,190	£3,945	£2,595
17	£73,597	£55,198	£36,798	£21,071	£10,589	£8,471	£6,883	£5,294	£4,024	£2,647
18	£75,069	£56,301	£37,534	£21,493	£10,800	£8,640	£7,020	£5,400	£4,104	£2,700
19	£76,570	£57,427	£38,285	£21,922	£11,016	£8,813	£7,161	£5,508	£4,186	£2,754
20	£78,101	£58,576	£39,051	£22,361	£11,237	£8,989	£7,304	£5,618	£4,270	£2,809
Total	£1,302,611	£976,958	£651,306	£372,946	£187,410	£149,928	£121,816	£93,705	£71,216	£46,852

Non Domestic RHI returns year by year. Inflation has been included at the UK historical 20 year average of 2%. Figures based on 1,314 running hours per year. For clarity, fuel savings have not been included. Figures above are correct at time of print and may be subject to change.

Check latest figures go to www.euroheat.co.uk/RHI

Which biomass boiler is suitable for my business?

At Euroheat we have a wide range of boilers to suit most requirements.

What is the procedure and timescale.

It is difficult to offer an accurate timescale as each project will be different.

Experience has shown that smaller biomass installations where there is little ground work can be installed in 12 to 14 weeks.

Large scale installations where building work is required can run into many months.

Each installation does however follow the same path:

Initial contact

Local Euroheat installer site survey

Basic plan and costing

Detail plan and/or 3D drawing

Order and first instalment

Any necessary building work

Boiler build and shipping

Delivery to site, second instalment

Boiler installation

Final instalment

Fuel delivery

Commissioning

Handover



There are very few situations where a biomass boiler is unsuitable for an organisation. As a rule of thumb, the larger the heating requirement, the greater the return due to the economies achieved, but even small biomass systems can make excellent financial sense.

Are my buildings suitable?

Most buildings are suitable for a biomass system. The biggest ask of a biomass heating system is space for the fuel storage and the boiler, which is more likely larger than your current fossil fuel system.

If necessary, the biomass boiler can be sited away from the building (or buildings) to be heated and a district heating network installed to supply the heat.

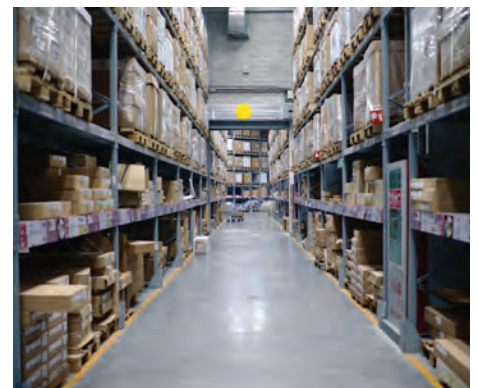
Which biomass fuel is right for me?

At Euroheat, we supply a wide range of boilers, from 10 kW to 1 MW, encompassing all three biomass fuels of wood log, wood chip, and wood pellet. We have no preference to the type of system used, and will instead guide you to the most appropriate solution for your individual requirements.

What are the next steps?

Euroheat have produced a range of literature which is immediately available via the web www.euroheat.co.uk or by post.

Alternatively call one of our biomass experts on **01885 491100** and they will discuss your requirements in further detail.



Croft Castle - National Trust

Picturesque castle nestling in the heart of Herefordshire needed reliable, low cost energy to heat the many rooms and various outbuildings and greenhouses.



With a historic 18,000 square foot Castle, several additional properties and an antiquated and expensive oil fired heating system, it was no wonder Croft Castle was selected as a pilot project under the National Trust's Renewable Energy Investment Programme.

After demonstrating its class leading equipment, knowledge and resources through an extensive tender selection program, Euroheat project managed the entire build of a new boiler house and chip store, holding a 199 kW HDG boiler and 6000 litre thermal store.

This energy centre now pipes hot water to all of the buildings for space heating and domestic hot water needs. Not only will this save around

£20,000 per annum in heating oil, it also allows the estate to self-supply using timber from the parkland around the castle, whilst earning over £20,000 per year in RHI payments. Part of a green initiative of the National Trust, it is an exemplar pilot project that will be reproduced in many of their properties throughout the UK.



Key facts

Application

Compact 200 chip boiler with FRA flexiblade to heat the Castle and outbuildings.

Fuel storage

Purpose built plant room and store

Previous Heating

Oil

Estimated fuel saving and income

Fuel saving pa	£15,000
RHI income pa	£22,000
Total income pa	£42,000
Payback time	7 years
ROI	14%





Energy Cabins

For those who need heat quickly or have space limitations, the Euroheat Biomass Energy Cabin is the ideal solution. It comes complete ready to use with boiler, accumulator and feed system already installed. Heat with sustainable, natural energy from the Euroheat range of exceptional, eco friendly, wood biomass boilers.



- Energy cabins for the home from 10kW
- Energy cabins for commercial premises to 1MW
- Wood chip, pellet and split wood boilers
- All systems components installed
- Delivered ready to plumb into your system
- High quality, long lifespan boilers and cabins

Speak to one of our team

01885 491100

Inspiration and information

www.euroheat.co.uk



Comfortable
heating. With wood!



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Euroheat operate a continuous development policy and specifications may have changed since the production of this brochure. Please check with Euroheat for latest updates.

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