



“How the benefits of Solar PV could be captured to the benefit of Highcross - Lakeside & Climate Change in the Solent area (this in terms of business, energy & financial benefits)”

with

No Cost Outlay

PSECC - Carbon Dioxide Emission Reduction (CDER)



Space4business

**PSECC – Portsmouth
Sustainable Energy &
Climate Change
Centre**

CO₂ savings - 6.81 million tonnes over 25 years possible

Facilitators for change

Future Solent

Creating a Low Carbon Economy



Resource Ownership concept could be a mechanism to be taken forward by Highcross Lakeside CO₂ savings - 6.81 million tonnes over 25 years – no cost outlay

Priority 1: New Low Carbon & Green Technology

Priority 3: Generation of Secure, Renewable & Low Carbon Energy in the Solent

Lakeside - could lead the way in Low Carbon

Gateway to Portsmouth



What are the possibilities of Renewable Energy Solar PV for Lakeside



No Cost Outlay

CO2 savings - 6.81 million tonnes over 25 years



Lakeside - already an extremely well managed site can be enhanced by Solar PV

Energy Saving & Resource Ownership Loan (ESRO) – pays for itself from FIT & enables revenues to be gained by Lakeside.

PSECC – Stages so far in Solar PV at Highcross Lakeside proposal

- PSECC – Initial enquiry letter sent - approached Ian Cox & Nick Turner - 2nd December 2012
- Pre-feasibility study sent for consideration to Ian Cox & Nick Turner - 3rd January 2013
- Feasibility study sent to Ian Cox - 7th February 2013
- Tender proposal sent to Ian Cox – listing four individual Solar company quotes - 11th February 2013
- 1st site Survey of Lakeside roof for Solar PV – Solar Advanced Systems - 12th February 2013
- 2nd site Survey of Lakeside roof for Solar PV - 20th February 2013
- Final submission of two quotes for Solar PV to Lakeside - 21st & 27th Feb' 2013
- Presentation - Nick Turner Director & Ian Cox Lakeside Facilities manager - 13th March 2013
- Try and install before the end of April to minimise any changes for higher FIT, revenue & profits

Preferred bid - Solar Advanced Systems Ltd

Solar Advanced Systems



Solar Advanced Systems Ltd are a market leading, innovative and future thinking solar PV company, committed to providing the most affordable, efficient and sustainable solutions to rising energy costs for all types of domestic and commercial buildings.



Ian Cox Facilities Manager led Survey team



Atrium Flat roof

Corrugated raised fixing points for PV panels



Switch gear and controls in roof top Air Conditioning buildings



Plenty of room for Solar PV Inverters to be mounted

Cabling can use existing routes



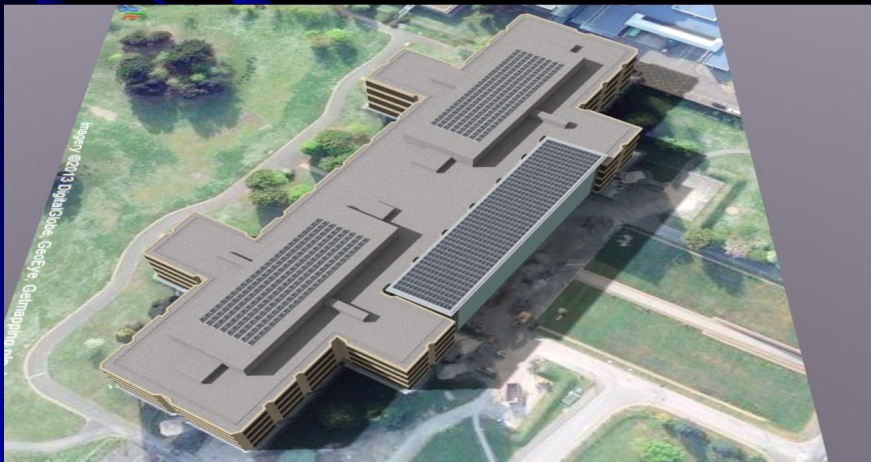
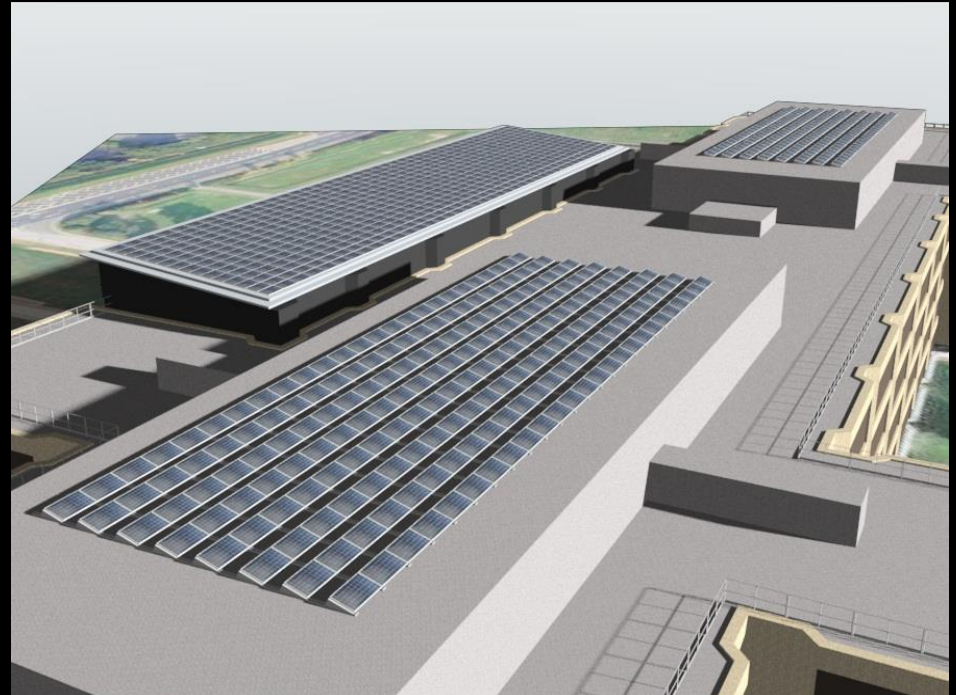
The proposals we are putting forward means leaving lower sub-mains as they are but changing the 4 sub-mains in the plant rooms on the roof and have been costed in.

Tender selected Solar Advanced Systems Ltd proposal

250 KW Solar PV Atrium and Air Conditioning roof areas

Lakeside Solar PV installation

PSECC have already arranged a Solar PV tender
Best competitive Solar PV pricing and loan



250 KW system

Seven year Energy Savings & Resource Ownership Loan



| | |
|--------------------------------|----------------------|
| Quote Number: | SOLDOM07241c |
| Estimated yield (SAP) | 205400 Kwh** |
| Actual Estimated Annual Yield: | 275268 Kwh*** |
| Cost of Install: | £376,992.00 |

| | |
|---------------------|----------------------|
| Payback time | |
| 5.3 yrs | |
| Profit | £2,525,881.30 |
| 20.9% ROI | |

Inclusive of Finance interest

| Year | Feed in @ £0.1100* | Cost of Electricity Saved £0.120* | Export | Rate * | Annual % return | Annual Total | Total | |
|------|--------------------|-----------------------------------|---------|--------|-----------------|--------------|-------------|---------------|
| 1 | £30,279.48 | £33,032.16 | £0.1200 | 0.0000 | £0.0450 | 16.8% | £63,311.64 | £63,311.64 |
| 2 | £31,187.86 | £35,344.41 | £0.1284 | 0.0000 | £0.0466 | 17.6% | £66,532.28 | £129,843.92 |
| 3 | £32,123.50 | £37,818.52 | £0.1374 | 0.0000 | £0.0482 | 18.6% | £69,942.02 | £199,785.94 |
| 4 | £33,087.21 | £40,465.82 | £0.1470 | 0.0000 | £0.0499 | 19.5% | £73,553.02 | £273,338.96 |
| 5 | £34,079.82 | £43,298.42 | £0.1573 | 0.0000 | £0.0516 | 20.5% | £77,378.25 | £350,717.20 |
| 6 | £35,102.22 | £46,329.31 | £0.1683 | 0.0000 | £0.0534 | 21.6% | £81,431.53 | £432,148.73 |
| 7 | £36,155.28 | £49,572.37 | £0.1801 | 0.0000 | £0.0553 | 22.7% | £85,727.65 | £517,876.38 |
| 8 | £37,239.94 | £53,042.43 | £0.1927 | 0.0000 | £0.0573 | 23.9% | £90,282.37 | £608,158.75 |
| 9 | £38,357.14 | £56,755.40 | £0.2062 | 0.0000 | £0.0593 | 25.2% | £95,112.54 | £703,271.29 |
| 10 | £39,507.85 | £60,728.28 | £0.2206 | 0.0000 | £0.0613 | 26.6% | £100,236.13 | £803,507.42 |
| 11 | £40,693.09 | £64,979.26 | £0.2361 | 0.0000 | £0.0635 | 28.0% | £105,672.35 | £909,179.77 |
| 12 | £41,913.88 | £69,527.81 | £0.2526 | 0.0000 | £0.0657 | 29.6% | £111,441.69 | £1,020,621.46 |
| 13 | £43,171.30 | £74,394.75 | £0.2703 | 0.0000 | £0.0680 | 31.2% | £117,566.05 | £1,138,187.51 |
| 14 | £44,466.44 | £79,602.39 | £0.2892 | 0.0000 | £0.0704 | 32.9% | £124,068.82 | £1,262,256.33 |
| 15 | £45,800.43 | £85,174.55 | £0.3094 | 0.0000 | £0.0728 | 34.7% | £130,974.98 | £1,393,231.32 |
| 16 | £47,174.44 | £91,136.77 | £0.3311 | 0.0000 | £0.0754 | 36.7% | £138,311.21 | £1,531,542.53 |
| 17 | £48,589.68 | £97,516.35 | £0.3543 | 0.0000 | £0.0780 | 38.8% | £146,106.02 | £1,677,648.55 |
| 18 | £50,047.37 | £104,342.49 | £0.3791 | 0.0000 | £0.0808 | 41.0% | £154,389.86 | £1,832,038.41 |
| 19 | £51,548.79 | £111,646.46 | £0.4056 | 0.0000 | £0.0836 | 43.3% | £163,195.25 | £1,995,233.66 |
| 20 | £53,095.25 | £119,461.72 | £0.4340 | 0.0000 | £0.0865 | 45.8% | £172,556.97 | £2,167,790.63 |
| 21 | £0.00 | £127,824.04 | £0.4644 | 0.0000 | £0.0895 | 33.9% | £127,824.04 | £2,295,614.66 |
| 22 | £0.00 | £136,771.72 | £0.4969 | 0.0000 | £0.0927 | 36.3% | £136,771.72 | £2,432,386.38 |
| 23 | £0.00 | £146,345.74 | £0.5316 | 0.0000 | £0.0959 | 38.8% | £146,345.74 | £2,578,732.12 |
| 24 | £0.00 | £156,589.94 | £0.5689 | 0.0000 | £0.0993 | 41.5% | £156,589.94 | £2,735,322.06 |
| 25 | £0.00 | £167,551.24 | £0.6087 | 0.0000 | £0.1027 | 44.4% | £167,551.24 | £2,902,873.30 |

| | |
|----------------------------|------|
| % of consumed Electricity: | 100% |
| DNO assumed export: | 0% |

* Based on predicted energy prices rises of 7% and RPI inflation of 3.0%

** Predicted yield outputs based on SAP 2009. Yields may be higher

*** Predicted yield outputs on PV sol data. Yields may be higher

**Using DEFRA 0.527kg CO2/kWh
CO2 savings – 3.578 million tonnes**


Seven year Energy Savings & Resource Ownership Loan

250kwp Solar PV system Lease Purchase Model

| | Energy Price Rise 7% | RPI Increase 3% | System Size 250kwp | | | | | |
|----|-------------------------|--------------------|-----------------------|-----------------------|-----------------------|--------------------|----------------------------|-----------------------|
| Yr | Electricity Saving | FITS Income | Yr | Benefit Per Annum (£) | Annual Repayments (£) | SAS ongoing Rental | Gross Profit per Annum (£) | Cumulative Profit (£) |
| 1 | £33,032.16 | £30,279.48 | 1 | 63,311.64 | 53,856.00 | 0.00 | 9,455.64 | 9,455.64 |
| 2 | £35,344.41 | £31,187.86 | 2 | 66,532.28 | 53,856.00 | 0.00 | 12,676.28 | 22,131.92 |
| 3 | £37,818.52 | £32,123.50 | 3 | 69,942.02 | 53,856.00 | 0.00 | 16,086.02 | 38,217.94 |
| 4 | £40,465.82 | £33,087.21 | 4 | 73,553.02 | 53,856.00 | 0.00 | 19,697.02 | 57,914.96 |
| 5 | £43,298.42 | £34,079.82 | 5 | 77,378.25 | 53,856.00 | 0.00 | 23,522.25 | 81,437.20 |
| 6 | £46,329.31 | £35,102.22 | 6 | 81,431.53 | 53,856.00 | 0.00 | 27,575.53 | 109,012.73 |
| 7 | £49,572.37 | £36,155.28 | 7 | 85,727.65 | 53,856.00 | 0.00 | 31,871.65 | 140,884.38 |
| 8 | £53,042.43 | £37,239.94 | 8 | 90,282.37 | 0.00 | 0.00 | 90,282.37 | 231,166.75 |
| 9 | £56,755.40 | £38,357.14 | 9 | 95,112.54 | 0.00 | 0.00 | 95,112.54 | 326,279.29 |
| 10 | £60,728.28 | £39,507.85 | 10 | 100,236.13 | 0.00 | 0.00 | 100,236.13 | 426,515.42 |
| 11 | £64,979.26 | £40,693.09 | 11 | 105,672.35 | 0.00 | 0.00 | 105,672.35 | 532,187.77 |
| 12 | £69,527.81 | £41,913.88 | 12 | 111,441.69 | 0.00 | 0.00 | 111,441.69 | 643,629.46 |
| 13 | £74,394.75 | £43,171.30 | 13 | 117,566.05 | 0.00 | 0.00 | 117,566.05 | 761,195.51 |
| 14 | £79,602.39 | £44,466.44 | 14 | 124,068.82 | 0.00 | 0.00 | 124,068.82 | 885,264.33 |
| 15 | £85,174.55 | £45,800.43 | 15 | 130,974.98 | 0.00 | 0.00 | 130,974.98 | 1,016,239.32 |
| 16 | £91,136.77 | £47,174.44 | 16 | 138,311.21 | 0.00 | 0.00 | 138,311.21 | 1,154,550.53 |
| 17 | £97,516.35 | £48,589.68 | 17 | 146,106.02 | 0.00 | 0.00 | 146,106.02 | 1,300,656.55 |
| 18 | £104,342.49 | £50,047.37 | 18 | 154,389.86 | 0.00 | 0.00 | 154,389.86 | 1,455,046.41 |
| 19 | £111,646.46 | £51,548.79 | 19 | 163,195.25 | 0.00 | 0.00 | 163,195.25 | 1,618,241.66 |
| 20 | £119,461.72 | £53,095.25 | 20 | 172,556.97 | 0.00 | 0.00 | 172,556.97 | 1,790,798.63 |
| 21 | £127,824.04 | £0.00 | 21 | 127,824.04 | 0.00 | 0.00 | 127,824.04 | 1,918,622.66 |
| 22 | £136,771.72 | £0.00 | 22 | 136,771.72 | 0.00 | 0.00 | 136,771.72 | 2,055,394.38 |
| 23 | £146,345.74 | £0.00 | 23 | 146,345.74 | 0.00 | 0.00 | 146,345.74 | 2,201,740.12 |
| 24 | £156,589.94 | £0.00 | 24 | 156,589.94 | 0.00 | 0.00 | 156,589.94 | 2,358,330.06 |
| 25 | £167,551.24 | £0.00 | 25 | 167,551.24 | 0.00 | 0.00 | 167,551.24 | 2,525,881.30 |

250 KW system

Highcross direct purchase scenario

| | | | | | | | | | |
|--|------------------|---------------------|----------------------------------|---|---|---------------|------------------------|---------------------|---------------|
| Quote Number: SOLDOM07241c | | Payback time | |  | | | | | |
| Estimated yield (SAP) 205400 Kwh** | | 4.4 yrs | | | | | | | |
| Actual Estimated Annual Yield: 275268 Kwh*** | | Profit | £2,594,874.30 | | 100% consumed electricity from Solar PV system | | | | |
| Cost of Install: £307,999.00 | | 24.4% | ROI | | | | | | |
| Year | Feed in @ | £0.1100 | Cost of Electricity Saved | £0.120 | Export | Rate * | Annual % return | Annual Total | Total |
| 1 | £30,279.48 | | £33,032.16 | £0.1200 | 0.0000 | £0.0450 | 20.6% | £63,311.64 | £63,311.64 |
| 2 | £31,187.86 | | £35,344.41 | £0.1284 | 0.0000 | £0.0466 | 21.6% | £66,532.28 | £129,843.92 |
| 3 | £32,123.50 | | £37,818.52 | £0.1374 | 0.0000 | £0.0482 | 22.7% | £69,942.02 | £199,785.94 |
| 4 | £33,087.21 | | £40,465.82 | £0.1470 | 0.0000 | £0.0499 | 23.9% | £73,553.02 | £273,338.96 |
| 5 | £34,079.82 | | £43,298.42 | £0.1573 | 0.0000 | £0.0516 | 25.1% | £77,378.25 | £350,717.20 |
| 6 | £35,102.22 | | £46,329.31 | £0.1683 | 0.0000 | £0.0534 | 26.4% | £81,431.53 | £432,148.73 |
| 7 | £36,155.28 | | £49,572.37 | £0.1801 | 0.0000 | £0.0553 | 27.8% | £85,727.65 | £517,876.38 |
| 8 | £37,239.94 | | £53,042.43 | £0.1927 | 0.0000 | £0.0573 | 29.3% | £90,282.37 | £608,158.75 |
| 9 | £38,357.14 | | £56,755.40 | £0.2062 | 0.0000 | £0.0593 | 30.9% | £95,112.54 | £703,271.29 |
| 10 | £39,507.85 | | £60,728.28 | £0.2206 | 0.0000 | £0.0613 | 32.5% | £100,236.13 | £803,507.42 |
| 11 | £40,693.09 | | £64,979.26 | £0.2361 | 0.0000 | £0.0635 | 34.3% | £105,672.35 | £909,179.77 |
| 12 | £41,913.88 | | £69,527.81 | £0.2526 | 0.0000 | £0.0657 | 36.2% | £111,441.69 | £1,020,621.46 |
| 13 | £43,171.30 | | £74,394.75 | £0.2703 | 0.0000 | £0.0680 | 38.2% | £117,566.05 | £1,138,187.51 |
| 14 | £44,466.44 | | £79,602.39 | £0.2892 | 0.0000 | £0.0704 | 40.3% | £124,068.82 | £1,262,256.33 |
| 15 | £45,800.43 | | £85,174.55 | £0.3094 | 0.0000 | £0.0728 | 42.5% | £130,974.98 | £1,393,231.32 |
| 16 | £47,174.44 | | £91,136.77 | £0.3311 | 0.0000 | £0.0754 | 44.9% | £138,311.21 | £1,531,542.53 |
| 17 | £48,589.68 | | £97,516.35 | £0.3543 | 0.0000 | £0.0780 | 47.4% | £146,106.02 | £1,677,648.55 |
| 18 | £50,047.37 | | £104,342.49 | £0.3791 | 0.0000 | £0.0808 | 50.1% | £154,389.86 | £1,832,038.41 |
| 19 | £51,548.79 | | £111,646.46 | £0.4056 | 0.0000 | £0.0836 | 53.0% | £163,195.25 | £1,995,233.66 |
| 20 | £53,095.25 | | £119,461.72 | £0.4340 | 0.0000 | £0.0865 | 56.0% | £172,556.97 | £2,167,790.63 |
| 21 | £0.00 | | £127,824.04 | £0.4644 | 0.0000 | £0.0895 | 41.5% | £127,824.04 | £2,295,614.66 |
| 22 | £0.00 | | £136,771.72 | £0.4969 | 0.0000 | £0.0927 | 44.4% | £136,771.72 | £2,432,386.38 |
| 23 | £0.00 | | £146,345.74 | £0.5316 | 0.0000 | £0.0959 | 47.5% | £146,345.74 | £2,578,732.12 |
| 24 | £0.00 | | £156,589.94 | £0.5689 | 0.0000 | £0.0993 | 50.8% | £156,589.94 | £2,735,322.06 |
| 25 | £0.00 | | £167,551.24 | £0.6087 | 0.0000 | £0.1027 | 54.4% | £167,551.24 | £2,902,873.30 |

| | |
|----------------------------|------|
| % of consumed Electricity: | 100% |
| DNO assumed export: | 0% |

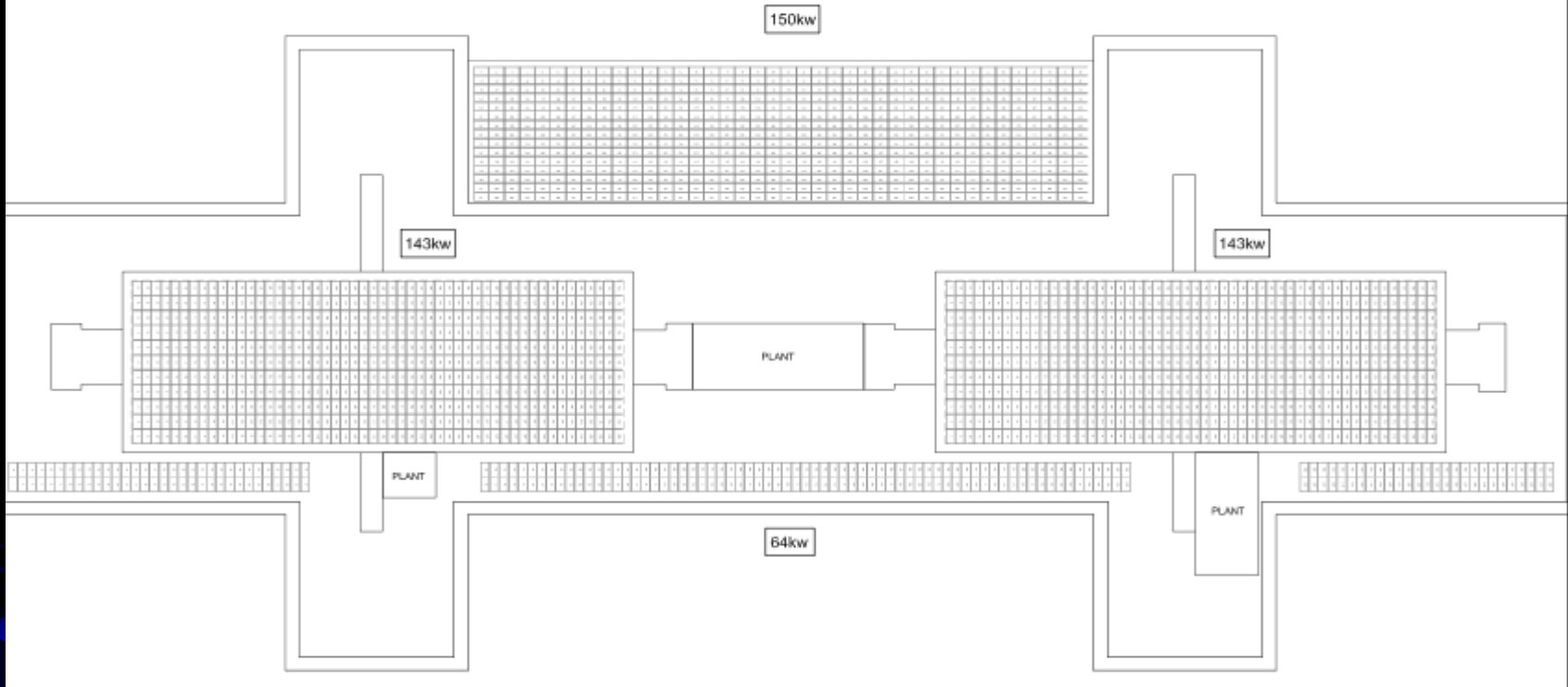
* Based on predicted energy prices rises of 7% and RPI inflation of 3.0%

** Predicted yield outputs based on SAP 2009. Yields may be higher

*** Predicted yield outputs on PV sol data. Yields may be higher

500 KW Solar PV proposal

PLAN - AS PROPOSED



500 KW system

Seven year Energy Savings & Resource Ownership Loan



| | |
|--------------------------------|----------------------|
| Quote Number: | SOLDOM07241d |
| Estimated yield (SAP) | 390000 Kwh** |
| Actual Estimated Annual Yield: | 514396 Kwh*** |
| Cost of Install: | £692,720.00 |

| | |
|---------------------|----------------------|
| Payback time | |
| 6.1 yrs | |
| Profit | £4,192,849.17 |
| 18.8% ROI | |

Inclusive of Finance interest

| Year | Feed in @ £0.0710 * | Cost of Electricity Saved £0.120 * | Export | Rate * | Annual % return | Annual Total | Total |
|------|---------------------|------------------------------------|--------|---------|-----------------|--------------|---------------|
| 1 | £36,522.12 | £61,727.52 | 0.0000 | £0.0450 | 14.2% | £98,249.64 | £98,249.64 |
| 2 | £37,617.78 | £66,048.45 | 0.0000 | £0.0466 | 15.0% | £103,666.23 | £201,915.86 |
| 3 | £38,746.31 | £70,671.84 | 0.0000 | £0.0482 | 15.8% | £109,418.15 | £311,334.01 |
| 4 | £39,908.70 | £75,618.87 | 0.0000 | £0.0499 | 16.7% | £115,527.57 | £426,861.58 |
| 5 | £41,105.96 | £80,912.19 | 0.0000 | £0.0516 | 17.6% | £122,018.15 | £548,879.73 |
| 6 | £42,339.14 | £86,576.04 | 0.0000 | £0.0534 | 18.6% | £128,915.18 | £677,794.91 |
| 7 | £43,609.32 | £92,636.36 | 0.0000 | £0.0553 | 19.7% | £136,245.68 | £814,040.59 |
| 8 | £44,917.60 | £99,120.91 | 0.0000 | £0.0573 | 20.8% | £144,038.50 | £958,079.10 |
| 9 | £46,265.12 | £106,059.37 | 0.0000 | £0.0593 | 22.0% | £152,324.50 | £1,110,403.59 |
| 10 | £47,653.08 | £113,483.53 | 0.0000 | £0.0613 | 23.3% | £161,136.61 | £1,271,540.20 |
| 11 | £49,082.67 | £121,427.37 | 0.0000 | £0.0635 | 24.6% | £170,510.04 | £1,442,050.24 |
| 12 | £50,555.15 | £129,927.29 | 0.0000 | £0.0657 | 26.1% | £180,482.44 | £1,622,532.68 |
| 13 | £52,071.80 | £139,022.20 | 0.0000 | £0.0680 | 27.6% | £191,094.01 | £1,813,626.69 |
| 14 | £53,633.96 | £148,753.76 | 0.0000 | £0.0704 | 29.2% | £202,387.71 | £2,016,014.40 |
| 15 | £55,242.98 | £159,166.52 | 0.0000 | £0.0728 | 31.0% | £214,409.50 | £2,230,423.90 |
| 16 | £56,900.27 | £170,308.17 | 0.0000 | £0.0754 | 32.8% | £227,208.44 | £2,457,632.34 |
| 17 | £58,607.27 | £182,229.75 | 0.0000 | £0.0780 | 34.8% | £240,837.02 | £2,698,469.36 |
| 18 | £60,365.49 | £194,985.83 | 0.0000 | £0.0808 | 36.9% | £255,351.32 | £2,953,820.68 |
| 19 | £62,176.46 | £208,634.84 | 0.0000 | £0.0836 | 39.1% | £270,811.29 | £3,224,631.98 |
| 20 | £64,041.75 | £223,239.28 | 0.0000 | £0.0865 | 41.5% | £287,281.03 | £3,511,913.01 |
| 21 | £0.00 | £238,866.03 | 0.0000 | £0.0895 | 34.5% | £238,866.03 | £3,750,779.03 |
| 22 | £0.00 | £255,586.65 | 0.0000 | £0.0927 | 36.9% | £255,586.65 | £4,006,365.68 |
| 23 | £0.00 | £273,477.71 | 0.0000 | £0.0959 | 39.5% | £273,477.71 | £4,279,843.39 |
| 24 | £0.00 | £292,621.15 | 0.0000 | £0.0993 | 42.2% | £292,621.15 | £4,572,464.54 |
| 25 | £0.00 | £313,104.63 | 0.0000 | £0.1027 | 45.2% | £313,104.63 | £4,885,569.17 |

| | |
|----------------------------|------|
| % of consumed Electricity: | 100% |
| DNO assumed export: | 0% |

* Based on predicted energy prices rises of 7% and RPI inflation of 3.0%

** Predicted yield outputs based on SAP 2009. Yields may be higher

*** Predicted yield outputs on PV sol data. Yields may be higher

CO2 savings - 6.81 million tonnes

Seven year Energy Savings & Resource Ownership Loan

500kwp Solar PV system Lease Purchase Model

| Energy Price Rise 7% | | RPI increase 3% | System Size 500kwp | | | | | |
|-------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|--------------------|----------------------------|-----------------------|
| Yr | Electricity Saving | FITS Income | Yr | Benefit Per Annum (£) | Annual Repayments (£) | SAS ongoing Rental | Gross Profit per Annum (£) | Cumulative Profit (£) |
| 1 | £61,727.52 | £36,522.12 | 1 | 98,249.64 | 98,960.00 | 0.00 | -710.36 | -710.36 |
| 2 | £66,048.45 | £37,617.78 | 2 | 103,666.23 | 98,960.00 | 0.00 | 4,706.23 | 3,995.87 |
| 3 | £70,671.84 | £38,746.32 | 3 | 109,418.15 | 98,960.00 | 0.00 | 10,458.15 | 14,454.02 |
| 4 | £75,618.87 | £39,908.71 | 4 | 115,527.57 | 98,960.00 | 0.00 | 16,567.57 | 31,021.60 |
| 5 | £80,912.19 | £41,105.97 | 5 | 122,018.15 | 98,960.00 | 0.00 | 23,058.15 | 54,079.75 |
| 6 | £86,576.04 | £42,339.15 | 6 | 128,915.19 | 98,960.00 | 0.00 | 29,955.19 | 84,034.94 |
| 7 | £92,636.36 | £43,609.32 | 7 | 136,245.68 | 98,960.00 | 0.00 | 37,285.68 | 121,320.62 |
| 8 | £99,120.91 | £44,917.60 | 8 | 144,038.51 | 0.00 | 0.00 | 144,038.51 | 265,359.13 |
| 9 | £106,059.37 | £46,265.13 | 9 | 152,324.50 | 0.00 | 0.00 | 152,324.50 | 417,683.63 |
| 10 | £113,483.53 | £47,653.08 | 10 | 161,136.61 | 0.00 | 0.00 | 161,136.61 | 578,820.24 |
| 11 | £121,427.37 | £49,082.68 | 11 | 170,510.05 | 0.00 | 0.00 | 170,510.05 | 749,330.29 |
| 12 | £129,927.29 | £50,555.16 | 12 | 180,482.45 | 0.00 | 0.00 | 180,482.45 | 929,812.74 |
| 13 | £139,022.20 | £52,071.81 | 13 | 191,094.01 | 0.00 | 0.00 | 191,094.01 | 1,120,906.75 |
| 14 | £148,753.76 | £53,633.96 | 14 | 202,387.72 | 0.00 | 0.00 | 202,387.72 | 1,323,294.47 |
| 15 | £159,166.52 | £55,242.98 | 15 | 214,409.50 | 0.00 | 0.00 | 214,409.50 | 1,537,703.97 |
| 16 | £170,308.17 | £56,900.27 | 16 | 227,208.45 | 0.00 | 0.00 | 227,208.45 | 1,764,912.42 |
| 17 | £182,229.75 | £58,607.28 | 17 | 240,837.03 | 0.00 | 0.00 | 240,837.03 | 2,005,749.45 |
| 18 | £194,985.83 | £60,365.50 | 18 | 255,351.33 | 0.00 | 0.00 | 255,351.33 | 2,261,100.78 |
| 19 | £208,634.84 | £62,176.46 | 19 | 270,811.30 | 0.00 | 0.00 | 270,811.30 | 2,531,912.08 |
| 20 | £223,239.28 | £64,041.76 | 20 | 287,281.03 | 0.00 | 0.00 | 287,281.03 | 2,819,193.11 |
| 21 | £238,866.03 | £0.00 | 21 | 238,866.03 | 0.00 | 0.00 | 238,866.03 | 3,058,059.14 |
| 22 | £255,586.65 | £0.00 | 22 | 255,586.65 | 0.00 | 0.00 | 255,586.65 | 3,313,645.79 |
| 23 | £273,477.71 | £0.00 | 23 | 273,477.71 | 0.00 | 0.00 | 273,477.71 | 3,587,123.50 |
| 24 | £292,621.15 | £0.00 | 24 | 292,621.15 | 0.00 | 0.00 | 292,621.15 | 3,879,744.65 |
| 25 | £313,104.63 | £0.00 | 25 | 313,104.63 | 0.00 | 0.00 | 313,104.63 | 4,192,849.28 |

500 KW system Highcross direct purchase scenario



| | |
|--------------------------------|----------------------|
| Quote Number: | SOLDOM07241d |
| Estimated yield (SAP) | 390000 Kwh** |
| Actual Estimated Annual Yield: | 514396 Kwh*** |
| Cost of Install: | £565,950.00 |

| | |
|---------------------|----------------------|
| Payback time | |
| 5.1 yrs | |
| Profit | £4,319,619.17 |
| 21.8% ROI | |

100% consumed electricity from Solar PV system

| Year | Feed in @ £0.0710 * | Cost of Electricity Saved £0.120 * | Export | Rate * | Annual % return | Annual Total | Total |
|------|---------------------|------------------------------------|--------|---------|-----------------|--------------|---------------|
| 1 | £36,522.12 | £61,727.52 | 0.0000 | £0.0450 | 17.4% | £98,249.64 | £98,249.64 |
| 2 | £37,617.78 | £66,048.45 | 0.0000 | £0.0466 | 18.3% | £103,666.23 | £201,915.86 |
| 3 | £38,746.31 | £70,671.84 | 0.0000 | £0.0482 | 19.3% | £109,418.15 | £311,334.01 |
| 4 | £39,908.70 | £75,618.87 | 0.0000 | £0.0499 | 20.4% | £115,527.57 | £426,861.58 |
| 5 | £41,105.96 | £80,912.19 | 0.0000 | £0.0516 | 21.6% | £122,018.15 | £548,879.73 |
| 6 | £42,339.14 | £86,576.04 | 0.0000 | £0.0534 | 22.8% | £128,915.18 | £677,794.91 |
| 7 | £43,609.32 | £92,636.36 | 0.0000 | £0.0553 | 24.1% | £136,245.68 | £814,040.59 |
| 8 | £44,917.60 | £99,120.91 | 0.0000 | £0.0573 | 25.5% | £144,038.50 | £958,079.10 |
| 9 | £46,265.12 | £106,059.37 | 0.0000 | £0.0593 | 26.9% | £152,324.50 | £1,110,403.59 |
| 10 | £47,653.08 | £113,483.53 | 0.0000 | £0.0613 | 28.5% | £161,136.61 | £1,271,540.20 |
| 11 | £49,082.67 | £121,427.37 | 0.0000 | £0.0635 | 30.1% | £170,510.04 | £1,442,050.24 |
| 12 | £50,555.15 | £129,927.29 | 0.0000 | £0.0657 | 31.9% | £180,482.44 | £1,622,532.68 |
| 13 | £52,071.80 | £139,022.20 | 0.0000 | £0.0680 | 33.8% | £191,094.01 | £1,813,626.69 |
| 14 | £53,633.96 | £148,753.76 | 0.0000 | £0.0704 | 35.8% | £202,387.71 | £2,016,014.40 |
| 15 | £55,242.98 | £159,166.52 | 0.0000 | £0.0728 | 37.9% | £214,409.50 | £2,230,423.90 |
| 16 | £56,900.27 | £170,308.17 | 0.0000 | £0.0754 | 40.1% | £227,208.44 | £2,457,632.34 |
| 17 | £58,607.27 | £182,229.75 | 0.0000 | £0.0780 | 42.6% | £240,837.02 | £2,698,469.36 |
| 18 | £60,365.49 | £194,985.83 | 0.0000 | £0.0808 | 45.1% | £255,351.32 | £2,953,820.68 |
| 19 | £62,176.46 | £208,634.84 | 0.0000 | £0.0836 | 47.9% | £270,811.29 | £3,224,631.98 |
| 20 | £64,041.75 | £223,239.28 | 0.0000 | £0.0865 | 50.8% | £287,281.03 | £3,511,913.01 |
| 21 | £0.00 | £238,866.03 | 0.0000 | £0.0895 | 42.2% | £238,866.03 | £3,750,779.03 |
| 22 | £0.00 | £255,586.65 | 0.0000 | £0.0927 | 45.2% | £255,586.65 | £4,006,365.68 |
| 23 | £0.00 | £273,477.71 | 0.0000 | £0.0959 | 48.3% | £273,477.71 | £4,279,843.39 |
| 24 | £0.00 | £292,621.15 | 0.0000 | £0.0993 | 51.7% | £292,621.15 | £4,572,464.54 |
| 25 | £0.00 | £313,104.63 | 0.0000 | £0.1027 | 55.3% | £313,104.63 | £4,885,569.17 |

| | |
|----------------------------|------|
| % of consumed Electricity: | 100% |
| DNO assumed export: | 0% |

* Based on predicted energy prices rises of 7% and RPI inflation of 3.0%
 ** Predicted yield outputs based on SAP 2009. Yields may be higher
 *** Predicted yield outputs on PV sol data. Yields may be higher

CO2 savings - 6.81 million tonnes

Lakeside Solar PV installation

PSECC have already arranged a Solar PV tender
 Best competitive Solar PV pricing and loan

DNO could take upto 65 days as such the current FIT rate for 250 KW of 11p will change to 10.62p and for 500 KW will change from 7.1p to 6.85p

Other Solar PV System performance monitoring Data logging

| Site | System Size | Installation Commission Date | Designed annual yield | Actual yield to date | Expected Yield to date | System performance % over months supplied |
|--------------------------------------|-------------|------------------------------|-----------------------|----------------------|------------------------|---|
| Ernest Doe Ringmer | 46 kw | 22nd June 2012 | 44973 | 26439 | 25280 | 104.58% |
| Steyning Grammer School | 21.5 kw | 9th November 2012 | 20156 | 3423 | 3245 | 105.49% |
| Ernest Doe Albourne | 19 kw | 6th July 2012 | 17881 | 10636 | 9855 | 107.92% |
| Hollam Nurseries | 26kw | 2nd December 2011 | 22146 | 29192 | 24894 | 117.27% |
| Ernest Doe North Walsham | 50 kw | 2nd July 2012 | 45973 | 24836 | 24796 | 100.16% |
| Ernest Doe Bennington | 30 kw | 12th October 2012 | 25497 | 3506.1 | 4090 | 85.72% |
| Speakman | 80 kw | 5th December 2011 | 75401 | 88562 | 84081 | 105.33% |
| East Sussex Dairy Farm (harding) | 250 kw | 2nd November 2011 | 262893 | 315266 | 303623 | 103.83% |
| Smiths | 50 kw | 11th November 2011 | 44682 | 57865 | 50708 | 114.11% |
| Great Baiden Farm | 35 kw | 14th September 2011 | 32749 | 44562 | 40099 | 111.13% |
| West Hall Farm | 30 kw | 15th November 2011 | 29279 | 36653 | 32670 | 112.19% |
| Hoe Vally Community centre | 30 kw | 8th May 2011 | 28743 | 55772 | 48375 | 115.29% |
| Coolham | 500 kw | 12th February 2011 | 521369 | 557745 | 527532 | 105.73% |
| 3 x 150kw Kent Egg farm (client N/A) | 450 kw | 12th May 2011 | 436589 | 794557 | 767489 | 103.53% |

Tree causing shading removal

Average yield achieved 1492.29%
106.59%

Tender process & proposals have taken 14 weeks – any delay on installing will result in revenue losses

Highcross goes **Low** Carbon & leads the way

Other Highcross properties in the UK - S/E - potential for Solar PV



Kembrey Park – could be next for a Solar PV install before the end of April?



Each Highcross building could have Solar PV installed demonstrating Climate Change mitigation to others as well as revenue generation across portfolio of sixteen sites in Southern England & beyond – with PSECC.

End