

Mary Ryan  
 The Laurels  
 High Beeches  
 Harpenden



HA4 1AS

Environmental Assumptions	Environmental Constants
Region:	Thames
Property:	House Semi Detached
Degree Days:	2033 (Days)
External Temp:	-1.8 (Degrees)
Occupants:	4 (Full and Part time)
Heat Load %:	100
Electricity Tariff:	10 Hour Tariff 8.18 p/Kwh
Existing Fuel Tariff :	0 p/Kwh

Best Electrical Ltd  
 24 High St  
 Bedford

Heat Loss Calculation Software: Complete Picture - SAP MCS Calculator 4.2 Report Date 16:56:29 24/04/2014

Rooms Heat Loss Table. Individual heat loss per room and available energy from heat emitter.

Room Description	Type	Stars Rating	Temp. °C	Heat Loss (w)	Loss (w) Area m2	Heat Emmitter Type & Dimensions
Living Room	Living Room		21	298	24.83	Fan Coil Unit H 0mm W 0mm
Bedroom	Bedroom		18	297	24.75	Standard Radiator H 450mm W 750mm

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**System Details**

Reference:  
Description:  
Manufacturer:  
Model:  
Efficiency %:  
Nominal Output Kw:  
Central Heating Pump w:

**System Results**

Heat Pump Example  
Fan Coil Dimplex  
Dimplex  
LA6MI  
270  
5.79  
105

**Hot Water Input Details**

Occupants :  
Showers :  
Water Usage L/day:  
Water Energy Kwh:  
Immersion Energy Kwh:  
Hot Water Cyl Volume L:  
Cylinder Loss Kwh:  
Distribution Loss Kwh:  
Minimum Heat Up Power kw:

**Hot Water Input Results**

4  
136  
0  
0  
120  
0  
0  
1.2

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**Renewable Heat Incentive Calculation**

**MIS 3005 Space Heating Details**

Annual Heat Demand Kwh:  
Heat Pump Heat Share %:  
System Efficiency %:  
Heat Pump Consumption Kwh:  
Existing Heat Demand Kwh:  
Existing System Fuel Type:  
Existing System Efficiency %:  
Existing System Fuel Consumption:

**MIS 3005 Space Heating Results**

1401  
100  
270  
518.888888888888  
0  
0  
0

**MIS 3005 Water Heating Details**

Annual Water Heat Demand Kwh  
Water Heat Flow Temp  
Heat Pump Water Energy Kwh:  
Heat Pump Annual Fuel Cost £:  
Existing System (Immersion) Kwh:  
Existing System Annual Fuel Cost £:

**MIS 3005 Water Heating Results**

0  
40  
0  
45  
0  
0

**RHI Annual Energy Details**

Annual Space Demand Kwh (EPC)  
Annual Water Demand Kwh (EPC)  
Heat Pump Water Heating  
Maximum Qualifying Heat From HP Kwh  
RHI Seasonal Performance Factor  
Maximum Qualifying Renewable Heat Kwh

**RHI Annual Energy Results**

15000  
2500  
Yes  
17500  
3  
11666.6666666666

The performance of microgeneration heat pump 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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 Degree Days:  
 External Temp:  
 Occupants:  
 Heat Load %:  
 Electricity Tariff:  
 Existing Fuel Tariff :

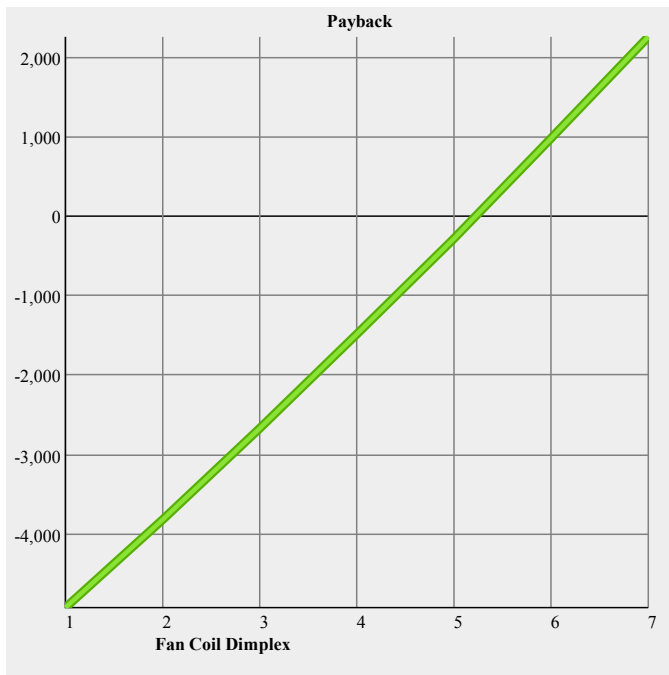
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**Renewable Heat Incentive Payback Calculation**



Fan Coil Dimplex							
Year	Space Output Kwh	Water Output Kwh	Feed In Tariff Payment p	Annual Fit Payment £	Maintenance Cost £	Annual Total £	Cumulative Total £
1	15000	2500	7.30	1,278	206	1,078	-4,923
2	15000	2500	7.52	1,316	212	1,110	-3,813
3	15000	2500	7.74	1,355	219	1,143	-2,670
4	15000	2500	7.98	1,396	225	1,177	-1,492
5	15000	2500	8.22	1,438	232	1,213	-279
6	15000	2500	8.46	1,481	239	1,249	970
7	15000	2500	8.72	1,525	246	1,287	2,256

**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  
 7.3  
 30/06/2014  
 7  
 6000  
 3  
 200  
 2256  
 9