



HKD ENERGY & DOWNLANDS SCHOOL SOLAR PROJECT

BUSINESS PLAN

Investing in a Better Future

November, 2014

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1 Executive Summary

Our vision is to deliver **low carbon** electricity to our local school, reducing their **costs** and in doing so deliver **educational benefit** for our children, reduce our community's **environmental impact** and provide those local businesses and community members that invest in the project with an attractive, tax efficient **return** on their investment.

HKD Energy and the Downlands School Solar Project

HKD Energy is a Community Benefit Society registered with the Financial Conduct Authority, aiming to bring community energy to Hurstpierpoint, Hassocks, Keymer and Ditchling. Our first project will be the installation of an 80kW solar electricity (PV) system at Downlands School. The project will reduce carbon dioxide emissions by 840 tonnes and save the school money through providing electricity to the school at a fixed rate that is two thirds less than they currently pay (and guaranteed not to rise for 20 years).

Government Support for Solar Electricity

Our project is made possible by the Government support for solar electricity – the Feed in Tariff – which guarantees a payment for any electricity that is generated (irrespective of whether or not it is used on site) and a further payment for any electricity the school does not use (and is exported). This tariff allows us to deliver low cost energy to the school and provide an attractive financial return for investors.

Community Benefit

The community benefits of the project are considerable, contributing to energy security, tackling climate change by reducing carbon emissions and supporting national aims of decarbonising the power supply. Locally, we will deliver significant cost savings to the school and protect them from increasing electricity costs, freeing up valuable resources to invest in the education of their students.

Anticipated Financial Returns for Investors

HKD Energy needs to raise £100,500 in order for the project to go ahead. The income generated from the Feed in Tariff will be sufficient not only to deliver lower cost electricity for the school, but enables the possibility of returning capital to investors over the 20 year project as well as providing them with approximately 4% return on capital invested (from the start of year 3). In addition, there are may be tax benefits of investing, with the potential for up to 50% of capital invested reduced from your tax liability. Further information is provided in the Appendix (Section 8.5, Summary of SEIS Income Tax Relief).

Risks and Mitigation

The project (and PV systems more generally) carries a relatively low risk. Our revenues are largely dependent upon the sun rising and the UK Government honouring its agreement to provide the feed in tariff. The risks of damage, poor performance, vandalism, theft and damage to the school are all mitigated by both our supplier and installer warranties along with our own insurance policy. We also have in place the necessary contingencies to cover these and other risks such as lower than expected inflation. These risks and mitigation are detailed in Section 7, Risks and Mitigation.

Next Steps

HKD Energy has carried out extensive community engagement and is continuing to do so. These activities are detailed within the Annexes, Section 8.6.

The share offer is due to launch on 8/11/14 with the installation planned for the half term in February, 2015. Downlands School will then immediately begin to enjoy clean, low cost electricity and revenues will be received by HKD Energy quarterly, with payments to investors commencing three years from then.

2 HKD Energy and the Downlands School PV Project

This document provides potential investors detailed information about HKD Energy's plans to install and maintain solar (PV) panels on the roofs of Downlands School and is not intended to replace the Share Issue document that will be issued in November 2014.

2.1 HKD Energy

The vision of HKD Energy is to develop locally owned renewable energy generation, in order to reduce our dependence on fossil fuels and imported energy. HKD Energy has entered into a partnership with Downlands Community School to develop a solar electricity installation on the roof of the school and another on the school's leisure facilities.

HKD Energy is a Community Benefit Society, registered with the Financial Conduct Authority with the aims of bringing community energy to Hurstpierpoint, Hassocks, Keymer and Ditchling. HKD Energy was formed by local people, not only passionate about their local community and about climate change, but with considerable experience in:

- Engineering, energy and sustainability
- The property sector
- Community and charitable sectors

2.2 About Photovoltaics (PV) Technology

Photovoltaics ("PV") or Solar Electricity systems converts light into electricity to be used locally or sold to the Grid. They can be building integrated or ground mounted.

Government support through the Feed in Tariff (FIT) is an incentive which guarantees PV generators an RPI linked payment for each kWh of energy generated or exported, as follows:

- The Feed in Tariff, a payment of 12.13p for each kilowatt hour (kWh) generated by the PV system
- The export tariff, a payment of 4.77p/kWh electricity exported to the Grid
- For systems <30kW it is assumed 50% of electricity generated is exported

Most community energy projects (including the proposed Downlands project) are paid for any energy consumed on site at a lower rate than they would otherwise pay

2.3 HKD Energy's PV project at Downlands School

We have agreement in principle from West Sussex County Council (the building owner) to lease the roof to HKD Energy for 20 years. An 80 kW PV system will be installed on the roof to produce an estimated 80,731 kilowatt hours (kWh) of clean electricity each year, saving 840 tonnes of carbon dioxide over 20 years.

HKD Energy is seeking investment from the local community so that they are able to participate in the benefits of the income that the project will generate as well as support a valuable community initiative that will deliver educational as well as environmental benefit.

How it works:

1. *Community members and local businesses invest ~£100,500 to install 80kW PV Projects. Community members may be eligible for tax relief under the SEIS scheme (through a reduction of investor's tax liability of up to 50% of the cost of the investment)¹*
 2. *PV panels generate approximately 80,731kWh electricity each year*
 3. *School saves £149,000 over project life through receiving low cost electricity from the project*
 4. *The project receives ~£13,000 income in year one (increasing with RPI) from the Government backed Feed in Tariff and the sale of low cost electricity to the school*
 5. *The project returns the income generated to community members and local investors; with the intention of providing interest of approximately 4%, along with making the return of capital possible*
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2.4 Benefits of Community owned Energy

Community-owned solar projects like ours were started by Ouse Valley Energy Services Company (OVESCO) in Lewes 3 years ago, with a project on Harveys Brewery. OVESCO have developed several other community solar projects since then.

In addition to the financial returns to investors, local renewable energy projects deliver significant benefit:

- Contributing to energy security
- Tackling climate change by reducing greenhouse gas emissions
- Contributing to national goals of decarbonising the power sector
- Demonstrating the potential for low and zero carbon technologies
- Raising awareness of climate change and the means for local residents to reduce carbon emissions
- Lowering energy costs and providing educational benefits for Downlands School and its students

This document explains what is planned and how you can be involved.

¹ See further details on EIS and SEIS in the Annex. Please note that independent tax advice must be taken to establish eligibility for any tax relief.

3 The Proposed Project

HKD Energy is a not-for-profit organisation set up as a Community Benefit Society to enable community investment. It provides an opportunity for local people to contribute financially to the community with the expectation of both a social dividend and a financial return.

1. Community Investment Required	<ul style="list-style-type: none"> ■ Community members and local businesses are invited to invest £100,500 to install the 80kW solar PV project. ■ Individuals and organisations can invest between £250 and £10,000. Investors will become full voting members of HKD Energy. ■ HKD Energy will apply for the project to be SEIS eligible to allow investors to potentially benefit from the associated 50% tax relief in the first year.
2. Project generates 80,700 kWh electricity	<ul style="list-style-type: none"> ■ The project will include a 30kW installation on the south facing roof of the leisure facilities at Downlands school ■ A 50kW installation will be provided on the flat roofs of the main school buildings ■ Detailed analysis has been carried out by local MCS (Microgeneration Certification Scheme) accredited engineers, which confirms the combined 80kW system will generate 80,731 kWh electricity each year. ■ Most of this electricity will be consumed on site, with our analysis confirming that over 85% of the electricity generated on the leisure facilities and over 70% of the electricity generated on the school will be consumed on site. ■ The electricity not consumed on site will be exported to the Grid
3. Downlands to save ~£149,000 over project life through low cost electricity	<ul style="list-style-type: none"> ■ HKD Energy will provide the electricity consumed by the school at a rate of 3.3p/kWh (compared with the current 10p/kWh the school currently pays) ■ This rate will be fixed for the 20 year duration of the project, protecting the school from future increases in electricity costs ■ On the basis of very conservative estimates for fuel price inflation (2.5%) the school will benefit from approximately £149,000 in cost savings
4. The project's £13,000 income in year one (increasing with RPI) from electricity sales to the school and the Feed in Tariff	<p>HKD Energy will receive four income streams, increasing with inflation, as follows:</p> <ul style="list-style-type: none"> ■ The school will contribute to HKD 3.3p/kWh for electricity the school consumes. This will be fixed for the 20 year project lifetime (protecting the school from fuel price inflation). ■ The Government will pay HKD Energy 4.77p/kWh for every kWh of electricity exported by the school building (the 50kW system) to the grid, increasing with inflation (RPI). ■ The Government will pay HKD Energy 4.77p/kWh for 50% of the energy generated by the 30kW system installed on the leisure facilities, increasing with inflation (RPI). ■ The Government will pay HKD Energy 12.13p/kWh for every kWh of electricity generated by the whole system, irrespective of whether the electricity is used by the school or exported.
5. The project returns the income to community members and local investors	<p>We intend to use the income to:</p> <ul style="list-style-type: none"> ■ pay interest to investors ■ cover the cost of maintaining the panels and administering the project ■ build up capital so that it may be possible for some investors to withdraw their investment each year

4 Anticipated financial offer and timetable

The following section outlines the investment required and the returns that we intend to be paid to investors (including share interest and the return of share capital).

A detailed financial model has been developed, provided in Section 5.2, “Financial Forecasts for the Project as a Whole”, along with the assumptions underpinning the model which is provided in Section 5.1, “Assumptions for Factors Affecting Cash Flows”.

4.1 Investment needed:

HKD Energy needs to raise £100,500 for the project to go ahead, and to cover the capital costs as follows:

- £92,189 for the supply and installation of the solar PV system
- £3,750 for professional fees
- £4,559 contingency

The following costs will be covered by the income that is generated by the system during the 20 year life of the project:

We intend to use the income to

- pay interest to investors
- cover the cost of maintaining the panels and administering the project
- build up capital so that it may be possible for some investors to withdraw their investment each year

4.2 Investors' returns – share interest:

HKD Energy is non-profit, but we expect the project to generate a small fund for ongoing management and working capital as well as to enable the possibility of repaying investors' capital each year and to pay share interest on invested capital.

We expect to be able to pay **interest of approximately 4%** with the first payment being made at the start of year 3 operation after the date on which the installation starts to generate electricity.

It is necessary for the delay in repayments as the project must firstly await payments from the Government (for the Feed in Tariff) and from the school (for energy supplied to the school). In addition, the project needs to also ensure we have built up an appropriate reserve to cover working capital (for example to pay for the operation and maintenance contracts, insurance and so on) as well as to provide a buffer to allow for any larger withdrawal of Share Capital owing as a result of any deaths amongst the community investors (See Section 4.3, “Investors' returns – return of capital invested:” for further details on the approach to returning capital to investors).

4.3 Investors' returns – return of capital invested:

The investment is for 20 years, and is for a minimum of three years in order to meet the project's working capital requirements. It is also a requirement to remain a qualifying investment for SEIS tax relief.

We will seek to maintain a balance of £2,500 to provide for the eventuality of having to repay capital to any investors that pass away and requests to have their share capital passed on to their estate in cash.

Investors do not have the right to withdraw share capital but the Board has the power to permit its shares to be withdrawn. HKD Energy presents possible mechanisms for repaying capital below:

Returning of Share Capital

The following summarises possible mechanisms for repaying capital:

1. **Return of Capital upon Death:** Where an investor passes away and the estate requests their capital is returned as a cash payment, it is the intention of HKD Energy that these investors will be repaid as a priority. It should be noted however that investors may choose to pass on their investments to the beneficiaries of their will. It should be noted that estates will need to provide notice of 180 days for the return of their capital. HKD Energy will then prioritize this payment where sufficient funds are available.
2. **Requests for Larger Capital Repayments:** HKD Energy will look sympathetically on any investors that require or request their capital to be returned. This can only be done after the third year of the project. HKD Energy cannot guarantee that these funds will be available.
3. **Return of Capital Each Year:** HKD Energy may return to investors up to 1/18th of the total original investment each year from the third year of the project

Reinvestment of Capital: Investors may wish not to receive their capital back, or even to make additional investments. This could be possible where there are other investors that request larger repayments of capital to be made.

For further information on HKD Energy's rules, please see the Appendix, Section 8.4, "HKD Energy Rules".

4.4 Tax Relief:

HKD Energy applied for Advanced Assurance under the Seed Enterprise Investment Scheme (SEIS) which offers income tax relief to individual UK taxpayers. Relief is available at 50% of the cost of the shares and is given by way of a reduction of tax liability, providing there is sufficient tax liability against which to set it. A claim to relief can be made up to 5 years after the 31 January following the tax year in which the investment was made.

The shares must be held for a period of 3 years from date of issue for relief to be retained. If they are disposed of within that 3 year period, or if any of the qualifying conditions cease to be met during that period, relief will be withdrawn or reduced. Further information on this scheme is provided in Section 8.5, "Summary of SEIS Income Tax Relief".

4.5 Financial Risks and Mitigation:

Investors should note that an investment in a Community Benefit Society is outside the protection of the government's Financial Services Compensation Scheme, and investors do not have recourse to the Financial Ombudsman Service. Investors should seek independent advice. Information about investing in community shares of this type is available in Investing in Community Shares from Cooperatives UK Community Shares Unit <http://communityshares.org.uk/resources>.

Solar electricity, supported by the Feed in Tariff, provides a tried and tested reliable technology (having no moving parts). The revenues are dependent largely on the sun rising and the UK Government backed Feed in Tariff and inflation (RPI). We do however recognise that all investments carry some risk and so these, along with how we are mitigating risk, are detailed in Section 7, "Risks and Mitigation".

4.6 The proposed timetable

HKD Energy intends to ensure that all capital is raised and is seeking to complete the installation of the solar panels by 20th February 2014.

INDICATIVE TIMETABLE	
8 November to 31 December 2014	<ul style="list-style-type: none"> Share offer open
31 December 2014	<ul style="list-style-type: none"> Solar panel installation partner commissioned
1-14 January 2015	<ul style="list-style-type: none"> Share purchases to be completed
15 January 2015	<ul style="list-style-type: none"> Share certificates posted to all paid-up investors
End February 2015	<ul style="list-style-type: none"> Solar panel installation complete and electricity generation begins (provisional date)
November 2015 (and annually thereafter)	<ul style="list-style-type: none"> HKD Energy Ltd AGM
End February 2018 (and annually thereafter)	<ul style="list-style-type: none"> Annual share interest payments begin Possibility for capital repayments to commence

Please note that the above presents a proposed timetable and is subject to change.

5 HKD Energy, Downlands Project Financial Forecasts

The current section sets out the conservative financial forecasts for the HKD Energy project at Downlands School as a whole.

We set out each of the revenue and cost items, and our associated conservative assumptions for how these will develop over time to provide a cash flow forecast demonstrating the viability of the project and therefore the security of the investment.

The following provide all the key elements affecting the cash flows associated with the project and management of HKD, along with the assumptions and associated uncertainties:

5.1 Assumptions for Factors Affecting Cash Flows

Item	Assumption	Rationale / Uncertainty	Evidence
Capital Costs	Total capital costs are assumed to be £100,500 <ul style="list-style-type: none"> ■ £92,189 supply and installation ■ £3,750 for professional fees ■ £4,559 contingency 	<ul style="list-style-type: none"> ■ HKD Energy has had detailed analysis and both design and structural surveys carried out. On the basis of these studies we have received detailed quotations ■ We have allowed a generous contingency that we do not expect to utilise ■ As such the capital costs assumed are conservative. 	<ul style="list-style-type: none"> ■ See Section 8.1 for copies of the quotations received for the system
Electricity Generation	Total generation assumed to be 80,731kWh (28,740 kWh to be generated by the 30kW system and 51,991 kWh by the 50kW system)	<ul style="list-style-type: none"> ■ Panel performance is guaranteed for the 20 year project duration ■ Electricity generation has been calculated by MCS (Microgeneration Certification Scheme) accredited engineers ■ Solar irradiation over the course of a year has been found to be very consistent. 	<ul style="list-style-type: none"> ■ See Section 8.1 for copies of the quotations detailing the generation predicted
Electricity Prices	<ul style="list-style-type: none"> ■ The Feed in Tariff (for all electricity generated) is assumed to be 12.13p/kWh ■ Energy exported will attract 4.77p/kWh ■ Energy sold to the school will receive 3p/kWh 	<ul style="list-style-type: none"> ■ The Feed in Tariff rates are, guaranteed by the UK Government once the system has been approved and will increase with RPI, and as such are highly certain ■ The energy generated will be significantly less than the electricity demanded by the school and leisure facility as such it is highly unlikely the electricity generated will not be utilised as predicted. ■ The risk of the school being unable to pay for the significantly reduced cost electricity is very low 	<ul style="list-style-type: none"> ■ See Section 8.3 for details of the Feed in Tariff scheme and the associated tariffs available
Inflation	<ul style="list-style-type: none"> ■ RPI of 2.5% ■ Inflation of electricity sold to school of 0% 	<ul style="list-style-type: none"> ■ We have assumed that inflation (RPI) will be 2.5%, a very conservative assumption as the Office for Budget Responsibility predicts RPI to remain above 3% between 2015 and 2018 (http://cdn.budgetresponsibility.org.uk/37839-OBR-Cm-8820-accessible-web-v2.pdf) 	<ul style="list-style-type: none"> ■ OBR forecast for RPI

Item	Assumption	Rationale / Uncertainty	Evidence
Degradation of PV panel	We have assumed a rate of degradation of 1% each year	<ul style="list-style-type: none"> We have assumed the panels will degrade (reduce generation) by 1% each year. This rate is in line with the performance guarantee we will receive and so is conservative 	<ul style="list-style-type: none"> See Section 8.1 for quotations detailing performance guarantee
Operating costs	<ul style="list-style-type: none"> Operation & management : £3,000 pa Insurance: £750 pa Inverter replacement : £6000 in year 10 Panel removal: £8,000 (split between years 6, 8 and 10) 	<ul style="list-style-type: none"> We have made conservative estimates of operation and maintenance, given that in any given year it is most likely that only visual inspection and cleaning would be required Insurance quotations have been obtained We have adopted a worst case scenario of all inverters needing to be replaced in year 10 (when their guarantee expires) We have also allowed for the cost of removal and replacement of panels in case roof works are required 	<ul style="list-style-type: none"> N/A
Financial costs	<ul style="list-style-type: none"> Corporation tax rate of 20% Bonus to school (varies) 	<ul style="list-style-type: none"> We have assumed a 20% rate for corporation tax We will pay the school a bonus, subject to availability of funds, providing further certainty for investors. 	<ul style="list-style-type: none"> See financial model in Section 5.2 for the financial model
Installation of the panels is delayed	<ul style="list-style-type: none"> Delays to installation due to relevant permissions from school being delayed 	<ul style="list-style-type: none"> We are working hard with West Sussex County Council to get all of the permissions in place to install the panels in February 2015. If installation is delayed, interest payments will start later. 	

5.2 Financial Forecasts for the Project as a Whole

The following table shows a summary of our financial projections. The timetable for capital repayments illustrates one possible way that capital will be repaid.

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Electricity Generated	80,731	79,924	79,124	78,333	77,550	76,774	76,007	75,247	74,494	73,749	73,012	72,282	71,559	70,843	70,135	69,433	68,739	68,052	67,371	66,697	
Electricity Consumed	68,621	67,935	67,256	66,583	65,917	65,258	64,606	63,960	63,320	62,687	62,060	61,439	60,825	60,217	59,615	59,018	58,428	57,844	57,265	56,693	
Value of Electricity Consumed	6,862	6,997	7,135	7,276	7,419	7,565	7,714	7,866	8,021	8,179	8,340	8,505	8,672	8,843	9,017	9,195	9,376	9,561	9,749	9,941	
Installation (Capital) Costs	- 99,498																				
Revenue	13,084	13,221	13,362	13,504	13,650	13,798	13,949	14,103	14,259	14,419	14,581	14,746	14,914	15,085	15,259	15,436	15,616	15,799	15,986	16,176	
Generation Income	9,793	9,937	10,084	10,232	10,383	10,537	10,692	10,850	11,010	11,172	11,337	11,504	11,674	11,846	12,021	12,198	12,378	12,560	12,746	12,934	
Export Income	1,057	1,073	1,089	1,105	1,121	1,138	1,155	1,172	1,189	1,206	1,224	1,242	1,261	1,279	1,298	1,317	1,337	1,356	1,376	1,397	
Electricity Sales Income	2,233	2,211	2,189	2,167	2,145	2,124	2,103	2,082	2,061	2,040	2,020	2,000	1,980	1,960	1,940	1,921	1,902	1,883	1,864	1,845	
Operating Costs	- 4,110	- 4,213	- 4,318	- 4,426	- 4,537	- 4,646	- 4,766	- 4,882	- 5,008	- 5,139	- 5,276	- 5,419	- 5,566	- 5,716	- 5,871	- 6,031	- 6,196	- 6,366	- 6,541	- 6,721	- 6,906
Annual Operation & Maintenance	- 3,000	- 3,075	- 3,152	- 3,231	- 3,311	- 3,394	- 3,479	- 3,566	- 3,655	- 3,747	- 3,840	- 3,936	- 4,035	- 4,136	- 4,239	- 4,345	- 4,454	- 4,565	- 4,679	- 4,796	
Annual Insurance	- 750	- 769	- 788	- 808	- 828	- 849	- 870	- 892	- 914	- 937	- 960	- 984	- 1,009	- 1,034	- 1,060	- 1,086	- 1,113	- 1,141	- 1,170	- 1,199	
Inverter Replacement Costs																					
Panel removal cost						- 2,667		- 2,667		- 2,667											
Export meter and Data Collection	-1000	- 360	- 369	- 378	- 388	- 397	- 407	- 417	- 428	- 439	- 450	- 461	- 472	- 484	- 496	- 509	- 521	- 534	- 548	- 561	- 576
Depreciation	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975	4,975
Corporation Tax	-	- 800	- 807	- 814	- 821	- 828	- 835	- 842	- 850	- 857	- 865	- 873	- 881	- 889	- 897	- 905	- 913	- 921	- 929	- 937	- 945
Cash Flow Before Dividends & Redemptions	8,974	8,209	8,237	8,265	8,293	8,321	8,349	8,377	8,405	8,433	8,461	8,489	8,517	8,545	8,573	8,601	8,629	8,657	8,685	8,713	8,741
Dividend and Redemption Payments	-	-	- 9,327	- 9,105	- 8,884	- 8,663	- 8,442	- 8,221	- 8,000	- 7,779	- 7,558	- 7,337	- 7,115	- 6,894	- 6,673	- 6,452	- 6,231	- 6,010	- 5,789	- 5,568	- 5,347
Equity redemption	-	-	- 5,528																		
Dividend Payments	-	-	- 3,799	- 3,578	- 3,357	- 3,136	- 2,914	- 2,693	- 2,472	- 2,251	- 2,030	- 1,809	- 1,588	- 1,367	- 1,146	- 924	- 703	- 482	- 261	-	-
Cash Flow After Dividends & Redemptions	8,974	8,209	- 1,090	- 841	- 592	- 309	439	2,512	937	8,015	1,762	2,017	1,395	1,643	1,890	2,136	2,382	2,628	2,873	2,117	2,157
School Bonus	-	-	-	-	-	-	-	-	-	-	- 1,762	- 2,017	- 1,395	- 1,643	- 1,890	- 2,136	- 2,382	- 2,628	- 2,873	- 4,657	-
Cum cash flow after dividends, redemptions & bonus	8,974	17,182	16,092	15,252	14,660	11,651	12,090	9,578	10,515	2,500											

Please note: the School bonus payments will be at the discretion of the directors. These bonus payments will only be made where funds are available. This provides a further assurance to the security of the share interest payments as the bonus payment will only be finalised after payment of any capital and share interest.

6 Investor Benefits and Returns

Investors have the opportunity to derive considerable benefits, enjoying social and environmental dividends along with the attractive financial dividends the project has to offer. The following provides an example cash flow for an investment of £10,000 as follows:

- Assumes a 40% marginal income tax rate
- Assumes eligibility for SEIS relief of 50% of the investment (please note we have applied to, but have not yet received Advance Assurance for Eligibility for SEIS tax relief).
- Assumes investors receives 4% return on investment (please note this rate of return cannot be guaranteed)
- Assumes investors receive their capital back in equal payments between years 3 and 20 (please note this is just one possible means by which capital may be returned to investors).

6.1 Example Cash Flow for an Investor

Example based on £10000 Investment and 40% income tax rate

Investment	10,000	Net Investment (after tax relief)	5,000
Tax Rate	40%	Cumulative cash flow (after 20 years including initial investment)	7,280
Tax Relief	50%	Pre Tax Effective Interest Rate (IRR)	11.4%
Share Interest Rate	4%	Post Tax Effective Interest Rate (IRR)	9.6%

Year	Investment	Tax Relief	Equity	Capital Returned	Interest Income	Tax on Interest	Cash Flow
0	-10,000	5,000	10,000	0	0	0	-5,000
1			10,000	0	0	0	0
2			10,000	0	0	0	0
3			9,444	555.56	400.00	-160.00	795.56
4			8,889	555.56	377.78	-151.11	782.22
5			8,333	555.56	355.56	-142.22	768.89
6			7,778	555.56	333.33	-133.33	755.56
7			7,222	555.56	311.11	-124.44	742.22
8			6,667	555.56	288.89	-115.56	728.89
9			6,111	555.56	266.67	-106.67	715.56
10			5,556	555.56	244.44	-97.78	702.22
11			5,000	555.56	222.22	-88.89	688.89
12			4,444	555.56	200.00	-80.00	675.56
13			3,889	555.56	177.78	-71.11	662.22
14			3,333	555.56	155.56	-62.22	648.89
15			2,778	555.56	133.33	-53.33	635.56
16			2,222	555.56	111.11	-44.44	622.22
17			1,667	555.56	88.89	-35.56	608.89
18			1,111	555.56	66.67	-26.67	595.56
19			556	555.56	44.44	-17.78	582.22
20			0	555.56	22.22	-8.89	568.89

6.2 Summary Example Returns for an Investment of £1000

The following provides example rates of returns for an investment of £1,000 for different personal income tax rates. Please note these examples are based on a rate of interest of 4% and one possible means of repaying capital (as outlined in Section 4.3 there are a number of different possible means by which capital may be returned and the interest rate cannot be guaranteed):

Tax Relief	50%			
Share Interest Rate	4%			
Investment	1,000			This is the investment made prior to the example tax relief being applied
Income Tax Rate	Pre tax	20%	40%	This is the investor's personal income tax rate that is applied to share interest earned
Net Investment	500	500	500	This is the net investment made after receipt of the potential tax relief
Cumulative cash flow	880	804	728	This is the cumulative cash flow after 20 years including the effect of the initial investment
Effective Interest Rate	11.4%	10.5%	9.6%	This is the effective interest rate, calculated by the IRR (Internal Rate of Return)

6.3 Summary Example Returns for an Investment of £10,000

The following provides example rates of returns for an investment of £10,000 for different personal income tax rates. Please note these examples are based on a rate of interest of 4% and one possible means of repaying capital (as outlined in Section 4.3 there are a number of different possible means by which capital may be returned and the interest rate cannot be guaranteed):

Tax Relief	50%			
Share Interest Rate	4%			
Investment	10,000			This is the investment made prior to the example tax relief being applied
Income Tax Rate	Pre tax	20%	40%	This is the investor's personal income tax rate that is applied to share interest earned
Net Investment	5,000	5,000	5,000	This is the net investment made after receipt of the potential tax relief
Cumulative cash flow	8,800	8,040	7,280	This is the cumulative cash flow after 20 years including the effect of the initial investment
Effective Interest Rate	11.4%	10.5%	9.6%	This is the effective interest rate, calculated by the IRR (Internal Rate of Return)

NOTE: The capital returned at the start is based on the illustrative assumption of 50% tax relief, and assuming the project is eligible for SEIS. HKD Energy has applied for advance assurance under the SEIS scheme, but is not yet able to confirm eligibility for the scheme. HKD Energy is unable to offer tax advice and as such you must seek your own independent tax advice before making any investment. Please see our Appendix (Section 8.4) for further information on Tax Reliefs.

7 Risks and Mitigation

Solar electricity provides investors with a very low risk investment opportunity, however all investments carry some risk. HKD Energy has taken the necessary steps to ensure these risks are mitigated effectively and present below the risks we are aware of, the mitigating factors and steps we have taken to mitigate them:

Item	Key Risk	Mitigation
Sales Volume (electricity generated)	<ul style="list-style-type: none"> ■ Solar irradiation lower than expected ■ Panels do not perform as expected, or degrade faster than expected, resulting in lower levels of electricity generated than expected 	<ul style="list-style-type: none"> ■ Whilst solar irradiation varies significantly on a daily basis, annual irradiation levels are remarkably consistent meaning that this risk is extremely low ■ Solar panels are remarkably reliable with a life expectancy of double that of the project. However should the expected performance not be achieved, the project will be covered by the 20 year performance warranty by the supplier along with our own insurance that will protect us against poor performance.
Sales Price (money received for electricity generated)	<ul style="list-style-type: none"> ■ Government reneges on its commitment to pay the feed in tariff ■ School no longer requires electricity or reneges on its commitment to pay for electricity generated 	<ul style="list-style-type: none"> ■ The agreement by the UK Government, of course, provides a very reliable counterpart and as such this risk is low ■ The school is likely to remain on site and demand electricity, as well as be able to pay for the (very low) costs associated for years to come. Given we are selling electricity to the school at a lower cost than the export tariff if the project had to export to achieve an income this would prove even more favourable to investors
Construction risk and damage to the roof / school	<ul style="list-style-type: none"> ■ There is a risk of damage to the school roof and building during construction and in operation along with the usual risks associated with any building project 	<ul style="list-style-type: none"> ■ These risks will be mitigated by putting in place the necessary insurance to protect HKD Energy and the school against any damage during construction and in operation. ■ Installing the system (largely) during the half term period when students are not present will limit disruption and risks further
Damage to the Solar Panels	<ul style="list-style-type: none"> ■ There is a risk of damage to the PV panels through theft, vandalism or falling objects 	<ul style="list-style-type: none"> ■ Panels are very tough and damage very unlikely given they will be installed at the highest point of the school. Being on the roofs of the property, the risk of theft, vandalism or damage is very low however insurance will be in place to cover this small risk
System failure	<ul style="list-style-type: none"> ■ The system (or parts of the system) fails over time ■ Specifically inverters fail 	<ul style="list-style-type: none"> ■ We have allowed a generous sum (£3,000 increasing with RPI) to ensure the system is monitored throughout the year and that any drop in performance is identified and rectified. The panels are guaranteed for the lifetime of the project and backed further by our own insurance. ■ Inverters will be guaranteed for 10 years. We have allowed for their complete replacement in year 10 (as soon as they come out of warranty).
Inflation lower than expected	<ul style="list-style-type: none"> ■ RPI is lower than the 2.5% assumed 	<ul style="list-style-type: none"> ■ This is a key risk however; where RPI is lower than expected the bonus paid to the school could be reduced to limit this risk to investors.

APPENDICES

8 Appendices

8.1 Solar Resources Technical Specifications and Quotation

The following provides the

- Specifications of the PV Panel modules that will be installed
- Details of the mounting system
- Quotation and information about our selected installer
- Estimated electricity generation

Quotation for the 50kW school roof installation	<ul style="list-style-type: none"> ■ Confirmation of quotation for installed system of £57,374 ■ Confirmation of warranties and performance guarantee ■ Confirmation of estimated generation of 51,991kWh pa 	Detailed information on the products and systems along with the quotations we have received is available upon request (please see our contact details on www.hkdenergy.com).
Quotation for the 30kW leisure installation	<ul style="list-style-type: none"> ■ Confirmation of quotation for installed system of £33,815 ■ Confirmation of warranties and performance guarantee ■ Confirmation of estimated generation of 28,740kWh pa 	
Specification of the PV panels	<ul style="list-style-type: none"> ■ Details of the solar panels that will be installed are provided here 	
Summary letter from installer	<ul style="list-style-type: none"> ■ Summary letter from Solar Resources, our installation partner and information about the firm is provided here 	

8.2 HKD Directors

The Board of Directors of HKD Energy currently has five members with a sound combination of skills and experience.

<p>Chris Handel (Chair)</p>	<p>Chris Handel (Chair) is a Chartered Surveyor and Director at CBRE Ltd, London. CBRE is a leading full-service real estate services company, operating around the world. Chris has had a long involvement with HKD and has a particular interest in the Low Carbon Economy, both professionally and in his private life.</p>	
<p>John Willis (Secretary)</p>	<p>John Willis is retired after more than 40 years as a mechanical engineer in the power industry in UK and Australia. Most recently he was project engineering manager for several large power plants including combined power and desalination plants in the Middle East. He is a Chartered Engineer (Australia) and Associate Member of the Institution of Mechanical Engineers.</p>	
<p>Juliet Merrifield (Treasurer)</p>	<p>Juliet Merrifield (Treasurer) is retired after 35 years' experience as an adult educator and researcher, and director of non-profit organisations in the UK and USA. She has served on the boards of a number of charities and other non-profit organisations.</p>	
<p>Bec Hanley</p>	<p>Bec Hanley works with a range of charities, the NHS and research organisations (both in this country and in Australia) to promote the involvement of people who use services in health care and health research. She has lived in Sussex for over 30 years.</p>	
<p>Darren Berman</p>	<p>Darren has worked in energy and sustainability for over 10 years, initially at a not for profit company and most recently at CBRE (a global property consultancy). Darren has delivered domestic and community scale renewables programmes, sustainable design and construction services and has assisted both occupiers and investors reduce carbon emissions and comply with carbon legislation.</p>	

8.3 The Feed in Tariff and Tariff Rates

The following table provides the detailed Feed in Tariff rates published by OfGem confirming the tariff that the school would be eligible for will be:

- 12.13 p/kWh for each kWh of electricity generated (irrespective of whether the electricity is then consumed on site or exported to the grid)
- 4.77 p/kWh for each kWh of electricity that is exported to the grid. Please note that for the 30kW system it will be assumed (by the scheme) that 50% of electricity generated will be exported
- Please note that these rates increase with RPI

Feed in Tariff Rates	https://www.ofgem.gov.uk/publications-and-updates/feed-tariff-scheme-tariff-table-1-october-2014-pv-only
Further Information	https://www.ofgem.gov.uk/environmental-programmes/feed-tariff-fit-scheme http://www.energysavingtrust.org.uk/Generating-energy/Getting-money-back/Feed-In-Tariffs-scheme-FITs http://www.fitariffs.co.uk/

8.4 HKD Energy Rules

Please see attached HKD Energy's governing Rules.

Also attached is the Community Shares Handbook produced by the Community Shares Unit (CSU), under the supervision of a technical committee composed of the FCA, HM Treasury, the Charity Commission, and an independent legal adviser. This document is attached to provide the reader with confidence that HKD Energy has been established and will operate in line with the legal requirements of the Cooperative and Community Benefit Societies Act and best practice relating to the promotion of community shares.

Cooperative and Community Benefit Societies Act 2014 Rules of HKD Energy Limited	http://www.hkdenergy.org.uk/HKDE_wp/wp-content/uploads/2014/10/Certified-rules-of-HKD-Energy-Limited-07-Oct-14.pdf
Community Shares Handbook	http://communityshares.org.uk/sites/default/files/community_shares_handbook.pdf

8.5 Summary of SEIS Income Tax Relief

HKD Energy investors may be eligible for income tax relief on their investment in the company. The following brief summary of EIS and SEIS schemes is provided for information only: taxpayers should consult their tax advisers for more details about the schemes and their own potential eligibility.

HKD Energy will apply to the Small Companies Enterprise Centre for approval of company eligibility. Once approved, we can issue the appropriate form to investors who request it, in order to claim their income tax relief under EIS or SEIS.

The Seed Enterprise Investment Scheme (SEIS) is similar to EIS but aimed particularly at helping small, early-stage companies. Income Tax relief is available to individual UK taxpayers at 50% of the cost of the shares, on a maximum annual investment of £100,000. The shares must be held for a period of 3 years from date of issue for relief to be retained.

Worked examples

Example 1

Jenny invests £10,000 in the tax year 2012-13 (6 April 2012 to 5 April 2013) in SEIS qualifying shares. The SEIS relief available is £5,000 (£10,000 at 50%). Her tax liability for the year (before SEIS relief) is £15,000 which she can reduce to £10,000 as a result of her investment.

Example 2

James invests £10,000 in the tax year 2012-13 in SEIS qualifying shares. The relief available is £5,000, as above. His tax liability for the year (before SEIS relief) is £2,500. James can reduce his tax bill to zero as a result of his SEIS investment, but loses the rest of the relief available.

Source: (HMRC website, <http://www.hmrc.gov.uk/seedeis/background.htm>) with examples adapted to relate to the current project and the limits we have placed on investment

Further information can be obtained from your tax advisor and from HMRC at the following links:

Background to SEIS: <http://www.hmrc.gov.uk/seedeis/background.htm>

SEIS Requirements: <http://www.hmrc.gov.uk/seedeis/invest.htm>

FAQs on SEIS: <http://www.hmrc.gov.uk/seedeis/faq.htm>

8.6 Community Engagement Activities

Since May, the HKD Energy directors and other volunteers have actively engaged with people in our three villages (Hassocks, Hurstpierpoint and Ditchling) through taking part in village events, providing project briefings for key local organisations, and one to one contact with key individuals. Response from the community has been overwhelmingly positive. In discussions with residents, people tell us that the support for Downlands School is important for them, that the solar project is a positive development, and that renewable energy is valuable for the community.

From June to October we were active at 8 community events, where we made contact with close to 1,000 people. We also provided personal briefing sessions for 8 key community organisations, including the Hurstpierpoint and Hassocks Parish Councils.

In October the Hassocks scouts helped the project by delivering flyers about HKD Energy door to door to some 2,500 residences. Overall some 5,000 flyers about HKD Energy and the Downlands School project have been disseminated across the community.

Information about HKD Energy and our Downlands School Solar Project has also been disseminated via community media in the three villages, via the HKD Transition mailing list (well over 300 people), community newsletters including the Hassocks Amenity Association and church newsletters, and our own HKD Energy mailing list.

We have engaged with pupils and parents at Downlands School through:

- Meeting with the school's Eco Club: this led to the development of an art and writing competition for all Downlands pupils on the theme of 'the solar revolution'. Eco Club are also preparing a short film sequence for the launch event.
- Regular meetings with the Head Teacher and other key staff, and briefing sessions for Governors
- Regular emails to parents to inform them about the project and to invite them to attend the launch event and invest in the project.

Future Community Engagement

We plan to continue to engage local people in the next three months by:

- Holding surgeries in community venues to enable potential investors and others interested in the project to meet with HKD Energy on a one-to-one basis
- Attending community events and community group meetings to raise awareness about the project
- Using community media and social media to get the word out about the project.

In the longer term we will:

- Work with Downlands School's Eco Club and with other pupils to ensure they are involved in monitoring the amount of energy generated by the panels
- Work with staff, governors and pupils to agree how any bonuses should be allocated
- Continue to talk with community groups and at local events about the project