

# Biomass Boiler Quotation

Private and Confidential

07 May 2013



Quote generated for:

**PRIVATE &  
CONFIDENTIAL**

Generate Green Ltd  
Equinox House  
Unit 10 Shannon Way  
Tewkesbury  
Glos  
GL2 5JS  
01452 227022

[enquiries@generategreen.co.uk](mailto:enquiries@generategreen.co.uk)





## Customer Order Form

Quotation Reference	20130507A
Quotation Summary	Biomass Boiler Quotation

<b>Supply and fit 2 x 199.00 kW Biomass Boilers in 40ft Ecolodge</b>	<b>£360,000.00+VAT</b>
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<b>Payment 1:</b> Deposit (Payable on order)	£216,000.00+VAT
<b>Payment 2:</b> Balance (Payable on Installation)	£144,000.00+VAT

To proceed with this order please read the following instructions, and then sign below and return to **Generate Green Ltd**, Equinox, Shannon Way, Tewkesbury, Glos, GL20 8ND

### Finance

100% of the cost of the system may be financed subject to acceptance through our partner Nationwide Corporate Finance (part of Nationwide PLC). To apply please let us know and we will arrange for our Nationwide Business Manager to contact you.

### Methods of Payment

Monies are transferred in stages, 60% (£216,000.00+VAT) is payable on confirmation of the order, with a further 40% (£114,000.00+VAT) on the day of completion of the installation. The easiest way to do this is by bank transfer to: Generate Green Ltd, HSBC Sort code: 40-37-60 account number: 80021245. If you are arranging finance through our partner, Nationwide Corporate Finance, we can arrange for the deposit to be paid straight to us with your permission.

### Planning permission confirmation

This installation will take place under permitted development regulations. You only require planning permission if the scope of the installation is outside of these regulations or if your building is listed or is in a conservation area. 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.

**Generate Green 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 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 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. For full Terms & Conditions see enclosed contract.
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 Ltd.****

All goods listed in quotation.

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

- Supply and installation of a biomass boiler
- Supply and installation of buffer tank
- Installation of all other associated works
- all pipe work up to the existing hot water and central heating circuits
- All AC wiring up to boiler controls
- Project Management throughout contract
- Installation of fuel storage area

**Proposed System**

Existing System Summary	
Current Heating system	3 x 250 kW Boiler (1 not in operation)
Expected Heat Load	398 kW (partial loading only)
Estimated Current Consumption	2,300,000 kWh pa
Current Fuel Type	Mains Gas
Proposed New System Summary	
Proposed Biomass Boiler Size	2 x 199kW
Expected Proportion of existing annual energy load to be provided	88%
Annual Rated Output per boiler	1,150,000 kWh pa
Year 1 CO2 savings based on DECC	549 Tonnes



## 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. Due to the generous Renewable Heat Incentive (RHI) offered 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 RHI on the scale as below:

Tariff	Eligible Technology	Eligible Sizes	Tier	Tariff Payment in pence/kWhth
Small Commercial Biomass	Solid Biomass including solid biomass contained in municipal solid waste	Less than 200kWth	Tier 1	8.3
			Tier 2	2.1
Medium Commercial Biomass		200kWth and above but less than 1000kWth	Tier 1	5.1
			Tier 2	2.1
Large Commercial Biomass		1000kWth and above	N/A	1.0

## Proposed System Images – Ecolodge (40ft Container)



Note – images are of a 20ft Ecolodge and are for illustration purposes only. Ecolodges can be supplied clad in wood for a more aesthetic finish for an extra charge if desired.





## Estimated Financial Returns **PER BOILER**

### RHI Financial Impact & Savings

<b><u>Natural Gas</u></b>		
Natural Gas Usage £p.a	£	<b>45,000</b>
p/KWh (from most recent Bill)	£	<b>0.040</b>
KWh per annum		1,125,000
<i>Biomass Heating System(Using 100% Biomass)</i>		
<b><u>Biomass</u></b>	<b>Per Annum</b>	
Energy Usage (kWhr)		1,125,000
Quantity of Fuel required (kgs)		272,893
Quantity of Fuel required (tonnes)		273
Annual Cost of Fuel	£	<b>54,579</b>
Biomass Cost/kwhr	£	<b>0.0485</b>
<b><u>RHI (Feed in tariff)</u></b>		
Boiler Size in KW	199 KW	
Boiler Size x 1,314 hrs (Tier 1)		261,486
Balance (Tier 2)		863,514
kWhrs		1,125,000
Cash Back @ 8.5p Tier 1	£	22,488
cash back @ 2.1p Tier 2	£	18,997
Total cash back p.a	£	<b>41,485</b>
Total Cash back/kWhr	£	<b>0.037</b>

### RHI implications for customers coming off Gas

<b>Biomass (Pellet)</b>		
Pellet Price per Tonne	£ <b>200.00</b>	Ave estimate
Calorific value of 1kg of Wood Pellet 4.85kWhr/kg Assume Boiler runs @ 85% Efficiency		
<b>Tariff for &gt;200kW and &lt;1000kW Biomass Boiler</b>		
8.6p/kWhr for first 1,314 at Full Power		
		Tier 1
2.2p/kwhr thereafter		
		Tier 2
Cash back paid Quarterly in arrears		
RHI is Index Linked for 20 years		
Boiler Capacity in KW		1,743,240
Heat Load %		65%

Year	RHI Tier 1	RHI Tier 2	Cost of Finance	Balance inc cost of finance	Balance for cash sale	Combined Income & Savings pa	Net pa on finance
1	£22,487.80	£18,997.31	£39,689.40	-£156,661.90	-£138,514.90	£41,485.10	£1,795.70
2	£23,293.76	£19,678.17	£39,614.40	-£113,689.97	-£95,542.97	£42,971.93	£3,357.53
3	£24,128.61	£20,383.44	£39,614.40	-£69,177.92	-£51,030.92	£44,512.04	£4,897.64
4	£24,993.38	£21,113.98	£39,614.40	-£23,070.57	-£4,923.57	£46,107.36	£6,492.96
5	£25,889.14	£21,870.70	£39,614.40	£24,689.28	£42,836.28	£47,759.84	£8,145.44
6	£26,817.01	£22,654.55		£74,160.83	£92,307.83	£49,471.56	£49,471.56
7	£27,778.13	£23,466.49		£125,405.45	£143,552.45	£51,244.62	£51,244.62
8	£28,773.70	£24,307.53		£178,486.67	£196,633.67	£53,081.22	£53,081.22
9	£29,804.94	£25,178.71		£233,470.33	£251,617.33	£54,983.65	£54,983.65
10	£30,873.15	£26,081.12		£290,424.60	£308,571.60	£56,954.27	£56,954.27
11	£31,979.65	£27,015.86		£349,420.11	£367,567.11	£58,995.51	£58,995.51
12	£33,125.80	£27,984.11		£410,530.02	£428,677.02	£61,109.91	£61,109.91
13	£34,313.03	£28,987.06		£473,830.11	£491,977.11	£63,300.09	£63,300.09
14	£35,542.81	£30,025.96		£539,398.87	£557,545.87	£65,568.76	£65,568.76
15	£36,816.66	£31,102.09		£607,317.62	£625,464.62	£67,918.75	£67,918.75
16	£38,136.17	£32,216.79		£677,670.57	£695,817.57	£70,352.96	£70,352.96
17	£39,502.97	£33,371.44		£750,544.98	£768,691.98	£72,874.41	£72,874.41
18	£40,918.76	£34,567.47		£826,031.20	£844,178.20	£75,486.22	£75,486.22
19	£42,385.28	£35,806.37		£904,222.85	£922,369.85	£78,191.65	£78,191.65
20	£43,904.37	£37,089.67		£985,216.89	£1,003,363.89	£80,994.04	£80,994.04

<b>RPI %</b>	3.584
<b>Cost of system</b>	180000.00
<b>Finance cost per 1000*</b>	18.34

\*illustrative cost only including tax relief, full quotation will be given on application