

HKD ENERGY

**DOWNLANDS SCHOOL
SOLAR PROJECT**

**INVEST IN A BETTER
FUTURE**

COMMUNITY SHARE OFFER 8 NOVEMBER TO 31 DECEMBER 2014



An invitation to invest in community-owned solar power

HKD Energy is a new, not for profit social enterprise based in the villages of Hassocks, Hurstpierpoint, Keymer and Ditchling. We are an offshoot of the successful HKD Transition group that has been active for the last 5 years. Our aim is to develop locally-owned renewable energy projects, so that we can reduce our dependence on fossil fuels and imported energy. This project is the first step towards our goal.

We are inviting you to invest in our first project, which is a partnership with Downlands Community School, Hassocks. We plan to install 266 solar panels (that's 80 kilowatts of solar power) on the roofs of the school and sports centre. This will significantly reduce the school's electricity bills and its carbon footprint. We'll also be able to support the school's energy efficiency and enthusiasm for learning about energy and climate.

A successful first project will enable HKD Energy to work with other partners in our villages to develop more renewable energy projects.

Darren Berman, Chris Handel, Bec Hanley, Juliet Merrifield and John Willis

Directors, HKD Energy

www.hkdenergy.org.uk

HKD Energy Limited
A Community Benefit Society registered with the Financial Conduct Authority
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This project

HKD Energy is working in partnership with Downlands Community School to install 266 solar panels (80 kilowatts) on the roofs of the school and the sports centre. This will produce at least 80,000 kilowatt hours (kWh) of electricity each year and save up to 840 tonnes of carbon dioxide over project's 20 year lifetime.

The project will significantly reduce the school's electricity costs, saving around £150,000 over the 20 years. The project will also help students learn about renewable energy, energy security and reducing greenhouse gas emissions.

The project offers you an opportunity to:

- Support our local secondary school financially and in their education and sustainability work
- Potentially receive income tax relief equal to up to 50% of your initial investment under the Seed Enterprise Investment Scheme
- Generate renewable energy, help tackle energy security and climate change
- Contribute to sustainable development in our community.

We intend to pay all investors an attractive and fair return on your investment, anticipated as a rate of approximately 4% from year 2 of the project (paid in year 3).

This document explains what we plan to do and how you can be involved.

The benefits of solar energy

Solar energy offers great potential for our community. The number of sunshine hours in our area is among the highest in the UK: 4.43 hours a day on average through the year.¹ Solar PV panels generate electricity from sunlight, even when skies are overcast. The technology is well-developed and readily available. A recent report by HKD Transition estimated that we could generate at least one third of our annual electricity needs from solar panels on homes and public buildings.²

Community-owned solar projects, like the one we are planning, were started in our area by OVESCO, a not-for-profit organisation based in Lewes. In 2011 they raised money from local people to install solar panels on the roof of Harveys Brewery. OVESCO have developed other community solar projects since then, and many more have been developed by other not-for-profit organisations across the country.

In addition to the financial returns to investors, community-owned renewable energy projects provide a 'social return' on investment, including:

- Contributing to energy security

¹ Data from Charlwood monitoring station near Haywards Heath: <http://www.metoffice.gov.uk/public/weather/climate/haywards-heath-west-sussex#?tab=climateTables>

² HKD Transition (2014), *Energy in Hassocks: Reduce, Insulate, Generate*. Report available on <http://www.hkdenergy.org.uk/about-us/>

- 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

The government supports community energy, and its 2014 Community Energy Strategy says:

Community-led action can often tackle challenges more effectively than government alone, developing solutions to meet local needs, and involving local people. Putting communities in control of the energy they use can help maintain energy security and tackle climate change; help people save money on their energy bills; and have wider social and economic benefits.

Our fundraising target

We need to raise £100,500 to buy, install and maintain the solar panels at Downlands School and to cover our associated costs, including contracts, insurance, management and legal costs.

If we raise more than £100,500 we will ask larger investors to invest a smaller sum, return the money, or invite later investors to invest in other local renewable energy projects under development.

If we raise less than £100,500 we will put fewer solar panels on the roofs of the school. The minimum we need to raise is £35,000. This would enable us to install 30 kilowatts of solar panels on the roofs of the school. The return to investors would remain at 4%, but it would generate much less electricity, which is why we want to install more panels.

How will the project work?

Our plan is as follows:

- Local people invest £100,500 to install 80 kilowatts of solar panels
 - The panels generate around 80,000 kilowatt-hours of electricity each year
 - The school saves around £150,000 over the 20 year life of the project, because it receives low cost electricity generated by the panels
-

- The project receives income from the government's Feed in Tariff and the sale of low cost electricity to the school. This sum will increase with inflation.
- From year 2, we intend to pay interest at a rate of approximately 4% - we aim to make these payments at the beginning of year 3. Capital repayments will also become possible from this time.
- After 20 years, ownership of the panels will be transferred to the school. (We expect them to keep generating free electricity for the school for years after.)

	Indicative Timetable
8 November to 31 December 2014	Share offer open
31 December 2014	Solar panel installation partner commissioned
1-14 January 2015	Share purchases to be completed
15 January 2015	Share certificates posted to all paid-up investors
End February 2015	Solar panel installation complete and electricity generation begins (provisional date)
November 2015 (and annually thereafter)	HKD Energy Ltd AGM
March 2017 (and annually thereafter)	Annual share interest payments begin Capital repayments become possible from this time, dependent upon capital being available

Our business plan

Details of our business plan and financial projections are provided in the HKD Energy Business Plan (www.hkdenergy.co.uk). In summary, the project will have three sources of income:

- a) The government's feed in tariff (FIT) will pay us 12.13 pence per kilowatt-hour for all electricity generated by the solar panels (including the electricity that is used by the school)
- b) The government's feed in tariff will pay us an extra 4.77 pence per kilowatt-hour for electricity that the school does not use, which is exported to the national grid
- c) The school will pay us 3.3 pence per kilowatt-hour for the electricity they use. This is about one-third of what they currently pay for electricity during the day. We have fixed the electricity price for 20 years, which means that as energy costs rise, so will the benefits to the school.

We intend to use the income from these three sources 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

Any surpluses will go to the school as bonuses for energy efficiency work and for education around climate and energy.

Key assumptions of the business plan are:

- Installation costs will be £91,189
- Other costs (including 5% contingency) will be £9,309
- FIT payments will increase by an annual inflation rate (RPI) of 2.5% each year
- Electricity costs to school will be fixed and not increase with inflation
- The cost of maintaining the panels and administering the project will be £3,000 per year (costs rise with inflation)
- Annual insurance and metering costs will be £1,100 (costs rise with inflation)
- Cost of replacing inverters (a key part of the equipment) after their 10 year warranty expires will be £6,000
- Cost of panel removal and reinstatement to enable roof repairs will be £8,000 over the life of the project



Summary of financial projections

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

	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	...	Yr 20
Installation capital costs	100,498													
Revenue		13,084	13,221	13,362	13,504	13,650	13,798	13,949	14,103	14,259	14,419	14,581		16,176
Generation FIT		9,793	9,937	10,084	10,232	10,383	10,537	10,692	10,850	11,010	11,172	11,337		12,934
Export FIT		1,057	1,073	1,089	1,105	1,121	1,138	1,155	1,172	1,189	1,206	1,224		1,397
Electricity sales		2,233	2,211	2,189	2,167	2,145	2,124	2,103	2,082	2,061	2,040	2,020		1,845
Operating costs		4,110	4,213	4,318	4,426	4,537	7,317	4,766	7,552	5,008	13,799	5,261		6,570
Operation & maintenance		3,000	3,075	3,152	3,231	3,311	3,394	3,479	3,566	3,655	3,747	3,840		4,796
Insurance & metering		1,110	1,138	1,166	1,195	1,225	1,256	1,287	1,319	1,652	1,386	1,421		1,775
Inverter replacement & panel removal							2,667		2,667		8,667			
Depreciation		4,975		4,975										
Corporation tax			800	807	814	821	828	301	842	315	855	0		920
Cash flow before interest & capital redemption		8,974	8,209	8,237	8,265	8,293	5,654	8,882	5,709	8,937	236	9,320		8,685
Interest and capital redemption				9,327	9,105	8,884	8,663	8,442	8,221	8,000	7,779	7,558		6,528
School bonuses												1,762		4,657
Cumulative cash flow		8,974	17,182	16,092	15,252	14,660	11,651	12,090	9,578	10,515	2,500	2,500		0



Financial returns to investors

Paying interest

We intend to pay interest of approximately 4% per year on investments, from the second year of operation after the date on which the solar panels start to generate electricity. Interest is paid annually in arrears, so the first payment date will be at the beginning of year 3. The potential tax relief available to UK taxpayers means that the effective interest rate (or internal rate of return, IRR) will be higher for many people. We give more information about the potential tax relief in the following section.

The reasons for waiting until the beginning of year 3 to pay interest are:

- We will need to wait until the Feed in Tariff payments from the government start to flow, and this may take a while;
- We need to build up a reserve fund so that it may be possible to buy back the shares from any investors who die before the project end.

Repaying capital sums invested

Possible ways that the capital invested will be returned are:

- a. Repaying the investment if an investor dies in the course of the project, (alternatively their investment may be transferred to another individual);
- b. Repaying investors who wish to withdraw their capital in full before the end of the project. Such investors should submit their request to the directors, who will take these requests into account, but cannot guarantee they will be able to meet all such requests;
- c. Repaying a proportion of the capital of all remaining investors from year 3.

Our business model suggests that we will be able to repay all of the capital invested over the 20 years that the project is running, and we hope to repay a proportion of investments each year from Year 3. The amount of capital repaid each year will depend on the income for that year, and will be at the discretion of the directors.

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>.

Potential tax relief

HKD Energy investors who are UK tax payers may be eligible for income tax relief on their investment through the **Seed Enterprise Investment Scheme (SEIS)**.

HKD Energy is applying to the Small Companies Enterprise Centre so that people who invest in this project can apply for the SEIS scheme. If our application is approved, we can give investors a form to claim their SEIS income tax relief.

The following brief summary of the SEIS scheme is provided for information only: if you are a UK taxpayer, please consult your tax adviser for more details about the scheme and whether you might be eligible.

The Seed Enterprise Investment Scheme (SEIS) is designed by the government to help small, early-stage trading companies to raise finance by offering tax reliefs to investors who purchase new shares in those companies. This is available to **individuals** only. Income tax relief is at 50% of the cost of the shares, to be set against the individual's Income Tax liability for the tax year in which the investment was made, with a maximum annual investment of £100,000. The shares must be held for at least 3 years from the date of issue or income tax relief will be withdrawn.

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 (50% of £10,000). 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 (50% of £10,000). His tax liability for the year (before SEIS relief) is £4,500. 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>)

How to invest

If you would like to invest in this project, you will need to apply for shares. Anyone over the age of 16 is eligible to apply for shares. In the event of the share offer being over-subscribed, priority will be given to residents of Hassocks, Hurstpierpoint, Keymer and Ditchling.

The share offer period (the period when you can apply to buy shares) begins on 8 November 2014 and will continue until the offer is fully subscribed (that is, until we have raised £100,500), or until 31 December 2014, whichever comes first.

Individuals and organisations may invest between £250 and £10,000. The upper limit on investment is to allow as many local residents as possible to be part of the project. The lower limit on investment is to reduce our annual administrative costs.

Investors will become full voting members of HKD Energy, one member one vote.

You cannot sell or transfer the shares to anyone else. The only exception is if the investor dies. If this happens, once we have received satisfactory proof of death, we will potentially (at the discretion of directors) be able to repay the current value of the capital invested to the Executor (as and when funds are available), or we will transfer the investment to an individual nominated by the investor.

To apply for shares, you should complete the investment application form at the end of this document and return it to the address shown. You can also apply for shares online at www.hkdenergy.org.uk. Once we have investment applications for the full amount of capital needed, or on 31 December 2014 (whichever comes first), the share offer will be closed. At that point we will let all investors know whether they can invest the full amount they requested and send them an invoice. If we are over-subscribed we may reduce the size of investments so that more individuals can be involved. You will have 2 weeks to make the payment for your investment.

Please note that under money laundering regulations you may be required to produce satisfactory evidence of your identity. It is a condition of this share offer that you do this if requested.

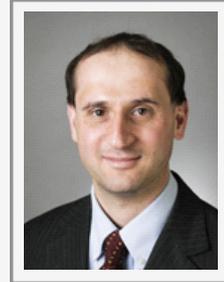
HKD Energy Directors

The five Directors of HKD Energy are all local residents, and have a sound combination of skills and experience. We are all volunteers and we have been working for more than a year to set up this project. Directors all stand down at the first AGM and may be re-elected by members. All directors will be investing and will receive the same rate of return as other investors. Directors' responsibilities are set out in the HKD Energy Ltd Rules <http://tinyurl.com/pgzbv9c>.

<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. He lives in Hassocks.</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. He lives in Ditchling.</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. She lives in Keymer.</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 lives in Hurstpierpoint.</p>	

Darren Berman

Darren Berman has worked in the energy and sustainability sector 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. He lives in Hassocks.



Risks

We believe that solar energy projects are low risk. The income from the feed in tariff is guaranteed by the government for 20 years, the technology is well-known, tried and tested. All investments, like this one, carry some risk, for example:

- The income from your investment can fluctuate, and you may not get back the value you invested. Investment in smaller unquoted businesses is likely to involve a higher degree of risk than investment in larger companies and those traded on the stock exchange.
- Your investment is not tradable. It is possible that your investment may be withdrawn in accordance with our rules, but it cannot be withdrawn at short notice or when you wish to do so. If HKD Energy lacks sufficient cash to enable you to withdraw your investment when desired, withdrawal may be delayed. Investment in this project should be seen as a long-term investment.

We have taken steps to reduce these and other risks as far as possible, as outlined in the table over.



Key risk	Our plan to minimise this risk
The solar panels do not generate the expected amount of electricity	<ul style="list-style-type: none"> ■ Solar panels are very reliable. They have a life expectancy of about 40 years. In the unlikely event that they do not perform as well as we expect, the project will be covered by the panels' 20 year performance warranty from the supplier, and our own insurance to protect us against poor performance.
Income is below expectations	<ul style="list-style-type: none"> ■ The agreement by the UK Government to pay the feed in tariff for 20 years means there is only a low risk that the government might renege ■ It's possible that the school might no longer require electricity, or renege on its commitment to pay for the electricity generated. We believe these risks are very low as we are selling electricity to the school at a much lower cost than it could buy elsewhere.
Installation of the panels is delayed	<ul style="list-style-type: none"> ■ We are working hard with Downlands School to get all the permissions in place.
Construction risk and damage to the roof / school	<ul style="list-style-type: none"> ■ The risk of damage to the school building during construction or operation will be covered by insurance. 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"> ■ While there is some risk of damage to the panels through falling objects, the panels are very tough. Such damage is 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.
Damage to the solar panels	<ul style="list-style-type: none"> ■ Our equipment will monitor each panel throughout the year so that we can identify any drop in performance and quickly put it right. The panels are guaranteed for the lifetime of the project and backed further by our own insurance. ■ Inverters are 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, which reduces expected FIT income	<ul style="list-style-type: none"> ■ This is a key risk to the project, however if the retail price index (RPI) is below 2.5% pa we could use the bonus that would otherwise be paid to the school to ensure investors receive their 4% interest.

Share application form

I wish to invest a total amount of _____ pounds (£_____) (**please insert amount in words and in figures**) in shares of HKD Energy Ltd on the terms and conditions of the Share Offer document. I confirm that I am over 16 and eligible to invest and become a member.

I understand that this is a long-term investment, and repayment of the capital before the end of the project is at the directors' discretion and depends on project income meeting expectations.

(NOTE: you may invest a minimum of £250 and a maximum of £10,000)

MY DETAILS:

TITLE

FIRST NAME

SECOND NAME

HOUSE NAME/NUMBER

ADDRESS LINE 1

ADDRESS LINE 2

ADDRESS LINE 3

POSTCODE

EMAIL

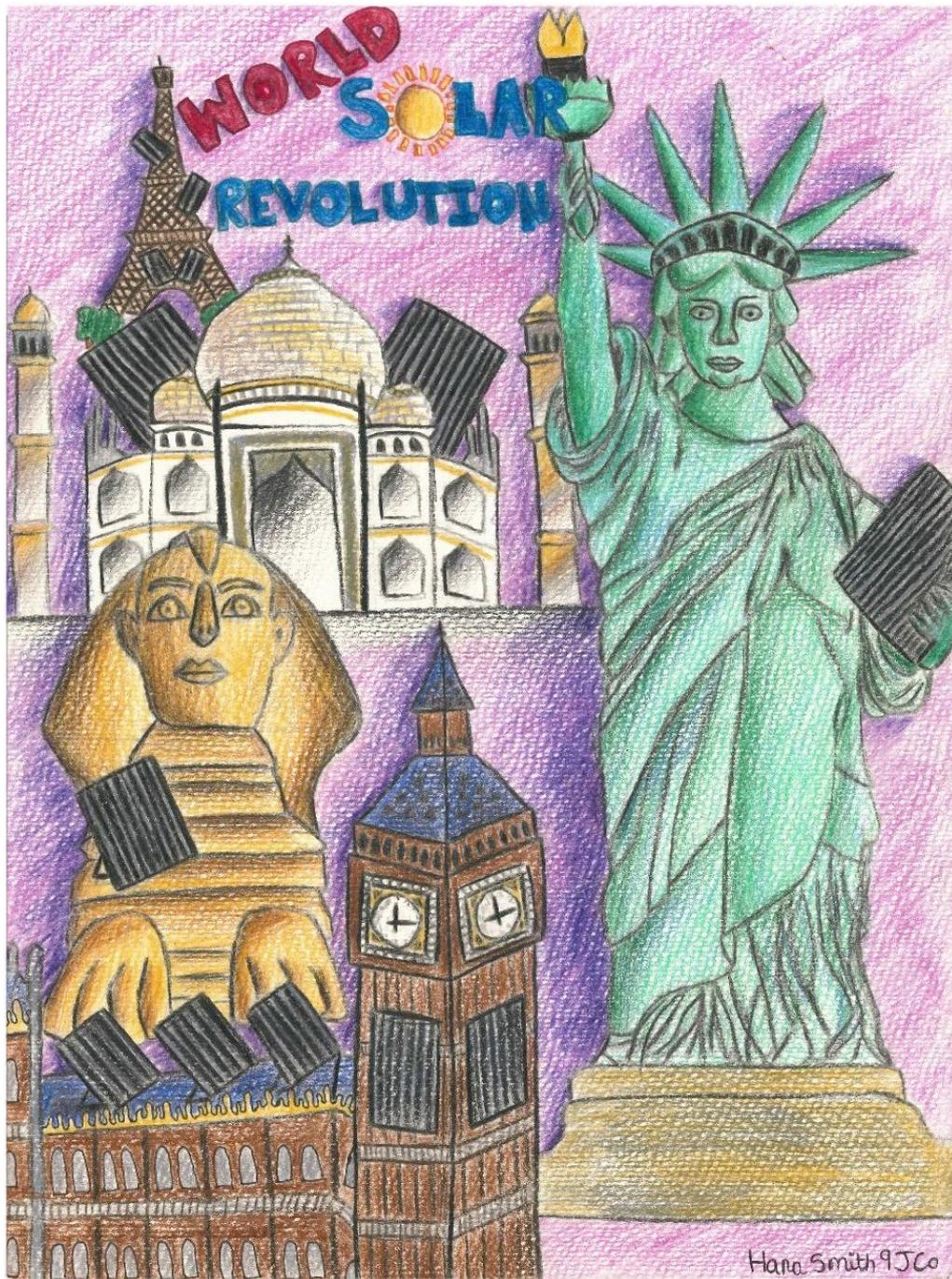
I confirm I am over 16 (YOU MUST BE OVER 16 TO INVEST)

I understand that HKD Energy will notify me about whether I can invest the total amount requested above. I will then have two weeks to pay the full amount of the investment by bank transfer or cheque.

SIGNATURE

DATE

Return your completed form by email to info@hkdenenergy.org.uk, or by post to 15 East Gardens, Ditchling, Hassocks BN6 8ST. You can also complete your form online at www.hkdenenergy.org.uk/how-to-invest/



Artwork by Hana Smith, one of the entries to 'the solar revolution' competition for Downlands School pupils