## See Example <u>250kWp Solar PV Roof Proposal (pre 1<sup>st</sup> January 2016)</u> in email

(Birmingham, 10 degrees from South, 15 degree pitch, 80% used, £1.05p/W)

Below are comparative O.R.A. cases associated with the installation of a 250kWp roof system before and after FIT cuts:

Returns using O.R.A. funding on example installation registered BEFORE 1st January 2016 (£1.05/W, 15 degree pitch, South facing, London)

								= -			
Cash Price £262,500 +VAT System Performance		6 Years			8 Years			10 Years			
Combined Savings/ Earnings	System Balance	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	
£36,483.91	-£226,016.09	£57,865.50	£21,381.59	£14,360.56	£47,407.50	£10,923.59	£6,128.64	£41,296.50	£4,812.59	£1,379.57	
£37,742.04	-£188,274.05	£57,865.50	£20,123.46	£13,102.43	£47,407.50	£9,665.46	£4,870.51	£41,296.50	£3,554.46	£121.44	
£39,045.31	-£149,228.74	£57,865.50	£18,820.19	£11,799.16	£47,407.50	£8,362.19	£3,567.24	£41,296.50	£2,251.19	-£1,181.83	
£40,395.41	-£108,833.34	£57,865.50	£17,470.09	£10,449.07	£47,407.50	£7,012.09	£2,217.15	£41,296.50	£901.09	-£2,531.93	
£41,794.07	-£67,039.26	£57,865.50	£16,071.43	£9,050.40	£47,407.50	£5,613.43	£818.48	£41,296.50	-£497.57	-£3,930.59	
£43,243.12	-£23,796.14	£57,865.50	£14,622.38	£7,601.35	£47,407.50	£4,164.38	-£630.57	£41,296.50	-£1,946.62	-£5,379.65	
£44,744.44	£20,948.31	£347,193.00	£108,489.14	£66,362.98	£47,407.50	£2,663.06	-£2,131.89	£41,296.50	-£3,447.94	-£6,880.96	
£46,299.99	£67,248.30				£47,407.50	£1,107.51	-£3,687.44	£41,296.50	-£5,003.49	-£8,436.51	
£47,911.79	£115,160.09				£379,260.00	£49,511.70	£11,152.12	£41,296.50	-£6,615.29	-£10,048.31	
£49,581.96	£164,742.05							£41,296.50	-£8,285.46	-£11,718.48	
£51,312.70	£216,054.75							£412,965.00	-£14,277.05	-£48,607.26	
£53,106.27	£269,161.01				Before and A	fter Income Tax	and Reliefs				
£54,965.05	£324,126.06	Total ORA	£347,193.00	£305,066.84	£379,2	260.00	£340,900.42	£412,965.00		£378,634.79	
£56,891.49	£381,017.55	Monthly Payments	£4,822.13	£4,237.04	£3,950.63		£3,551.05	£3,441.38		£3,155.29	
£58,888.15	£439,905.69	Annual ORA Interest	5.377%	2.703%	5.560%		3.733%	5.732%		4.424%	
£60,957.68	£500,863.37	Net Benefits	£682,252.56	£566,230.39	£650,2	£650,185.56		£616,480.56		£530,370.07	
£63,102.83	£563,966.20	ROI (as a multiplier)	2.0	2.4	1.7		2.0	1.5		1.7	
£65,326.48	£629,292.68	ROI (as av. ann. %)	9.8%	11.9%	8.6% 10.1%		7.5%		8.6%		
667 624 60	5505 024 20	Please note After Income Tay and Reliefs above are guidelines, you must seek out your own tay advice									

Please note After Income Tax and Reliefs above are guidelines, you must seek out your own tax advice

£1,029,445.56

£67,631.60

£70,021.28

£696,924.29

£766,945.56



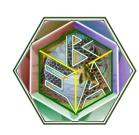


Returns using O.R.A. funding on example installation registered AFTER 1<sup>st</sup> January 2016 (£1.05/W, 15 degree pitch, South facing, London)

Cash Price £185,000 +VAT System Performance		6 Years				8 Years		10 Years		
Combined Savings/ Earnings	System Balance	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim
£23,431.95	-£239,068.05	£57,865.50	£34,433.55	£24,608.30	£47,407.50	£23,975.55	£16,293.53	£41,296.50	£17,864.55	£11,458.38
£24,316.93	-£214,751.12	£57,865.50	£33,548.57	£23,723.31	£47,407.50	£23,090.57	£15,408.55	£41,296.50	£16,979.57	£10,573.40
£25,236.39	-£189,514.73	£57,865.50	£32,629.11	£22,803.85	£47,407.50	£22,171.11	£14,489.09	£41,296.50	£16,060.11	£9,653.94
£26,191.70	-£163,323.02	£57,865.50	£31,673.80	£21,848.54	£47,407.50	£21,215.80	£13,533.77	£41,296.50	£15,104.80	£8,698.62
£27,184.30	-£136,138.73	£57,865.50	£30,681.20	£20,855.94	£47,407.50	£20,223.20	£12,541.18	£41,296.50	£14,112.20	£7,706.03
£28,215.67	-£107,923.06	£57,865.50	£29,649.83	£19,824.57	£47,407.50	£19,191.83	£11,509.81	£41,296.50	£13,080.83	£6,674.66
£29,287.37	-£78,635.69	£347,193.00	£192,616.06	£133,664.51	£47,407.50	£18,120.13	£10,438.11	£41,296.50	£12,009.13	£5,602.96
£30,401.01	-£48,234.68				£47,407.50	£17,006.49	£9,324.47	£41,296.50	£10,895.49	£4,489.32
£31,558.27	-£16,676.41				£379,260.00	£164,994.68	£103,538.50	£41,296.50	£9,738.23	£3,332.06
£32,760.91	£16,084.50							£41,296.50	£8,535.59	£2,129.42
£34,010.75	£50,095.25							£412,965.00	£134,380.50	£70,318.78
£35,309.67	£85,404.92				Before and After	Income Tax and F	Reliefs (Below)			
£36,659.66	£122,064.58	Total ORA	£347,193.00	£288,241.45	£379,2	£379,260.00 £317,803.82			£412,965.00	
£38,062.76	£160,127.34	Monthly Payments	£4,822.13	£4,003.35	£3,950.63 £3,310.46		£3,441.38		£2,907.53	
£39,521.13	£199,648.47	Annual ORA Interest	5.377%	1.634%	5.56	50%	2.634%	5.732%		3.292%
£41,036.97	£240,685.44	Net Benefits	Benefits £336,531.51 £289,653.54		£304,464.51 £27		£272,028.85	£270,759.51		£253,793.22
£42,612.61	£283,298.06	ROI (as a multiplier) 1.0 1.4			0.8 1.2		0.7		1.0	
£44,250.47	£327,548.52	ROI (as av. annual %) 4.8% 6.9%			4.0% 5.8%			3.3%		4.8%
£45,953.04	£373,501.56	Please note After Income Tax and Reliefs above are guidelines, you must seek out your own tax advice								

£47,722.95 £683,724.51 £421,224.51





## Our Best Case Scenario AFTER 1st January 2016 (£0.90/W, 35 degree pitch, South facing, London using 100%) (best location/ orientation and no extra scaffold/ fixing of roof/ optimizers/ correction of inclination/ orientation/ obstructions/ new roof construction)

Cash Price £225,000 +VAT System Performance		6 Years			8 Years			10 Years		
Combined Savings/ Earnings	System Balance	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim
£27,097.22	-£197,902.78	£49,599.00	£22,501.78	£13,708.79	£40,635.00	£13,537.78	£6,570.88	£35,397.00	£8,299.78	£2,415.07
£28,179.18	-£169,723.60	£49,599.00	£21,419.82	£12,626.84	£40,635.00	£12,455.82	£5,488.93	£35,397.00	£7,217.82	£1,333.11
£29,305.17	-£140,418.43	£49,599.00	£20,293.83	£11,500.85	£40,635.00	£11,329.83	£4,362.94	£35,397.00	£6,091.83	£207.12
£30,477.01	-£109,941.42	£49,599.00	£19,121.99	£10,329.00	£40,635.00	£10,157.99	£3,191.09	£35,397.00	£4,919.99	-£964.72
£31,696.60	-£78,244.82	£49,599.00	£49,599.00 £17,902.40 £9,109.41		£40,635.00	£8,938.40	£1,971.50	£35,397.00	£3,700.40	-£2,184.31
£32,965.92	-£45,278.90	£49,599.00	£16,633.08	£7,840.10	£40,635.00	£7,669.08	£702.18	£35,397.00	£2,431.08	-£3,453.63
£34,287.01	-£10,991.89	£297,594.00	£117,872.90	£65,114.99	£40,635.00	£6,347.99	-£618.91	£35,397.00	£1,109.99	-£4,774.72
£35,662.02	£24,670.13				£40,635.00	£4,972.98	-£1,993.91	£35,397.00	-£265.02	-£6,149.73
£37,093.17	£61,763.30				£325,080.00	£75,409.87	£19,674.70	£35,397.00	-£1,696.17	-£7,580.88
£38,582.80	£100,346.10							£35,397.00	-£3,185.80	-£9,070.51
£40,133.31	£140,479.41							£353,970.00	£28,623.90	-£30,223.19
£41,747.24	£182,226.65				Before and After	Income Tax and F	Reliefs (Below)			
£43,427.21	£225,653.87	Total ORA	£297,594.00	£244,836.08	£325,0	080.00	£269,344.82	£353,970.00		£295,122.91
£45,175.96	£270,829.82	Monthly Payments	£4,133.25	£3,400.50	£3,386.25 £2,805.68		£2,805.68	£2,949.75		£2,459.36
£46,996.33	£317,826.15	Annual ORA Interest	5.377%	1.469%	5.560%		2.464%	5.732%		3.117%
£48,891.30	£366,717.45	Net Benefits	£510,241.35	£437,376.42	£482,755.35		£426,857.48	£453,865.35		£416,214.59
£50,863.96	£417,581.41	ROI (as a multiplier)	1.7	2.3	1.5		2.0	1.3		1.7
£52,917.54	£470,498.95	<b>ROI (as av. annual %)</b> 8.6% 11.5%			7.4% 10.0%			6.4%		8.7%
£55,055.39	£525,554.34	Please note After Income Tax and Reliefs above are guidelines, you must seek out your own tax advice								

£57,281.02 £807,835.35 £582,835.35





Cash Price £225,000 +VAT System Performance		6 Years				8 Years		10 Years		
Combined Savings/ Earnings	System Balance	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim	O.R.A. Repayments	Client Top Up	Client Top Up with tax reclaim
£18,768.43	-£206,231.58	£49,599.00	£30,830.58	£22,562.70	£40,635.00	£21,866.58	£15,440.30	£35,397.00	£16,628.58	£11,300.60
£19,460.79	-£186,770.79	£49,599.00	£30,138.21	£21,870.33	£40,635.00	£21,174.21	£14,747.93	£35,397.00	£15,936.21	£10,608.24
£20,179.59	-£166,591.20	£49,599.00	£29,419.41	£21,151.53	£40,635.00	£20,455.41	£14,029.13	£35,397.00	£15,217.41	£9,889.44
£20,925.87	-£145,665.32	£49,599.00	£28,673.13	£20,405.25	£40,635.00	£19,709.13	£13,282.85	£35,397.00	£14,471.13	£9,143.16
£21,700.71	-£123,964.61	£49,599.00	£27,898.29	£19,630.41	£40,635.00	£18,934.29	£12,508.01	£35,397.00	£13,696.29	£8,368.32
£22,505.23	-£101,459.38	£49,599.00	£27,093.77	£18,825.89	£40,635.00	£18,129.77	£11,703.49	£35,397.00	£12,891.77	£7,563.80
£23,340.61	-£78,118.77	£297,594.00	£174,053.38	£124,446.11	£40,635.00	£17,294.39	£10,868.12	£35,397.00	£12,056.39	£6,728.42
£24,208.05	-£53,910.72				£40,635.00	£16,426.95	£10,000.67	£35,397.00	£11,188.95	£5,860.98
£25,108.84	-£28,801.88	1			£325,080.00	£153,990.72	£102,580.51	£35,397.00	£10,288.16	£4,960.19
£26,044.27	-£2,757.61							£35,397.00	£9,352.73	£4,024.76
£27,015.73	£24,258.12							£353,970.00	£131,727.61	£78,447.91
£28,024.64	£52,282.76				Before and After	Income Tax and F	Reliefs (Below)			
£29,072.48	£81,355.24	Total ORA	£297,594.00	£247,986.73	£325,0	£325,080.00 £273,669.79			£353,970.00	
£30,160.80	£111,516.04	Monthly Payments	£4,133.25	£3,444.26	£3,386.25 £2,		£2,850.73	£2,949.75		£2,505.75
£31,291.20	£142,807.24	Annual ORA Interest	5.377%	1.703%	5.560%		2.704%	5.732%		3.364%
£32,465.35	£175,272.59	Net Benefits £245,218.92 £210,971.73		£217,732.92 £194,798		£194,798.41	£188,842.92		£178,008.52	
£33,684.99	£208,957.58	ROI (as a multiplier) 0.8 1.2			0.7 1.0		0.5		0.8	
£34,951.94	£243,909.52	<b>ROI (as av. annual %)</b> 4.1% 5.9%			3.3% 4.9%			2.7%		4.0%
£36,268.07	£280,177.59	Please note After Income Tax and Reliefs above are guidelines, you must seek out your own tax advice								

£37,635.34 £542,812.92 £317,812.92





There is still time now to get the higher returns, please provide us with your site details. The Distribution Network Operator waiting lists are quickly becoming prohibitive towards securing the current FIT rates at time of installation.

It does not cost anything to give us permission to put a proposal in the queue for connection. But delaying would ensure you miss out.

With your details on record, even if we run out of time, not all is lost. As well as energy saving commercial LED lighting, micro-CHP and infra-red heating for domestic and commercial applications, we also have a wonderful solar roof product; although about a third more expensive than a normal roof, incorporates solar panels into the construction with insulation options, sharing construction/ installation costs, therefore making energy saving through generation viable. Our funding now stretches to property refurbishment and construction. If you have a project in mind, please send plans for a quote.

For those interested in waste to power or biomass heat/ electricity generation, with wet or dry waste or space to store chip/ pellet deliveries

Our waste to power Pyrolysis flat-bed continuous feed system, with the ability to dry out fuel, produces natural gas. This can then be used in a gas engine for heat and electricity generation.

Our **Combined Heat and Power (CHP) plant** solution generates heat and electricity in much greater quantities than solar PV, available 24 hours 7 days a week. Previously the cost was prohibitive; however, our fund still supports the free installation of efficient biomass run equipment qualifying from the RHI.

Our **piping products** are **tested to have heat loss of less than 3% for even long runs**, therefore still qualifying for Renewable Heat Incentive when heating separate areas of the site. Where solar 1MW PV could only cover a tenth of the electricity demand of some of our clients, CHP can remove their electricity bill and provide heating at around 2.8p/kWh from a carbon neutral source.

See our example <u>2MW CHP Renewable Heat Incentive (RHI) Cashflow Calculator</u> in email And <u>Pyrolysis Technology</u>

https://www.ofgem.gov.uk/environmental-programmes/non-domestic-renewable-heat-incentive-rhi/tariffs-apply-non-domestic-rhi-great-britain

We look forward to being of assistance to your business finding solutions to the ever present requirement for energy and carbon emission reduction.

PVCommercial.com is a trading name of Bee Energy Solutions Ltd

EEEHVE ENERGY LTD. Telephone: 01225 920 199

Block 600 Unit 25, Smethwick Enterprise Centre, Rolfe Street, Smethwick, B66 2AR

Email: <a href="mailto:assessments@beehiveenergy.co.uk">assessments@beehiveenergy.co.uk</a>
Enterprise House, Timbrell Street, Trowbridge, Wiltshire BA14 8PL



