

Mary Ryan
 The Laurels
 High Beeches
 Harpenden



HA4 1AS

Environmental Assumptions	Environmental Constants
Region:	Thames
Property:	House
Type:	Detached
Degree Days:	2033 (Days)
External Temp:	-1.8 (Degrees)
Occupants:	4 (Full and Part time)
Heat Load %:	100

Heat Loss Calculation Software: Complete Picture - SAP MCS Calculator 4.2 Report Date 16:54:44 24/04/2014

Rooms Heat Loss Table. Individual power heat loss, ventilation and total energy loss per room.

Room Description	Type	Temp. °C	Volume m3	Fabric Loss (w)	Ventilation Loss (w/h)	Total Room Heat Loss (w)
Bedroom	Bedroom	18	24	205	235	440
Living Room	Living Room	21	30	151	339	490
Kitchen	Kitchen	18	18	453	235	688

System Details	System Results
Reference:	BM1311-0006
Description:	Grant Log Burner
Manufacturer:	Grant Engineering (UK)
Model:	Spira 6-26
Efficiency %:	89.5
Nominal Output Kw:	27.5

Hot Water Input Details	Hot Water Input Results
Occupants :	4
Showers :	Both electric and non-electric showers
Water Usage L/day:	136
Water Energy Kwh:	2137.69
Hot Water Cyl Volume L:	120
Cylinder Loss Kwh:	0
Distribution Loss Kwh:	0
Minimum Heat Up Power kw:	2

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MIS 3004 Renewable Heat Incentive Calculation.

MIS 3004 Worksheet Details	MIS 3004 Space Heating Results	MIS 3004 Water Heating Results
Annual Heat Demand Kwh (EPC):	10000	2200
Biomass Heat Share %:	100	100
Biomass Annual Demand Kwh:	3833	2137.69
System Efficiency %:	89.5	89.5
Annual Fuel Mass Kg:	1259	451
Annual Fuel Volume m3:	2.52	0.9
Existing Heat Demand Kwh:	0	0
Existing System Fuel Type:	Oil	Oil
Existing System Efficiency %:	71.4	71.4
Existing System Fuel Consumption:	0	0
Summary Space and Water	Annual Totals	
Annual Total Heat Demand Kwh (EPC):	12200	
Biomass Annual Total Demand Kwh:	5971	
Annual Total Biomass Fuel Mass Kg:	1259	
Annual Total Biomass Fuel Volume m3:	2.52	
Existing System Total Fuel Consumption Kwh:	0	
Biomass Fuel Cost p/Kwh:	5.45	
Existing System Fuel Cost p/Kwh:	5.95	
Biomass Annual Fuel Cost £:	325	
Existing System Annual Fuel Cost £:	0	
RHI Totals	RHI Totals	
Annual Space Demand Kwh (EPC)	10000	
Annual Water Demand Kwh (EPC)	2200	
Biomass Space and Water	Yes	
Maximum RHI Qualifying Heat Kwh (EPC)	12200	

The performance of Microgeneration Solid Biofuel Heating Systems is impossible to predict with certainty due to the variability of the climate and its subsequent effect on both heat supply and demand. This estimate is based upon the best available information but is given as guidance only and should not be considered as a guarantee.

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Environmental Assumptions

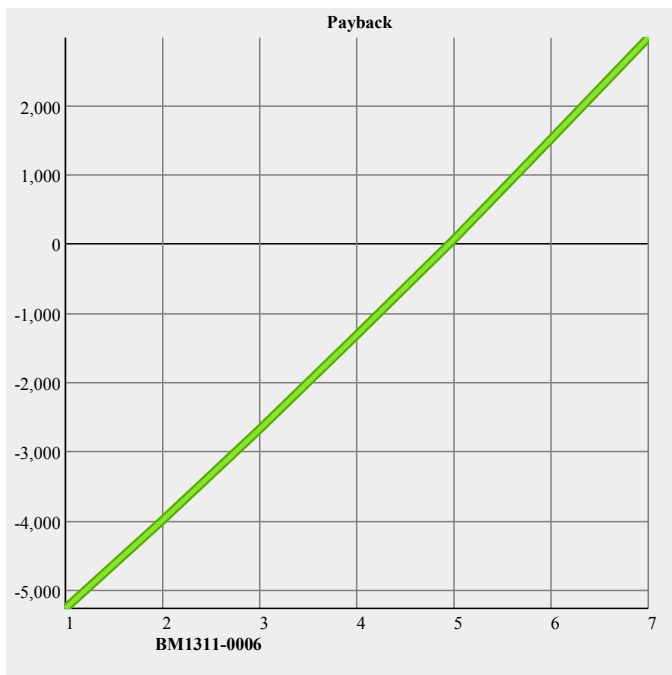
Region:
 Property:
 Type:
 Degree Days:
 External Temp:
 Occupants:
 Heat Load %:

Environmental Constants

Thames
 House
 Detached
 2033 (Days)
 -1.8 (Degrees)
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 100

Heat Loss Calculation Software: Complete Picture - SAP MCS Calculator 4.2 Report Date 16:54:44 24/04/2014

MIS 3004 Renewable Heat Incentive Payback Calculation.



Year	Space Output kWh	Water Output kWh	Feed In Tariff Payment p	Annual Fit Payment £	Maintenance Cost £	Annual Total £	Cumulative Total £
1	10000	2200	12.20	1,488	258	1,238	-5,262
2	10000	2200	12.57	1,533	265	1,276	-3,986
3	10000	2200	12.94	1,579	273	1,314	-2,872
4	10000	2200	13.33	1,626	281	1,353	-1,319
5	10000	2200	13.73	1,675	290	1,394	75
6	10000	2200	14.14	1,725	299	1,436	1,510
7	10000	2200	14.57	1,777	307	1,479	2,989

RHI Payback Calculation

Feed In Tariff Type
 Feed In Tariff
 Generation Tariff (p)
 Eligible Until
 Assessment Period
 System Cost
 Inflation RPI %
 Annual Maintenance £
 Total Return £
 Annual ROI %

EPC Band C or Higher
 April 2014 - June 2014
 12.2
 30/06/2014
 7
 6500
 3
 250
 2989
 11