

Energy Consumption 4-Bedroom Detached House –Jul 1983 to Jul 2014

1. Capital Costs

Ritter Solar Hot Water Panel – Solar Direct - £7,350.00 – Jul 2008

Worcester Bosch Condensing Boiler - Gasworks - £2,799.00 – Jan 2010

Sanyo Solar Photo Voltaic (PV) System – Dorset Solar - £14,904.74 – Nov 2011

2. Annual Consumption in 31+ years (07 Jul 83 - 31 Jul 14)

Gas: 18159 units (Average/yr = 585.77 units)

Electricity: 124095 units (Average/yr = 4003.06 units)

3. Consumption in last 6 years (at 30 April)

		Gas	pence/kwh	Electricity	pence/kwh
a.	01 May 09	592	3.512	4096	13.873
b.	01 May 10	569	3.220	4184	13.873
c.	01 May 11	529	3.504	3646	13.281
d.	01 May 12	460	3.973	3166	14.370
e.	01 May 13	549	4.379	2452	15.454
f.	01 May 14	493	4.211	2772	12.922

On 01 May 2004, prices per/Kwh were 1.24p for gas and 6.31p for electricity (increases of 340% and 205% respectively in 10 years).

4. Feed-In Tariff (FIT)

In the 2 years Nov 2011 – Nov 2013, I calculate I have received £2383.95 (at 45.4p/Kilowatt-hour) as FIT payment, plus an extra payment from my supplier of £107.52. The last 3 months (May – Jul 14) total £503.94 because the weather has been sunnier.

5. Budget Plan Monthly Payments

I have been with Utility Warehouse since May 2004, with gas from Gas Plus Supply Ltd and electricity from Electricity Plus Supply Ltd. In Oct 2005, I made monthly payments of £27 for gas and £24 for electricity. A high point was Oct 2009, with gas at £59 and electricity at £55. I am currently paying £67 for Gas and £25 for electricity monthly.

6. Summary

If you link in the capital costs, with the 7-year consumption data and cost/kwh, a reasonable trend can be assumed. Apart from a minor glitch in 2009/10, electricity costs have reduced due to the solar water heating panels, with further reductions from May 2011 due to the PV system. This has generated a FIT refund as well as reducing my monthly electricity consumption (although recent residence of computer using daughter has increased electricity consumption in this period).

The gas consumption has steadily reduced, despite an unexpected glitch last year due to extremely cold weather, since the installation of the condensing boiler in Jan 2010.

I hope this has proved useful and helpful and will assist you in making any of your own plans for energy saving in the future.

Ewan Simmonds 31 July 2014