



MINUTES

Harborough Solar One Ltd Annual General Meeting 2022

November 16th 2022 - 6.30pm

Our Lady of Victories Church, Fairfield Road, Market Harborough

Meeting called by the Board

Audio Recorded

Attendees

Peter Jones (Chair)

John Twidell

Darren Woodiwiss

Carl Tiivas

David Robbins

Stephen Rankine

Mary Twidell

Brian Davis

Peter Devine

Judith Devine

Lesley Burrows (My Admin Support)

Apologies Received

Gavin Fletcher

Klaus Heinrich

Robert Ball

Alexandra Frowde

Herbert Eppel

Alec Welton

Neil Adams

Carol Birch

1. Welcome and Introduction

The Chair opened the meeting at 6.30pm by welcoming all and giving thanks for attendance. The list of apologies received was read out accordingly. The meeting was declared quorate.

The Chair introduced Lesley (My Admin Support) whom has continued to support the HE/HS1 team this year.

The Chair referred to the Chairman's Statement as follow:

"Your Board reports after the "Black Swan" event of Russian's invasion of Ukraine with the significant fall out impact on the price of energy and global events in terms of climate chaos has

driven the messaging in that direction which is coupled to unabated increases in the levels of atmospheric and oceanic CO₂ throughout the world.

Heat devastation is now beginning to drive a political mainstream acceptance and the need to shift from fossil fuel renewables and the case for wider take up on renewables can only grow. We have seen that reflected on the number of enquiries we are receiving. The Chair commented on the sad death of one member this year.

Our Board has also changed in composition, we have seen the departure of two valued and long term officers, Gavin Fletcher, whom we have received apologies as unable to attend and David Robbins. Gavin's workload has expanded and continues to expand and David is in the process of moving and thanked David for service which left a difficult gap to fill. We welcome Carl Tiivas and Stephen Rankine who bring skills and energy to our reformed Board particularly in respect of technical and financial skills. The Officer Report will cover the details of specific aspects of our track record, but my intention is simply to reassure you that the underlying operation remain on track and our performance remains and continues to be closely aligned with the objectives that were set out almost 5 years ago. The mechanical and yield challenges demanding your Board's attention, last year has taught us lessons in which we have learned with the informed improvements in our control systems still further.

Financial performance continues in line with expectations although you will see from the numbers that our decision to repay the Estate of the deceased investor a significant sum in respect of their investment albeit in 2 stages has impacted the so called bottom line, although impacting on current yield, such decisions improve yields for the remaining investors in the longer term and enable us to sustain good investor relations.

The current pricing levels for electricity have seen levels climbing from around 12p per unit domestically and industrially to as much as 35p plus and all of our price reviews, which has been discussed at various Board meetings, they are undertaken in the Spring on the Anniversary date and we have taken the decision to review the strict contractual terms which would otherwise permit us to increase prices and review those prices at a rate of the order 18% less than the customers proven best supply price that they received, but we are waiting because, of course there is still great uncertainty about the long term trend of those prices. The Government has also indicated a preparedness to charge renewables on the "super profits" resulting from technologies where base production costs have not radically changed (such as ours). At the moment it is a case of "watch this space". I urge any Member with any interest in being part of our Team as well to translate that into an Election to the Board. Anyone and everyone is welcome because it is a case of "all hands on the pumps" and I thank our retiring as well my fellow Directors for their support and commitment in the following year.

Thus far, in the absence of suitable candidate projects, we have not used our surplus on any specific projects in line with our original Mem and Arts. Our newest and largest possible project 'LearnAT Academy Trust' decided that they lacked sadly the resources to pursue the recommendations in our Report despite the fact that it involved them in minimal financial commitment. In retrospect of course we regard that was something of a mistake but nevertheless we arrived at the conclusion that in the absence of extra Board nominations to share the load, it would be invidious to continue expanding into new projects indefinitely (and new fund raises) just because they are there. To simplify operational issues in terms of management, procurement, and quality control we have signed an agreement with Share Energy Ltd of Shrewsbury to take over our monitoring and maintenance arrangements from August next year. Share Energy work in partnership with Big Solar Co-operative as their commercial arm and

they are a co-operative, they have constitutionally identical to Harborough Solar One and they are raising capital at national level to integrate new opportunities of scale. Our existing projects will remain with Harborough Solar One, they don't take on existing commitments, but effectively any new leads we get we may do a local service of aggregating those leads but it is likely we would pass them to Big Solar Co-op.

Shifts in central Government policy led to the transfer of the "Warmer Homes" initiative to Local Authority direct control. This rendered the function of Harborough Energy redundant and we therefore took the decision to wind up the operations of that business. All formalities linked to that closure are now completed and signed off at the last Board meeting.

On the Admin front I would like to recognise the contribution from My Admin Support, and I said last year they do precisely what it says on the tin! And that relieves the Board of onerous administrative tasks and ensure that our legal responsibilities are met in full and on time as well as maintaining open lines of communication externally. We also thank Master Accounting for their work in ensuring that our legal obligations in that respect of reporting are fully met.

In conclusion it is my pleasure to thank my doughty team of fellow Directors for their support and continued enthusiasm. This comes with experience across a suitably wide range of disciplines and skill sets and these have underpinned our ability to react quickly to unexpected challenges and opportunities within a framework of good humour and mutual respect. We will continue to liaise with other similar organisations both across the UK and indeed locally as we face the challenges both exciting and ominous that loom ahead of us.

Thank you to you and our Members for your continued support now and in the coming years".

For the benefit of the meeting, the Chairman's Report and all presentations are available on the website www.harboroughenergy.co.uk.

2. Minutes Acceptance – Meeting 22nd September 2021

The minutes of the AGM held on 17 November 2021 discussed and agreed by the Board of Directors and Members all present accepted this proposal. A copy is available on the HE website.

3. Appointments and Resignations of Directors

The Chairman referred to the two resignations of Directors, David Robbins and Gavin Fletcher and we have appointments for Stephen Rankine and Carl Tiivas. All agreed with both resignations and appointments of Directors.

Stephen Rankine (Director):

Stephen Rankine retired as Finance Director from Northampton College in March, my experience of Finance Director of 20 years, 10 years at Northampton College and before that Loughborough College, involving preparing annual accounts, presenting budgets and approval producing management accounts, reporting to the Board, working with budgets across the College. Stephen is now an active Member of the Green Party and has been accepted to the Team.

Carl Tiivas (Director and Treasurer):

Carl is taking over Gavin Fletcher with the support of the Board.

Carl gave an introduction to the Board and Members about himself: I live in Lutterworth with my wife and son, my background is Physics and have worked for the NHS for 30 years and mostly retired, I have a longstanding interest in the environment and I am an allotment holder.

4. Financial Accounts and Operational

Carl Tiivas presented HE/HS1 Review of Finance 2022:

Carl presented The Warm Homes scheme which has now been taken over by the Council, HE remained as a financial overhead as a registered company with no ongoing income. In March 2022 the Directors voted to close the company, informally exists as an informal group and active on the website and involving environmental energy projects.

Summary of Accounts 2021/2022 up to the end of the financial year for HS1 end of July 2022.

Harborough Energy Ltd – Closing Finances

Accounts	2021	2022 End July	Closing Accounts 2022
Turnover £	21934	19902	1305
Other Income £		30576 Grant energy assessment	
Other Charges £	(5881)	(33856)	(2761)
Profit (Loss) £	(1836)	1615	(1456)

Harborough Solar One Finances

Accounts	2021	2022 End July
Turnover £	21934	19902
Operating Costs £	13971	13950
Operating Surplus £	7963	5952
Interest Payable/charges £	(7906)	(8613)
Surplus(Deficit) for year £	57	(2661)
Reserves £	23708	26369

Turnover in 2021 made a slight loss £4045, 2022 £4895 made a slight profit. Other charges relates to the application of the grant energy assessment and the fees for the energy consultancy which sadly did not evolve. *A copy of the report to be published on the HE website.* HE has completed the final accounts, the remaining bank balance is now zero after the transfer of the management fee to HS1 £2176 as a management service as advised by our Accountant and My Admin Support for HE/HS1 transferring the remaining funds. A voluntary strike off to Companies House in 3 months time from bank closure now confirmed.

The turnover in 2021/2022 amounted to c£22K for the generation of electricity from our host sites and the feed in tariff, this has dropped in 2022, as Good Energy require photographs of our meter readings every two years which have been provided, but GE are being meticulous with the photographs. One issue which has been followed up was causing the blockage of payment, this has now been taken off hold and verified.

This years accounts for Harborough Solar One are available and approved by the Directors and signed off.

No questions were raised.

Operating Costs HS1 Ltd

2022	£
Management	2650
Rent/Rates £	51

Insurance	1224
Repairs /Maintenance	(201)
Books/Accounting	1300
Assets depreciation	8935
Total	13950

Operating Costs Excluding Depreciation = £5015. The operating costs have remained similar at just under £14K are largely depreciation on the assets: which combine accounting, admin and insurance. Our reserves in the bank are rising and satisfactory.

Financial Model - 20 years

1 st Phase	Share Capital accrued Capital Expenditure – Solar PV installations
2 nd Phase	1 st year – accrue reserves for breakdowns etc
3 rd Phase	2 nd – 4 th years – pay interest to investors (P1 5%, P2 4%)
4 th Phase	5 th to 20 th years pay interest and capital replay (3-6%/yr)
Interest paid to investors – is a percentage of remaining capital - Decreases gradually with time Reserves - £10K – for breakdowns/inverter replacements etc Community Benefit Fund – when secure to do so	

Carl discussed:

Factors Affecting the Future Finances

- Feed In Tariff – this income is linked to the RPI so should be protected against inflation
- Power Purchase Agreements (PPAs) – our PPAs give an 18% discount on the price of electricity supplied from the grid, so will increase with increasing electricity prices. (Fairness, Risk, Price caps, ? Directors/Members wishes). We have an invested interest in the financial wellbeing of our hosts sites.
- Government price caps – Electricity Price Bill – this protects businesses with a price cap of 17.3p/kWh for 6 months.
- Energy Prices Bill – Currently the government plans to levy a tax on ‘excess profits’ for renewable generators. They are in consultation, so we will not know the details till probably early 2023.
- Sustainability of administration arrangements – the Directors voted to contract with a specialist company to supply administration/accounting services. After considering several companies Shareenergy were awarded this work and will start in mid to late 2023. Slight increase in costs expected.
- One site we sell surplus electricity to Good Energy (this is different from the FIT at the other sites). We need to consider a future contract and per unit sales price.

Carl explained a synopsis of Shareenergy:

Shareenergy

- Provide specialist administration and consultancy services for:
 - Community energy groups
 - Involved in over 100 community groups (renewables: solar, wind, hydro-electricity)
 - 10 years experience
 - Admin/accountancy fees - £3.9K + VAT per year
 - Other organisations considered, but either did not provide services needed or more expensive.

Carl discussed:

Capital Repayments

- Deceased members estate:

Directors voted to make best efforts to repay estate on the investment on the deceased member for over 2 years. The total investment amounted to c.£14K. Payments have already been paid out : >50% August/September 2022: Outstanding Capital Repayments due Aug/Sept 2023 - £5.6K

- Outstanding 3% capital repay + interest = £960
- Capital repayment – 1st instalment £8100

Current Balance after repayments: £24.4K and confirmed we are in a healthy financially position not to cause any difficulties.

A question was asked by a Member: regarding the capital that is being repaid to the deceased members investors and how that affect payment back?

Carl commented: We pay the executors to the estate back which will be going through probate. The terms and conditions of the share offer are that returns on capital are not guaranteed but we pay the capital back in one lump sum. The family still continue as Members.

A question was asked how many members there are: It is confirmed there are c.60 members investing into HS1.

Projections for 2022/2023

Assuming Members interest is paid at:

5% for Project 1

4% for Project 2

Final capital is paid to Deceased Members Estate

Capital Repayments to other members deferred for 1 year

End of Financial Year 2023:

14% of Project 1 Capital Repaid

4% of Project 2 Capital Repaid

Reserves of £>10K maintained throughout the year

(Original Business Model assumed 6% P1, 3% of P2 repaid)

As we have paid back capital to a deceased members estate, we will be ahead of our original capital repayment schedule overall by the end of the 2022/23 financial year. However, this will have necessitated a slight delay in the capital repayments for the remaining members, which will catch up in subsequent years.

5. Presentation on Performance

Carl presented the Solar PV Output Data up to end of July 2022:

Output panels analysis : annual output of the panels over the year if generating at Panel Peak Rating KWp all year.

The average capacity factor for the UK DECC = 9.7% HS1 panels Woodnewton capacity factor = c.> 10%, Archway is a little bit lower (possible shading issues) and NBJ is out in an open field which is 11/12%.

The Annual Output as a percentage of the Estimated Outputs figures from the installers of NBJ and the Micro-generation Certification Scheme certificates have a figure of an estimated output of different systems.

- In 2016: Woodnewton roof 1 and 2 doing well.
- 2017 onwards c.100%.
- 2020 a slightly low year in all of the systems.

- Woodnewton 3 has been a potential problem has dropped to 80% over the last couple of years, which gives a loss of income of c.£500 per year which we are looking into which is a possible isolation switch when maintenance work is being carried which we are visiting.
- Woodnewton roof 4 working >100%.
- Archway : working c.90% efficient and consistent.

NBJ: first year reasonable then breakdown issues in 2019/2020 which caused a drop in output, for a few weeks, 2020 now repaired and upgraded some of the components we believe, no other problems received.

Estimated Outputs vs Actual Outputs: it was confirmed the outputs are good.

A presentation is on our website detailing the kw/h annual performance.

John Twidell's presentation on Harborough Solar Site Monitoring: John showed slides of our sites via Google earth, the first being Woodnewton, Corby which clearly shows the solar panels from above and discussed an exercise carried out identifying equipment i.e. inverters, meters and hidden panels. This helps for all to see where the panels are and how many, any tree coverage etc. We co-ordinated data and records for ease and readings for Good Energy.

How do we monitor? eMIG shows the output for each day and we can see remotely on line and the data is incremented and we can see what is happening. If there is any indifference with each site we understand that something is wrong.

NBJ at Husbands Bosworth has a big array with an array in the field with the works behind and the daily generation and we see the monitoring. Peter commented we have been in dialogue with NBJ if NBJ were interested, they could double their solar capacity with BSC if they have interest, they could double the capacity of their plant and at the moment it is about a third of their energy supply which is mainly for the timber dryers.

NBJ solar is monitored online for its export to the grid purchased by Good Energy. A graph highlighted how surplus for export is only when the factory is not using all output, notably at weekends and factory holidays.

One visit to Archway: we have had erratic readings, although cumulative totals are reliable. The inverter and eMIG meter and transmitter are housed in a permanently screwed in box. We now have to prepare to fix an amplified transmitter to solve the problem for more reliable daily readings.

About eMIG

The Energy Meter Information Gateway (eMIG) is an online tool for remotely measuring and monitoring your energy use. eMIG can provide warnings via email and SMS of system failures and abnormal events.

eMIG records meter readings every half hour and makes them immediately available on-line - offering a powerful platform for managing metering and sub-metering for both domestic and commercial users.

Carl discussed:

The Prospects for Future New Projects:

The Feed In Tariff has now ended, however we still receive the FiT payments for our existing Woodnewton and Archway sites for the generation of the FiT c.20 years. The FiT was

constituting about a 3rd of our income and the remaining amount for the Power Purchase Agreement for NGB export to the grid. Any new projects have to support themselves financially from the sale of the electricity.

For the FiT, financially viable projects are potentially larger i.e. tennis court size roof and a site which use a large proportion of energy on site because of the export generation. The risks are higher for small community groups going into projects, if our host sites went bust then we would be at risk and without the FiT there will be a relatively small income. It makes it difficult for small community groups to initiate these projects without a risk.

Community Energy England have carried out a Report 2022 which showed marked slowing of roll out of community projects. However, energy consultant, WPI Economics which have reported on the prospects of community energy and they are positive because of the high prices of fossil fuels. There is a potential to increase the size of the energy sector by 12-20 times given supportive policy framework.

Darren commented: offshore wind £35 per MW hour for energy onto the grid, nuclear £96 per MW hour. Flexibility contracts could be a future revenue stream as they offer very high spot prices.

On Demand Side response Octopus offer free household batteries but they control your energy use.

Legislation with retailers. There is the Power to People campaign that aims to enable small generators to sell their electricity for the local population.

There is a complete change in the energy landscape. The electricity grid has changed model of centralised power stations fuelled by fossil fuels to disseminated generation with wind farms, hydro, solar which is more intermittent. To keep the grid going more storage is needed. Which should bring more projects in the renewable energy sector: opportunities we expect the National Grid to need more flexibility and manage the demand in electricity. Discussion on smart grid to alleviate the demand in peak times and being paid for it. Carl commented technology is evolving whereby you can charge your car and use the energy in your car to push back to grid and switching over to electric vehicles, cycling/walking, better public transport, home heating heat pump electricity rather than fossil fuels, more insulation, district heating, ventilation and retro-fitting. There is potential for community groups to look at all these areas.

Carl confirmed the *Community Energy England Reports have been made available on our HE website:*

Growth of Community-owned electricity in UK

State of the Sector Report 2019 : [UK Report CES - Draft 9 \(communityenergyengland.org\)](#)

WPI Economics.com Future Of Community Energy: [Future-of-Community-Energy-20200129-Web-Spreads.pdf \(wpieconomics.com\)](#)

Slides were presented with graphs of the:

CEE State of the State of the Sector Report 2022 on the Growth of community-owned electricity capacity in the UK. Whereby shows the slow down of the roll out of community energy and where different feed in tariffs and funding have withdrawn or reduced the rollout, with fossil fuels prices going up this may give community energy a boost. The Community rural energy fund which is ending very soon as well.

Community energy have reported as being problems for rolling out new projects; related to funding, costs and complexity of getting planning to be connected to the grid, timing, government legislation and planning guidelines.

Future project developments reported diversity being taken on, electricity, solar, some hydro projects, community owned wind turbine, heat generation, energy storage, low carbon transport initiatives, providing communities with charging facilities, car sharing electric vehicles, energy efficiency initiatives in the home, draft proofing insulation alongside the council for people in need, there are some groups doing retro-fitting and installation energy efficiency measures within the home. The demand side are management projects due to shifting electricity back to keeping the grid stable.

6. Big Solar Co-op

Carl introduced an exciting development called Big Solar Co-op: are a 'not for profit' company originating from Sharenergy.

BSC are rolling out a model of community energy, they have a core group of professional staff who run most of the admin and running of the projects and installation and the technical parts and are backed up by volunteers/community groups around the country who search their local area for potential projects that maybe financial viable.

BSC have raised £670K with their share offer open till 10th December 2022. They hope to raise £1.2Million with 4% return on investment projected. Aim to install 10MW of new solar capacity before 2030.

They carry out training for volunteers whereby Open Solar Design Software can be downloaded free off the internet to trial and they train volunteers to use the software and business models. Presently ran by professional staff.

BSC raise the share capital to fund the installation, owns, monitors and maintains the installation and sells power to the host site and grid. Our proposal to the host site details energy production, financial and carbon savings.

Website: bigsolar.coop

7. Any other business and close

The Chair offered if anyone wanted to raise any other business, we then show the televised BBC recording with Peter Jones and Neil Burke from NBJ:

A gross roots campaign to cut bills and carbon by allowing neighbourhoods to buy their energy from small community networks, making that happen is proving to be a challenge. Neil Burke from NBJ commented 'his panels are a lifeline in a world of rising energy costs 'we are looking at a rise in our electricity costs, from c.12p per unit to 60p per unit, a massive impact for a small business'. Neil worked with other shareholders at his local community energy group to put a £100K worth of solar energy on his doorstep. Harborough Energy roof top panels elsewhere but its not been easy.

Peter Jones commented for Harborough Energy 'it has been a bit like swimming in treacle, this difficulty is partly by national and local level because fundamentally we are going from a system where less than 30 big coal fire power stations supplied all the electricity in the country needed

to one where there could be hundreds of thousands of bottom up suppliers and the policy framework for that has been a minefield’.

The problem for these groups is that legally it is hard to sell their energy direct to the local people but that could about to change: we could choose to buy our energy from local from local community groups rather than the big energy companies called ‘the local electricity bill’, is a proposed piece of legislation and that would return the community energy sector growth and to do that by enabling them to sell power directly to their customers. You and I could buy electricity from a local community generator, the evidence is very strong at suggesting local customers would have lower bills.

Peter Jones commented : ‘This is an informed educated market, it is operating against a backlog of both global warming and increasing energy prices where there are clear local incentives to deliver jobs, cheap energy and improve the stability of supply’.

This has won support from almost 300 MP’s but it will take almost a year before it can get through the hoops to be signed off.

However, this BBC televised happened before the War in Ukraine.

The Chair wound up the meeting by thanking all for their attendance. He also thanked the Directors for their support and Lesley Burrows for her assistance with the administration. There being no further business, the meeting was duly closed at 20.10

Signed

Dated

Peter Jones, Chair