

# Biomass Boiler Quote

St Peters Care Home

15 April 2014



Quote generated for:  
St Peters Care Home  
15 St Georges Terrace  
Herne Bay  
CT6 8RQ

Generate Green (UK) Ltd  
9 Propeller Park  
NCR Business Centre  
Great Central Way  
London NW10 0AB

03333 208 061  
[enquiries@generategreen.co](mailto:enquiries@generategreen.co)



## Customer Order Form

Quotation Reference	20140414SPCH
Quotation Summary	Biomass Boiler Quotation

<b>Supply and fit 1 x 199kW Biomass Boiler in a packaged container including:</b> <ul style="list-style-type: none"> <li>• Buffer Tank</li> <li>• 8m Auger system with sensors</li> <li>• 14 tonne hopper with sensor level</li> <li>• Flue system</li> <li>• Checkerplate flooring</li> <li>• 2" insulated pipework</li> <li>• Lighting</li> <li>• Carbon monoxide detector</li> <li>• Expansion tank</li> <li>• Circulating pumps</li> <li>• Pressurisation Unit</li> <li>• Standard 7 day controls</li> </ul>	<b>£131,500.00+VAT</b>
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<b>Payment 1:</b> 60% Deposit payable on order	£89,550.00+VAT
<b>Payment 2:</b> 15% Interim payment on commencement of works on site	£22,387.50+VAT
<b>Payment 3:</b> 15% Interim payment on successful pressure test	£22,387.50+VAT
<b>Payment 4:</b> 10% Balance payable on commissioning	£14,925.00+VAT

To proceed with this order please read the following instructions, and then sign below and return to **Generate Green (UK) Ltd**, 9 Propeller Park, NCR Business Centre, Great Central Way, London NW10 0AB.

### Finance

Generate Green is able to arrange finance for 100% of the cost of the system subject to acceptance through our partner Nationwide Corporate Finance (part of Nationwide PLC) or Santander. To apply please let us know and we will arrange for our Asset Finance Business Manager to contact you. But as indicated by yourself, this is not required as you will arrange your own finance solution at 90% LTV.

### Methods of Payment

Direct BACS transfer to: Generate Green (UK) Ltd, Barclays Sort code 20-37-16, Account Number 90309613. If you are arranging finance through our partner, we will arrange for the deposit to be paid straight to us.

### Planning permission confirmation

By signing this contract you are confirming that you have received planning permission for the proposed installation if required or ascertained that planning permission is not required. **NB Planning permission is required for your external plant room.** Generate Green (UK) Ltd cannot be held responsible for any installations where planning permission was required but not obtained and no refunds will be offered.



## Confirmation

By signing this form, you are confirming the order for the products and installation services specified on the attached quotation. This order will become binding when Generate Green (UK) Ltd notifies you of its acceptance and will be governed by our Terms of Supply.

Customer Signature

Customer Name (please print)

Date

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Quotation valid for: **30 Days**

To place an order please complete the Customer Order Form and return to **Generate Green (UK) Ltd.** together with deposit payment or finance application – upon receipt of your deposit or finance approval we will contact you to arrange an installation date.

## Notes:

1. Installation price is based on continuous working period. If circumstances beyond our control necessitate a split programme of works we reserve the right to charge for additional time.
2. Full Terms & Conditions are available on request.
3. A full breakdown of services to be supplied is given on the enclosed "Summary of Goods & Works"
4. If Additional Works are required due to exceptional circumstances not reasonably foreseeable or if customer request for specification changes, an estimate will be provided based on the installers hourly or daily rate.

## Summary of Goods & Works Supplied

A. Goods to be supplied by **Generate Green (UK) Ltd.**

All goods listed in quotation.

B. Work to be undertaken by **Generate Green (UK) Ltd** or **an approved sub-contractor.**

- Supply and installation of a biomass boiler packaged within a container.
- Supply and Installation of fuel storage area within container
- Supply and installation of buffer tank within container
- Installation of all other associated works to enable a fully working system within container
- Carry out ground works in the form of a trench from the containerised biomass plantroom to the existing boiler plantroom located within the basement floor. Backfill trench upon completion of pressure testing of pipe work
- Carry out all pipe work within trench up to the existing low loss header which supplies existing hot water and central heating circuits
- All field wiring up to boiler controls
- Project Management throughout contract
- Operation and maintenance manuals
- Onsite training for general operation and maintenance of equipment.

## Renewable Heat Incentive

A biomass boiler installation provides the building with a new highly efficient heating system that provides clean energy, lowers carbon footprint, and enhances any carbon reduction plans already in place. To promote cleaner energy supplies in the UK, businesses and commercial premises willing to invest in biomass technology in replacement to existing gas, oil and LPG boilers will not only benefit in reduced carbon emissions and lower, more sustainable heating fuel costs, they will also be able to collect the Renewable Heat Incentive on the scale as below:

Tariff Name	Eligible Technology	Eligible Sizes	Tier	Applicable tariffs from 1 April 2014
Small commercial biomass	Solid biomass including solid biomass contained in municipal solid waste and CHP	Less than 200 kWth	Tier 1	8.8
			Tier 2	2.3
Medium commercial Biomass		200 kWth and above; less than 1MWth	Tier 1	5.4
			Tier 2	2.3
Medium commercial Biomass (w/e from 1 July 2013)			Tier 1	5.1
			Tier 2	2.2
Large commercial Biomass		1MWth and above	N/A	1

Ofgem are responsible for publishing tariff tables showing the tariffs that will be applicable for each tariff period following DECC's quarterly degression announcement. The tariff table above shows the tariffs that will be applicable for all biomass technologies from 1 April 2014 following DECC's announcement that there will be no degression reduction. This table accounts for the RPI adjustment that has applied on 1 April 2014.

## Payments

The non-domestic RHI provides financial support for renewable heat technologies for the lifetime of the installation (for 20 years). Ofgem make payments on a quarterly basis. Once you are accredited, your tariff level will be assigned to your installation and payments will be made based on the actual heat output of the system.

Payments begin to accrue from the date of accreditation of the installation. The date is confirmed in the accreditation confirmation letter that is emailed to applicants.



### System Images –(20ft Container)



*Cladded option*

Note – image is just an example of an external plant room. Actual design may differ depending on planning requirements and actual system specification. Cladding optional.

### Financial Returns Simulation

<b>RHI Tier 1 Tariff (£)</b>	0.088
<b>RHI Tier 2 Tariff (£)</b>	0.023
<b>RPI %</b>	2.500
<b>Gas Inflation %</b>	4.500

<b>Annual Gas Usage (kWh)</b>	542,362
<b>Spend on Gas (£/pa)</b>	21,152
<b>Cost of Gas (£/kWh)</b>	0.0390

<b>Biomass Boiler Size (kW)</b>	199
<b>Boiler Efficiency</b>	80%
<b>RHI Tier 1 Incentive Year 1</b>	23,010.77
<b>RHI Tier 2 Incentive Year 1</b>	6,460.15
<b>Cost of System (£)</b>	149,250.00
<b>LTV %</b>	90
<b>Loan Interest Rate*</b>	3.50%
<b>Loan Term (years)</b>	7

<b>Pellet Price (£/tonne)</b>	200.00
<b>Fuel Required (tonne/pa)</b>	140
<b>Annual Cost of Pellet Fuel (£)</b>	27,957
<b>Cost of Pellet Fuel (£/kWh)</b>	0.0515
<b>Calorific Value of Wood Pellet (kWh/kg)</b>	4.8500

\*Subject to confirmation on application



### Return on Investment

Year	RHI Tier 1	RHI Tier 2	Cost of Gas	Cost of Pellets	Fuel Cost Difference	Combined Income & Savings pa	Balance (Full Cash Purchase)	Cost of Finance	Net Yearly Position	Balanced Position
1	£23,010.77	£6,460.15	£0.03900	£0.05155	-£6,804.69	£22,666.23	-£126,583.77	£21,663.72	-£13,922.49	-£143,904.81
2	£23,586.04	£6,621.65	£0.04076	£0.05284	-£6,551.76	£23,655.93	-£102,927.84	£21,663.72	£1,992.21	-£120,248.88
3	£24,175.69	£6,787.19	£0.04259	£0.05416	-£6,273.48	£24,689.41	-£78,238.44	£21,663.72	£3,025.69	-£95,559.48
4	£24,780.08	£6,956.87	£0.04451	£0.05551	-£5,968.34	£25,768.61	-£52,469.82	£21,663.72	£4,104.89	-£69,790.86
5	£25,399.58	£7,130.79	£0.04651	£0.05690	-£5,634.79	£26,895.59	-£25,574.23	£21,663.72	£5,231.87	-£42,895.27
6	£26,034.57	£7,309.06	£0.04860	£0.05832	-£5,271.17	£28,072.47	£2,498.23	£21,663.72	£6,408.75	-£14,822.81
7	£26,685.44	£7,491.79	£0.05079	£0.05978	-£4,875.76	£29,301.47	£31,799.70	£21,663.72	£7,637.75	£14,478.66
8	£27,352.57	£7,679.09	£0.05307	£0.06127	-£4,446.74	£30,584.91	£62,384.61		£30,584.91	£45,063.57
9	£28,036.39	£7,871.06	£0.05546	£0.06280	-£3,982.21	£31,925.24	£94,309.85		£31,925.24	£76,988.81
10	£28,737.30	£8,067.84	£0.05796	£0.06437	-£3,480.16	£33,324.98	£127,634.83		£33,324.98	£110,313.79
11	£29,455.73	£8,269.54	£0.06057	£0.06598	-£2,938.48	£34,786.78	£162,421.61		£34,786.78	£145,100.57
12	£30,192.12	£8,476.27	£0.06329	£0.06763	-£2,354.97	£36,313.43	£198,735.04		£36,313.43	£181,414.00
13	£30,946.92	£8,688.18	£0.06614	£0.06932	-£1,727.31	£37,907.80	£236,642.83		£37,907.80	£219,321.79
14	£31,720.60	£8,905.39	£0.06912	£0.07106	-£1,053.06	£39,572.92	£276,215.75		£39,572.92	£258,894.71
15	£32,513.61	£9,128.02	£0.07223	£0.07283	-£329.67	£41,311.96	£317,527.71		£41,311.96	£300,206.67
16	£33,326.45	£9,356.22	£0.07548	£0.07465	£445.53	£43,128.21	£360,655.92		£43,128.21	£343,334.88
17	£34,159.61	£9,590.13	£0.07887	£0.07652	£1,275.38	£45,025.12	£405,681.04		£45,025.12	£388,360.00
18	£35,013.60	£9,829.88	£0.08242	£0.07843	£2,162.81	£47,006.30	£452,687.34		£47,006.30	£435,366.30
19	£35,888.94	£10,075.63	£0.08613	£0.08039	£3,110.93	£49,075.50	£501,762.84		£49,075.50	£484,441.80
20	£36,786.17	£10,327.52	£0.09001	£0.08240	£4,122.98	£51,236.67	£552,999.51		£51,236.67	£535,678.47
						£702,249.51	£552,999.51	£151,646.04	£535,678.47	