

Congleton Solar Business Plan



Dane Valley Community Energy - Congleton Park

**FROM THE TEAM WHO SUCCESSFULLY
DEVELOPED CONGLETON HYDRO**

Dane Valley Community Energy - Congleton Park Limited is a Community Benefit Society registered with the Financial Conduct Authority no. 8859

Contents

1. Who are Dane Valley Community Energy – Congleton Park Ltd (DVCE-CP) and why do we need to raise funds?	3
2. Summarised Proposal.....	4
3. Customers.....	5
4. Status and Schedule	6
4.1. Current Status	6
4.2. Schedule.....	6
5. Business Case.....	7
5.1. Budget	7
5.2. Sources of Capital	7
5.3. Financial Projections.....	7
5.4. Assumptions	9
5.5. Tax	9
5.6. Energy Prices	10
5.7. Interest payments to members	11
6. Financial Forecasts	13
6.1. Business Model	13
6.2. VAT	13
6.3. Project End of Life	13
6.4. Development of Additional Sites	13
7. Risks and Mitigation	14
8. Contact Us.....	16
Appendix A – The Directors.....	17
Appendix B – Installation Partners.....	19
Appendix C - Marketing Plan.....	20
Appendix D – Summary Business Model – Base Case.....	21
Appendix E – Summary Business Model – Pessimistic Case.....	22

1. Who are Dane Valley Community Energy – Congleton Park Ltd (DVCE-CP) and why do we need to raise funds?

DVCE-CP was formed in 2022 by the same group that successfully launched the Hydro-electric plant at Havannah Wier under a sister Community Benefit Society (CBS) – Dane Valley Community Energy (DVCE) - <https://www.congletonhydro.co.uk>. After twenty months of operation, the Havannah scheme has generated over 330 MWh of green electricity and DVCE has made its first interest and capital payment to shareholders on schedule. Furthermore, DVCE has contributed £9,000 to local charities and environmental projects.

The purpose of DVCE-CP is to promote the use of green energy and to help our customers reduce their carbon footprint.

In 2022, DVCE-CP received a grant from the Rural Communities Energy Fund to develop a second Hydro-electric scheme at the weir in Congleton Park and to fit solar panels to the roofs of local schools and businesses. The second Hydro-electric scheme in Congleton Park has been delayed by problems in acquiring the necessary land. However, the Solar project development has made good progress and we are now at the stage where we need to raise funds to pay for installation of the solar panels and associated equipment.

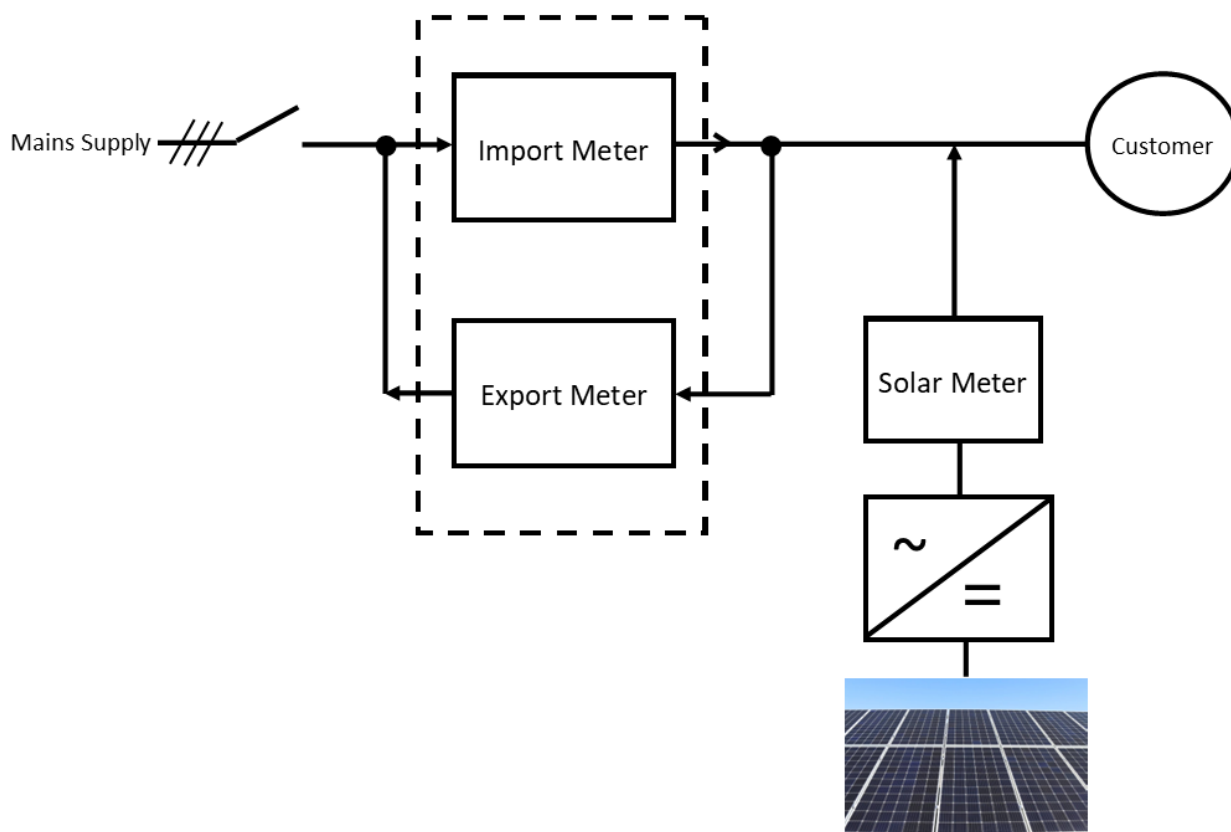
This Business Plan and associated Share Offer is for the Solar scheme only and the Hydro-electric scheme in Congleton Park will be the subject of a separate share offer in the future. The funds raised through this share offer will be entirely spent on the design, purchase and installation of Solar power systems for our customers.

DVCE and DVCE-CP are run by a team of 39 unpaid volunteers with a wide variety of ages, backgrounds and skills. The project will be managed by the six Directors of DVCE-CP (Appendix A) who have extensive experience of managing commercial businesses and have built and successfully run the Havannah Hydro-electric scheme under DVCE.

2. Summarised Proposal

The line diagram below shows how the solar schemes will work. The type of solar panels to be used are Solar PV (photo voltaic), which generate DC (direct current) power from sunlight. Each of our 10 sites will have a separate system and they are not interconnected.

Figure 1: Typical Solar Scheme Flow Diagram



Solar panels are fitted to the customer's roof by our Installation Partners (Appendix B) at DVCE-CP's expense. They generate direct current (DC) power from the Sun's rays and this is fed into an inverter that converts it into alternating current (AC) to match the mains supply. The solar power is fed via a meter into the customer's existing installation and supplies their load, instead of consuming mains electricity. At night and when the solar generation is low, the customer consumes power from their normal electricity supplier via the import meter. If the solar panels generate more power than the customer requires, the excess will be sold to a grid-based energy company, Younity Energy <https://www.younity.coop>, via the export meter.

The customer is charged by DVCE-CP for the solar power they use at a 25% discount to their normal electricity supplier purchase rate before VAT. There is also a second, smaller, income stream from exported power. These two income streams pay for maintenance, insurance and allow DVCE-CP to make interest and capital payments to our shareholders. Any surplus after meeting these commitments will be donated to environmental projects and other worthy causes.

The solar panels have a projected life of 25 years and our customer contracts reflect this.

3. Customers

During the development phase, we have identified 10 suitable customer sites for solar installations. Our solar consultants, Locogen < <https://locogen.com>>, have designed solar power systems for these sites and we have presented proposals to the customers. The customers have sent us ‘letters of intent’, subject to contract, accepting our proposals, which cover the following 10 sites shown in Table 1:

Table 1: List of Customers Sites			
Customers	No of Panels	Power (kWp)	CO2 Saving (t)
Havannah Primary School	70	32	3.5
CLPT Green Lea	136	29	6.8
CLPT Hempstalls	150	50	8.5
CLPT Thursfield	157	50	8.5
CLPT James Bateman	152	50	8.5
CLPT Manor Hill	118	39	6.0
CLPT Langdale	154	50	8.5
CLPT Greenhall	106	35	5.3
CLPT Parkside	149	50	8.5
Astbury Golf Club	140	47	7.1
TOTAL	1267	432	71

Our main customer, Creative Learning Partnership Multi Academy Trust (CLPT), has a mixture of special, first, primary and middle schools located in nearby North Staffordshire and has 2,200 pupils. Havannah Primary School is in Congleton with 260 pupils and Astbury Golf Club is on the outskirts of Congleton with 730 members.

Our customers will benefit from:

- A considerable reduction in their carbon footprint (approximately 60%)
- A substantial saving on their electricity bills (25% discount on solar power used)

- An invaluable education resource for teaching the benefits of green energy
- DVCE-CP is providing capital and ongoing funding with no additional burden on the customer's capital budget

The solar portfolio being developed by this project will generate around 371 MWh of electricity each year. According to the latest government figures on carbon footprinting¹, generating the average unit of electricity consumed from the grid emits around 193g of CO₂ equivalent, meaning that the portfolio will save around 71 tonnes of CO₂ equivalent in the first year of the project.

Of this generation, 62% will be used onsite by businesses, meaning that the collective carbon footprint of the customers will be reduced by around 44 tonnes of CO₂ in year one.

4. Status and Schedule

4.1. Current Status

Ten customer sites (see Section 3.) have been identified, desk-top designs have been done, proposals have been presented and we have received 'letters of intent' from the customers.

We have carried out a rigorous evaluation process and have selected two Installation Partners who will supply, install and maintain the Solar power systems. They will also carry out roof surveys and do the detailed designs – see Appendix B.

We have entered into negotiations with the energy provider Younity with the intent of signing a Power Purchase Agreement (PPA) for any electricity we export from the 10 sites. Younity have sent us a 'letter of intent' confirming their intention of entering into a PPA with DVCE-CP.

We have commenced legal negotiations for rooftop leases on the five (of 10) sites that are leasehold. So far, we have received one conditional agreement for Havannah School.

4.2. Schedule

- 12th July 2023 – Issue share offer
- End of October 2023 – Close share offer
- End of November 2023– Complete roof surveys, detailed designs and Distribution Network Operator (DNO) applications.
- End of November 2023 – Sign customer contracts and roof leases and Younity PPA. Place orders on Installation Partners.
- December 2023 to June 2024 – Install and commission 10 systems.
- June 2024 onwards – Ongoing billing and maintenance.
- July 2025 – Pay first interest and capital payments

¹ <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

Please refer to www.congletonsolar.co.uk for the detailed programme.

5. Business Case

5.1. Budget

The total capital costs for PV installations are expected to be £530,000. The breakdown of this budget is as follows:

Table 2	
Budget Item	Cost
PV purchase & installation costs	£477,360
Legal work and fees	£5,000
Budgeted contingency (10%)	£47,736
Total	£530,096

The complete Business Model can be reviewed at www.congletonsolar.co.uk and a summary is included in Appendices D and E.

5.2. Sources of Capital

All of the capital required to finance the project will be raised through a Community Share Issue (refer to www.congletonsolar.co.uk for the Share Offer document. The target for the share offer is to raise £530,000 with a minimum of £400,000 and maximum of £600,000. If the minimum amount of £400,000 is raised, the project will continue but the size of solar systems will be scaled back accordingly. If the share offer does not reach our minimum of £400,000, the Directors may choose to extend the share offer for a further two months. If less than £400,000 has been raised after the offer period has been extended, the Directors may proceed with a smaller portfolio of sites, seek a commercial loan to cover any shortfall or return funds to the investors. If the maximum amount of £600,000 is raised, the Directors will look to include one of the additional customers who have expressed interest. Shares will be allocated on a first come first served basis. No other sources of capital have so far been investigated for this project.

5.3. Financial Projections

The anticipated year one performance for the portfolio combined is shown in Table 3.

Table 3: Year 1 Performance	
Total electricity generated	372,000kWh
Proportion sold on-site	62%

Income from on-site electricity sales	£53,000 (base case)
Income from electricity exports	£14,000 (base case)

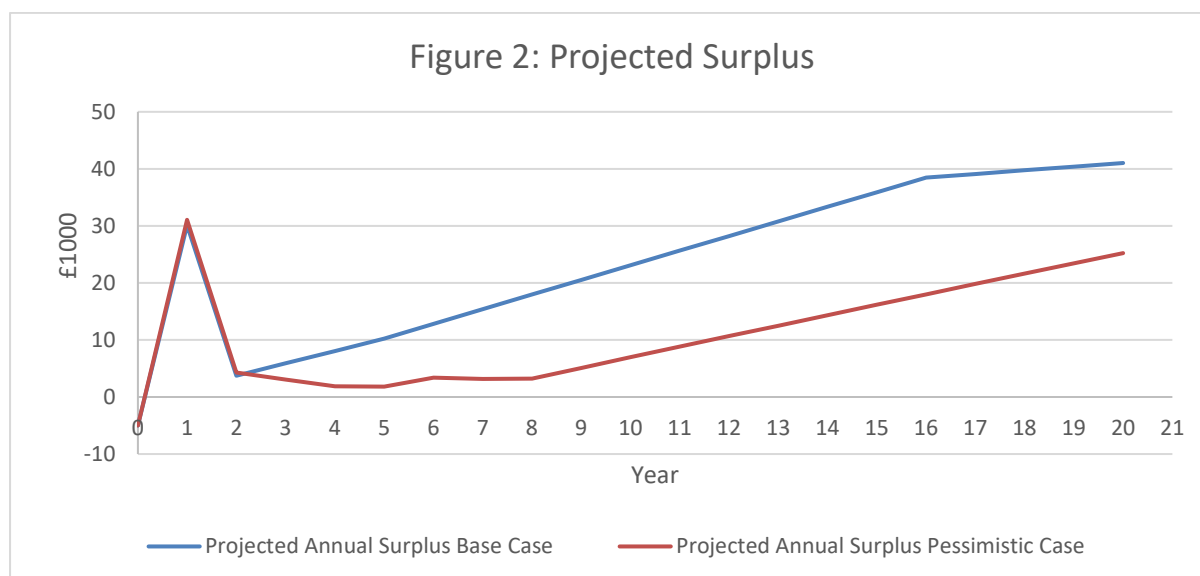
Electricity is sold onsite at a guaranteed discount of 25% from the occupant's grid supply contract unit price, as reported on an annual basis.

Because the energy market is particularly volatile at the moment, two separate energy tariff inflation cases have been considered; a so called "Base Case" which we judge to be the most realistic and a "Pessimistic Case". Both cases are based on an initial utility supplier grid tariff of 30p/kwh and an export tariff of 10p/kWh. The inflation rate models assumed in each case are described below.

Over the 25 year duration of the project total income is expected to be £2.04M for the base case, giving a total surplus of around £489,000 after repayment of share capital, interest and other running costs, which will be available for to develop further renewable energy schemes or donate to other environmental projects and worthy causes. (Note: according to the rules of the society this surplus cannot be distributed to members.) The base case financial Model also assumes an annual payment of £5,000 escalated at 3% per annum to community projects. We anticipate that members' shareholdings will be paid back within 15 years, with the first share interest and repayment being made once the solar panels have been in operation for a full financial year ending 30th June 2025. From year two we expect to be able to pay 5% share interest.

Over the same period the pessimistic model shows a total revenue of £1.62M and a surplus of £140,000. In this case the annual payment to beneficial environmental causes is assumed to 2,500 per annum escalated at 3% per annum. For this case the pay-back period will be extended out to 19 years. In this pessimistic case the annual return to shareholders is projected to be 4% in years 2,3,4,5 and 6 increasing to 4.5% in year 7 and then to 5% for the remainder of the member payback period.

Figure 2 shows the projected annual surpluses for the project over 25 years. Little surplus is made whilst energy prices are low, but as prices increase and more of the capital is repaid the surplus increases in later years of the project.



5.4. Assumptions

The key assumptions used in the financial projects are detailed in Table 4. These are common to both the base case and pessimistic cases. (only then energy price profiles and the community benefit fund contributions differ between the two cases).

Quantity	Base	Note
Initial export electricity price	10p/kWh	See note below about energy prices (section 5.6)
Initial average site supply grid price	30p/kWh	See note below about energy prices (section 5.6)
Electricity discount for customers	25%	
RPI inflation rate	3.0%	At project start;
Fraction of energy produced consumed onsite	62%	Based on LOCOGEN energy model
Project length	25 years	
Business Rates	£0	No site exceeds zero rating threshold
Corporation tax	£0	See below.

5.5. Tax

Corporation Tax may become payable in later years after the capital allowances associated with the solar installations have been used up. However, any surplus donated to registered charities may be set against the Corporation Tax bill. For this reason, Corporation Tax has not been included in the financial projection.

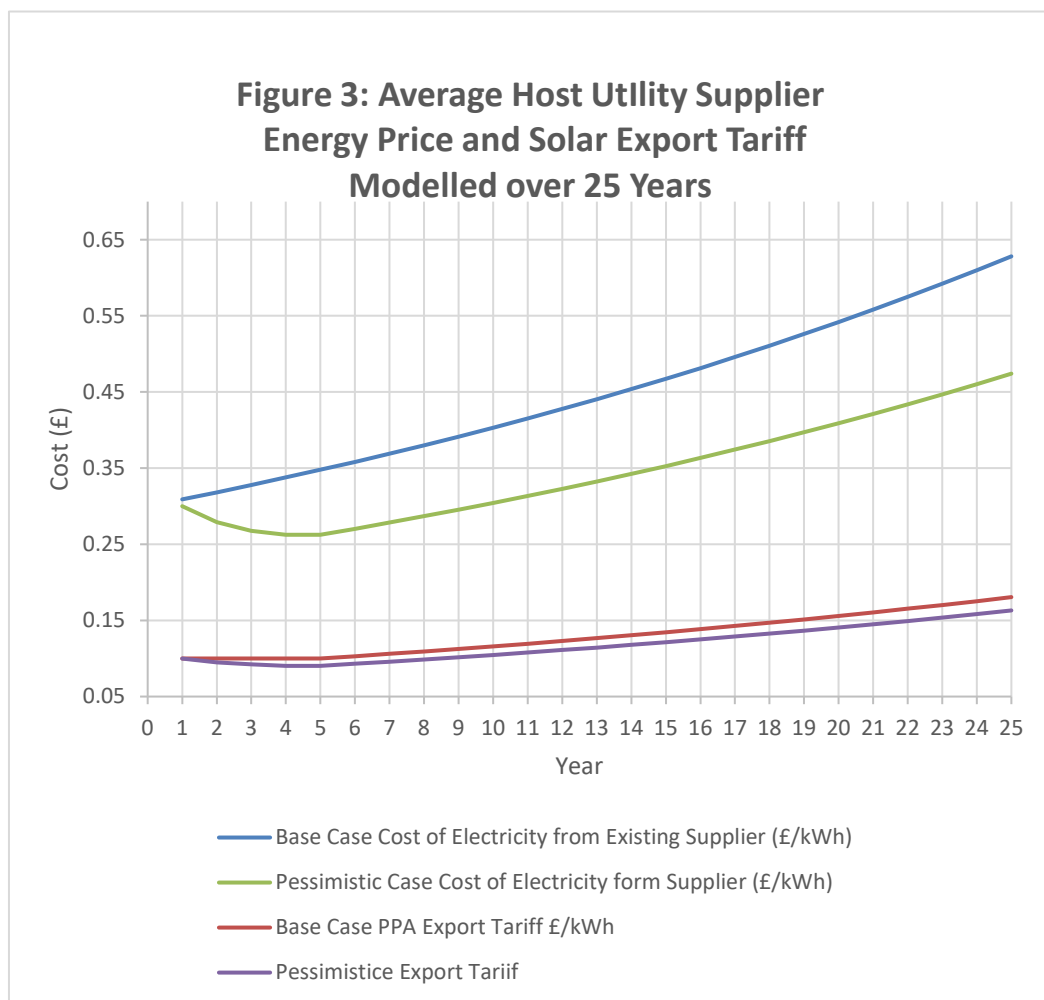
5.6. Energy Prices

The current electricity prices have been factored into the modelled prices for grid export and onsite grid supply (and therefore the onsite solar supply price, as a fixed discount on this).

For the base case we have assumed that the Initial day time rate paid to the hosts utility 30p/kWh escalates by 3% each year (£/kWh). The initial export PPA Rate of 10p/kWh is assumed to be fixed for 5 years then increasing by 3% per year.

For the pessimistic case the initial day time rate aid (30p/kWh) is assumed to decrease to 87% over the 1st 5 years and then increase by 3% each year thereafter.

This is shown graphically in 3.



Although the base case does not assume any further significant decrease in energy prices it is widely considered that bills will eventually increase at a higher rate than has been historically the case due to the grid upgrades necessary to achieve Net Zero and the widespread electrification of transport and heat. If energy prices remain higher than forecast for an extended period, the Directors will consider increasing the customer discount (25%) to reduce the surplus.

5.7. Interest payments to members

No share interest or capital repayment will be paid until at least year 2 of the scheme as DVCE-CP will need a full set of accounts and to hold an AGM to decide on the capital and interest payment to be made. From then on we expect to gradually payback the capital at an annual rate equivalent to the investment amount divided by our stated payback years less one. The annual interest rate to members is discussed in section 5.3 and shown graphically in Figure 4.

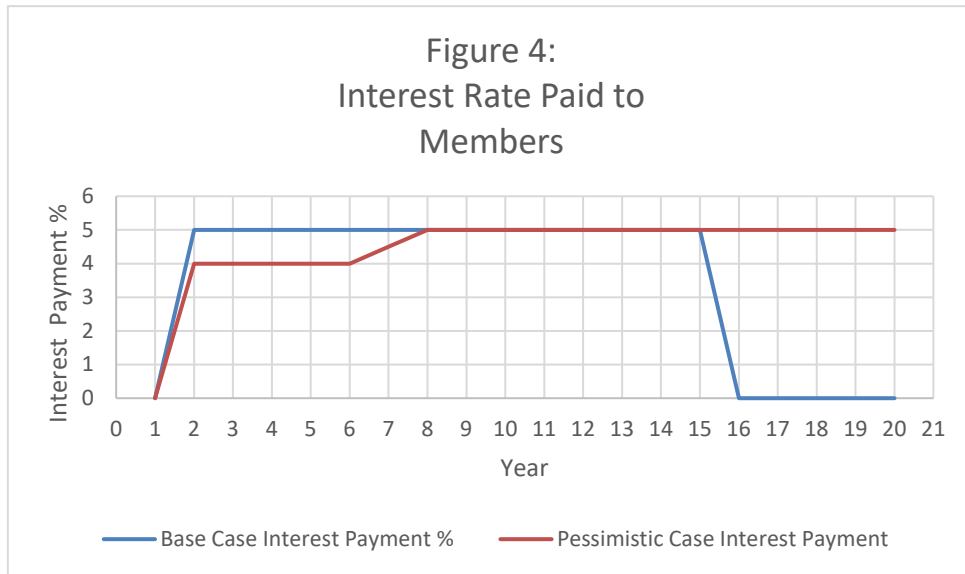
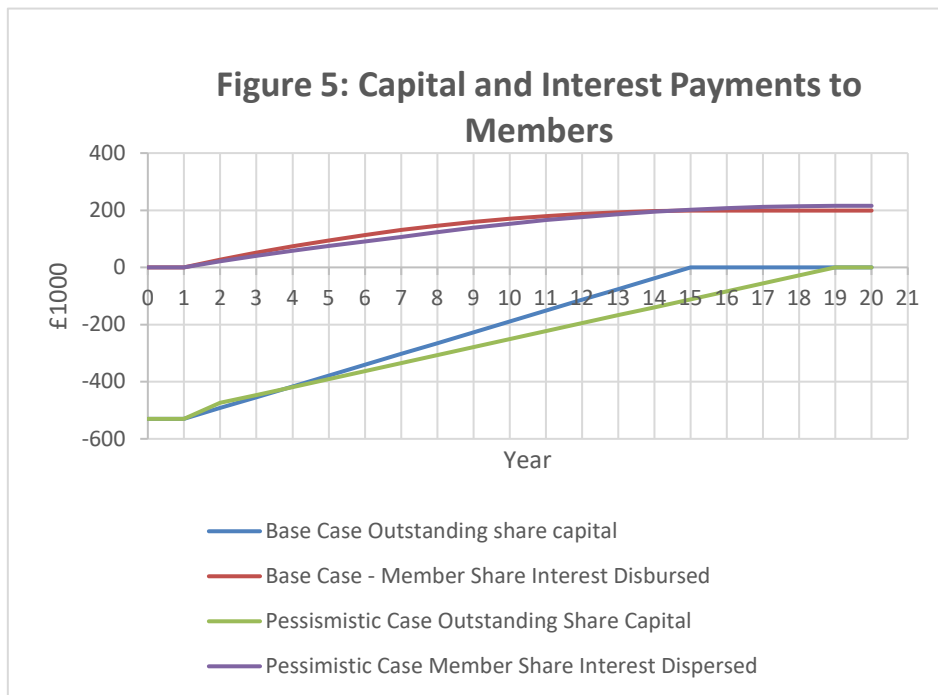


Figure 5 shows our projection of cumulative member interest payments to investors and outstanding to investors



Each year, members should receive a sum of money of which part is interest on shares, and part is a partial repayment of capital. The payment would be accompanied by a statement to explain how the amount breaks down. As an illustration, Table 4 shows the returns that a member who invests £1000 is projected to receive:

	BASE CASE			PESSIMISTIC CASE		
Year	Capital	Interest	Total	Capital	Interest	Total
1	0	0	0	0	0	0
2	£71	£50	£121	£56	40	£96
3	£71	£46	£118	£56	36	£91
4	£71	£43	£114	£56	34	£89
5	£71	£39	£111	£56	32	£87
6	£71	£36	£107	£56	29	£85
7	£71	£32	£104	£56	31	£86
8	£71	£29	£100	£56	32	£87
9	£71	£25	£96	£56	29	£85
10	£71	£21	£93	£56	26	£82
11	£71	£18	£89	£56	24	£79
12	£71	£14	£86	£56	21	£77
13	£71	£11	£82	£56	18	£74
14	£71	£7	£79	£56	16	£71
15	£71	£4	£75	£56	13	£69
16	£0	£0	£0	£56	11	£66
17	£0	£0	£0	£56	8	£63
18	£0	£0	£0	£56	5	£61
19	£0	£0	£0	£56	56	£111
20	£0	£0	£0	£0	0	£0
21				£0	0	£0
	£1,000	£375	£1,375	£1,000	460	£1,460

6. Financial Forecasts

6.1. Business Model

Appendixes D & E show a summary of the projected Profit and Loss, Cash Flow and Balance Sheet forecast for the Base and Pessimistic Cases. The full 25 year Business Model, including the Base and Pessimistic cases, can be viewed at www.congletonsolar.co.uk.

6.2. VAT

DVCE-CP is registered for VAT, which does affect cash flow, but the Business Model excludes VAT to avoid confusion. The 10 sites will be installed over a period of 12 months and the early sites will be producing income well before the final site is complete (please refer to the Solar Programme www.congletonsolar.co.uk). With 60-day payment terms for our installation partners, monthly payments from our customers and quarterly accounting for VAT we expect VAT to have a neutral or positive effect on our cash flow.

6.3. Project End of Life

At the end of 15 years, our projections are that all shareholders will have had their capital returned, in addition to the annual interest paid. Assuming the solar arrays remain economically serviceable, we will continue to operate the portfolio until leases expire in year 25, with all surplus allocated to community benefit. At year 25, either DVCE-CP may gift the systems to the customer or the systems will be decommissioned and any remaining value in the Society would be used for community benefit. The Business Model assumes that 50% of our customers will want the systems decommissioned and we have allowed £500 per kW of installed capacity for this work.

6.4. Development of Additional Sites

It is the intention of the Founding Directors that DVCE-CP will develop more projects in the future. Additional projects could be any form of renewable energy, including hydro power, solar PV, biomass etc. These schemes may be financed by new share offers. If so, new shares will have different and separate rights and interest rates to those issued under this current share offer. New projects would only be taken on if the projected returns to existing member investors will not be reduced and members would be consulted before any decision is taken to acquire or build a new project.

The development cost for new schemes would be either paid from the surplus that would otherwise be passed to community projects, or would be funded by applying to external funding bodies.

7. Risks and Mitigation

In Table 6 below we summarise key risks, along with measures we have taken to minimise them.

Table 6: Key Risks	
Risk	Mitigation
Customers do not proceed to contract.	Any of the customers could refuse to proceed to contract. If that happens, the Directors would look to recruit other customers (several have expressed interest). If we are not able to recruit replacement customers, the Directors may have to consider returning some of the funds raised to our shareholders.
The revenue is not as high as forecasted	Our payments to the Community Benefit Fund and/or of share capital repayment will be reduced. This may delay the point of full capital repayment but will not otherwise impact shareholders.
The sites reduce their consumption of electricity	The average onsite electricity consumption across the portfolio is projected to be 62% of total generation. If this figure drops to 50% or even 30% this will reduce the rate at which we can make capital repayments, but the project will not go bankrupt and all capital will be repaid by year 20.
We do not reach our target for the share offer	If the share offer does not reach our minimum of £400,000, the Directors may choose to extend the share offer for a further two months. If less than £400,000 has been raised after the offer period has been extended, the Directors may proceed with a smaller portfolio of sites, seek a commercial loan to cover any shortfall or return funds to the investors.
Future electricity prices are lower than forecast	If energy prices rise at or below the rate of inflation the project finances become very tight. However, this has not happened at any point this century and the switch to electric vehicles and domestic heat pumps is likely to substantially increase the demand for electricity. Lower than projected surpluses will result in delayed

Table 6: Key Risks	
Risk	Mitigation
	capital repayments and reduced payments to other environmental projects and worthy causes.
One or more sites become unavailable during the project period	We have chosen these sites as they are very likely to be in long term use: Astbury Golf Club is over 100 years old and schools also have a long lifetime. By developing a portfolio of ten sites we are protected from any existential impact of one or two sites ceasing to buy electricity before the capital is repaid. The Directors of DVCE-CP have already identified further sites to add to the portfolio, that will further mitigate the risks of sites ceasing to be customers.
One of more of the sites experience equipment failures.	We will require installers to provide guarantees on solar installations for a minimum of ten years and to carry professional indemnity and product liability insurance of at least £1m. Our installation partners are MCS-certified. Our Business Model includes provision for maintenance and replacement of faulty equipment.
Health and Safety issues are not correctly observed during installation	Our installation partners are fully accredited by HIES, Safe Contractor, CHAS or an equivalent certification scheme.
Planning permission is required.	We are informed by our Consultants and Installation Partners that the proposed designs are within the ‘Permitted Development’ planning regulations. In the unlikely event that this is challenged by the local authority, we will assist the customer to apply retrospectively for planning permission.
The Distribution Network Operator (DNO) refuses to connect the system.	We are informed by our Consultants and Installation Partners that systems of 50kW or less (all of our systems) are generally approved for connection. In the unlikely event that the DNO refuses connection, we will scale back the system to meet the DNO’s requirements.

Table 6: Key Risks	
Risk	Mitigation
Roof surveys reveal issues with roof structure.	The building owner will obviously want to address such issues, which may cause delay. We can also look at alternative parts of the roof and alternative fixing methods. Our Installation Partners are currently carrying out surveys on all of the roofs and have not encountered any insurmountable issues so far.
Succession	The financial projections assume that many essential tasks for the society (the membership and company administration, including production of accounts) are carried out by volunteer labour, which members are encouraged to get involved in. We have a strong volunteer pool of 39 people with a mixed skill set and age range. Our projections show that surpluses in later years will support buying in administration services if required.

8. Contact Us

For all enquiries contact DVCE-CP:

Telephone: 07716394416

Email: admin@congletonsolar.co.uk

Post: Grosvenor House, 3 Chapel Street, Congleton, Cheshire, CW12 4AB

Our website can be found at: www.congletonsolar.co.uk

DVCE-CP Ltd is a Community Benefit Society Registered with the Financial Conduct Authority. Our Registered number is 8859

Appendix A – The Directors

Paul Guymer – Chair



Paul has a degree in Chemical Engineering with 40 years of experience in performing and managing multidiscipline projects for civil nuclear power stations worldwide. He recently retired as director and part owner of a Congleton based engineering consulting business in the nuclear industry. Paul has been living in Congleton for nearly twenty years, is also Chairman of the Havannah Hydro Scheme, and has a strong interest in promoting carbon free energy sources.

Cathy Dean – Marketing and Communications



Cathy has worked in digital marketing for 15 plus years, running her own business and working part-time for Congleton Partnership delivering various local projects. 'Born and bred' in Congleton with 2 children at Havannah Primary School, Cathy hopes the project will inspire children in the local area to become green champions!

David Mason – Commercial



David holds an honours degree in Electronic and Electrical Engineering and is a Fellow of the Institution of Engineering and Technology. Recently retired, he worked for most of his career in the information and communications technology (ICT) sector. In 1993 he founded Mason Communications Ltd and built it into one of the UK's leading ITC consultancies. More recently he served as non-executive Director and Chairman in several leading public and private ICT companies. He has lived in Congleton for 40 years and is passionate about protecting the environment and promoting sustainable energy.

Paul Williams - Technical



Paul Williams holds a degree in Engineering, is a Chartered Engineer, and a Fellow of the Institution of Mechanical Engineers. He worked in the design and construction of manufacturing plant across the world before moving to specialise in the design and operation of Energy and Utilities systems for customers across Europe. Recently retired, he has lived in Congleton since 1987, and believes in the expansion and stewardship of our sustainable energy systems for future generations.

Mervyn Sara - Finance

Mervyn has a degree in Electrical Engineering and has worked as an electronics and electrical engineer for 42 years. Past roles have included product development of variable speed drives and technology management for the electrical power distribution industry and offshore wind farm projects. Mervyn has prepared the accounts for DVCE for since 2015. He has lived in Congleton for 37 years and his motivation for involvement in the project is to reduce the World's dependency on fossil fuels and to generate cash to support local causes.

Peter Aston – Secretary

Peter retired in 2011 from general management in the automotive and transport sector building cars and trains. He became Chair of Congleton Sustainability Group in 2009, amongst other charity trusteeships, to nudge the town towards better 'green' credentials. The group has championed its apple juice project, saved Vale Allotments from housing development, nurtured all schools in the town towards Green Flag Eco-Schools status, pushed cycling infrastructure improvement and has been deeply involved in the local Neighbourhood Plan. Peter has previous experience with small scale hydro schemes having been a key member of the previous Congleton Park Hydro proposal

Appendix B – Installation Partners

In order to source suitable organisations for the design, installation and maintenance of the proposed solar schemes, we designed and executed a formal selection process which focused not only on industry certifications, but also on experience in the relevant sectors in which our prospective customers operate.

A formal Request for Information was issued to prospective suppliers covering commercial stability, qualifications and certifications as well as team sizes, years of experience, equipment recommendations, technical clarifications, warranties and importantly client references of relevant type and size.

Three organisations were shortlisted from the RFI which was evaluated based on their responses and follow up written clarifications, and following client reference calls and visits to the supplier sites, two organisations were considered to provide the best fit in terms of commercial stability and size, technical skills and client reference.

Both organisations will be asked to design and bid on each of our customers' schemes based on the customer issued baseline data to establish a fair market price.

Following completion of the process, we decided to progress with the following organisations:

B-Engineering Group, based in Warrington, Cheshire.

The B-Eng Group has over 30 years' experience and are one of the leading, continually evolving M&E building services engineering providers in the North of England.

The company operates across 6 divisions under the B-Engineering Group:

B-mech Projects

B-mech Service and Maintenance

B-elec Solutions

B-rite Air Conditioning

B-eco Renewables

B-tech Technical Services

Complete Electrical Solutions, based in Tarporley, Cheshire

Complete Electrical Solutions are renowned for providing and maintaining a high standard of workmanship for our clients which is reflected in our NICEIC, MCS, ECA, RECC, OLEV, TESLA and CHAS accreditations. From the creation of superior designs and specifications to quality installations, compliance and maintenance, we provide a complete package. Customer satisfaction is guaranteed.

Our team of electricians provide first-class electrical installation & maintenance services to Domestic, Commercial and industrial sectors including; fire and intruder alarm installation, electrical testing and compliance, solar PV, battery storage and EV charging.

Appendix C - Marketing Plan

We have developed a Marketing Plan (please refer to www.congletonsolar.co.uk) that details our goals, target audience, messaging, marketing channels, content strategy and events. The Marketing Plan includes a budget (funded through the RCEF grant) and programme. We will commence with a ‘soft launch on 12th July 2023 to Congleton Hydro investors followed by a full launch on 18th July 2023 to school parents, golf club members and the local community in South Cheshire and North Staffordshire. We will also address the wider UK community through social media and advertising campaigns.

Appendix D – Summary Business Model – Base Case

End Year					0	1	2	3	4	5	6-10	11-20	21-25
PROFIT & LOSS													
Income:													
Total Generation (incl. panel degradation & customer attrition)MWh						372	366	361	356	351	1,679	2,993	1,322
Power used by Site (incl. customer attrition) MWh						230	228	226	224	221	1,074	1,992	923
Revenue from Site x£1000						53	54	56	57	58	£306.1	£709.5	£263.2
Power exported to grid (remainder) MWh						141	138	135	133	130	606	1,002	398
Revenue from Export x £1000						14	14	14	13	13	£66.2	£136.2	£67.7
Total Electricity Sales Income x £ 1000						67	68	69	70	71	£372.2	£845.6	£477.9
Expenditure													
Maintenance/ Insurance x £1000					£0.0	-£8.9	-£9.2	-£9.4	-£9.7	-£10.0	-£54.8	-£137.1	-£85.3
Lease, Rates					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Admin x £1000					-£5.0	-£2.5	-£2.6	-£2.6	-£2.7	-£2.8	-£15.2	-£38.1	-£23.7
Decommissioning x£1000					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	-£226.1
Total Operating Costx £1000					-£5.0	-£11.4	-£11.7	-£12.1	-£12.4	-£12.8	-£70.0	-£175.3	-£335.2
EBITDA (Earnings before interest,taxes, depreciation and amortization)					-£5.0	£56.1	£56.5	£57.0	£57.4	£57.9	£302.2	£670.4	£142.6
Depreciation x£ 1000					£0.0	-£21.0	-£21.0	-£21.0	-£21.0	-£21.0	-£105.0	-£210.0	-£105.0
Community Fund x £ 1000					£0.0	-£5.0	-£5.3	-£5.5	-£5.6	-£5.8	-£31.7	-£79.3	-£49.4
Share Interest x £1000					£0.0	£0.0	-£26.5	-£24.6	-£22.7	-£20.8	-£75.7	-£28.4	£0.0
Bank Interest Received					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Taxation					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Total Expenditure (includes OP costs, depreciation and share interest)					-£5.0	-£37.4	-£64.5	-£63.1	-£61.8	-£60.4	-£282.5	-£493.0	-£489.6
Total Surplus/Loss x £1000					-£5.0	£30.1	£3.7	£5.9	£8.1	£10.3	£89.8	£352.6	-£11.8
Reserves brought forward					£5.0	£0.0	£30.1	£33.9	£39.8	£47.8	£58.1	£147.9	£500.5
Reserves carried forward					£0.0	£30.1	£33.9	£39.8	£47.8	£58.1	£147.9	£500.5	£488.7
CASHFLOW													
EBITDA x £1000					-£5.0	£56.1	£56.5	£57.0	£57.4	£57.9	£302.2	£670.4	£142.6
Capital Expenditure x £1000					-£525.1	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Operating Cash Flowx £1000					-£530.1	£56.1	£56.5	£57.0	£57.4	£57.9	£302.2	£670.4	£142.6
Share capital receipt and repayment x£1000					£530.1	£0.0	-£37.9	-£37.9	-£37.9	-£37.9	-£189.3	-£189.3	£0.0
Share Interest to Members					£0.0	£0.0	-£26.5	-£24.6	-£22.7	-£20.8	-£75.7	-£28.4	£0.0
Community Fund					£0.0	-£5.0	-£5.3	-£5.5	-£5.6	-£5.8	-£31.7	-£79.3	-£49.4
Taxation					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Increase/decrease in cash					£0.0	£51.1	-£13.1	-£11.0	-£8.8	-£6.6	£5.5	£373.3	£93.3
Cash carried forward x £ 1000					£5.0	£56.1	£43.0	£32.0	£23.3	£16.6	£22.1	£395.5	£488.7
End Year					0	1	2	3	4	5	6-10	11-20	21-25
BALANCE SHEET													
Tangible Assets x £1000					£525.1	£504.1	£483.1	£462.1	£441.1	£420.1	£315.1	£105.0	£0.0
Total Fixed Assets x £1000					£525.1	£504.1	£483.1	£462.1	£441.1	£420.1	£315.1	£105.0	£0.0
Cash Balance x £1000					£5.0	£56.1	£43.0	£32.0	£23.3	£16.6	£22.1	£395.5	£488.7
Other Current Assets/ Liabilities					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
TOTAL ASSETS x £1000					£530.1	£560.2	£526.1	£494.1	£464.3	£436.7	£337.2	£500.5	£488.7
Represented by:					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Operating Reserve x £1000					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
General Fund x £1000					£0.0	£30.1	£33.9	£39.8	£47.8	£58.1	£147.9	£500.5	£488.7
Share Capital x £1000					£530.1	£530.1	£492.2	£454.4	£416.5	£378.6	£189.3	£0.0	£0.0
TOTAL FUNDS x £1000					£530.1	£560.2	£526.1	£494.1	£464.3	£436.7	£337.2	£500.5	£488.7

Appendix E – Summary Business Model – Pessimistic Case

End Year					0	1	2	3	4	5	6-10	11-20	21-25
PROFIT & LOSS													
Income:													
Total Generation (incl. panel degradation & customer attrition))MWh						372	366	361	356	351	1,679	2,993	1,322
Power used by Site (incl. customer attrition) MWh						230	228	226	224	221	1,074	1,992	923
Revenue from Site x£1000						53	54	56	57	58	£306.1	£709.5	£263.2
Power exported to grid (remainder) MWh						141	138	135	133	130	606	1,002	398
Revenue from Export x £1000						14	14	14	13	13	£66.2	£136.2	£67.7
Total Electricity Sales Income x £ 1000						67	68	69	70	71	£372.2	£845.6	£477.9
Expenditure													
Maintenance/ Insurance x £1000					£0.0	-£8.9	-£9.2	-£9.4	-£9.7	-£10.0	-£54.8	-£137.1	-£85.3
Lease, Rates					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Admin x £1000					-£5.0	-£2.5	-£2.6	-£2.6	-£2.7	-£2.8	-£15.2	-£38.1	-£23.7
Decommissioning x£1000					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	-£226.1
Total Operating Costx £1000					-£5.0	-£11.4	-£11.7	-£12.1	-£12.4	-£12.8	-£70.0	-£175.3	-£335.2
EBITDA (Earnings before interest,taxes, depreciation and amortization)					-£5.0	£56.1	£56.5	£57.0	£57.4	£57.9	£302.2	£670.4	£142.6
Depreciation x£ 1000					£0.0	-£21.0	-£21.0	-£21.0	-£21.0	-£21.0	-£105.0	-£210.0	-£105.0
Community Fund x £ 1000					£0.0	-£5.0	-£5.3	-£5.5	-£5.6	-£5.8	-£31.7	-£79.3	-£49.4
Share Interest x £1000					£0.0	£0.0	-£26.5	-£24.6	-£22.7	-£20.8	-£75.7	-£28.4	£0.0
Bank Interest Received					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Taxation					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Total Expenditure (includes OP costs, depreciation and share interest)					-£5.0	-£37.4	-£64.5	-£63.1	-£61.8	-£60.4	-£282.5	-£493.0	-£489.6
Total Surplus/Loss x £1000					-£5.0	£30.1	£3.7	£5.9	£8.1	£10.3	£89.8	£352.6	-£11.8
Reserves brought forward					£5.0	£0.0	£30.1	£33.9	£39.8	£47.8	£58.1	£147.9	£500.5
Reserves carried forward					£0.0	£30.1	£33.9	£39.8	£47.8	£58.1	£147.9	£500.5	£488.7
CASHFLOW													
EBITDA x £1000					-£5.0	£56.1	£56.5	£57.0	£57.4	£57.9	£302.2	£670.4	£142.6
Capital Expenditure x £1000					-£525.1	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Operating Cash Flowx £1000					-£530.1	£56.1	£56.5	£57.0	£57.4	£57.9	£302.2	£670.4	£142.6
Share capital receipt and repayment x£1000					£530.1	£0.0	-£37.9	-£37.9	-£37.9	-£37.9	-£189.3	-£189.3	£0.0
Share Interest to Members					£0.0	£0.0	-£26.5	-£24.6	-£22.7	-£20.8	-£75.7	-£28.4	£0.0
Community Fund					£0.0	-£5.0	-£5.3	-£5.5	-£5.6	-£5.8	-£31.7	-£79.3	-£49.4
Taxation					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Increase/decrease in cash					£0.0	£51.1	-£13.1	-£11.0	-£8.8	-£6.6	£5.5	£373.3	£93.3
Cash carried forward x £ 1000					£5.0	£56.1	£43.0	£32.0	£23.3	£16.6	£22.1	£395.5	£488.7
End Year					0	1	2	3	4	5	6-10	11-20	21-25
BALANCE SHEET													
Tangible Assets x £1000					£525.1	£504.1	£483.1	£462.1	£441.1	£420.1	£315.1	£105.0	£0.0
Total Fixed Assets x £1000					£525.1	£504.1	£483.1	£462.1	£441.1	£420.1	£315.1	£105.0	£0.0
Cash Balance x £1000					£5.0	£56.1	£43.0	£32.0	£23.3	£16.6	£22.1	£395.5	£488.7
Other Current Assets/ Liabilities					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
TOTAL ASSETS x £1000					£530.1	£560.2	£526.1	£494.1	£464.3	£436.7	£337.2	£500.5	£488.7
Represented by:					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
Operating Reserve x £1000					£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0	£0.0
General Fund x £1000					£0.0	£30.1	£33.9	£39.8	£47.8	£58.1	£147.9	£500.5	£488.7
Share Capital x £1000					£530.1	£530.1	£492.2	£454.4	£416.5	£378.6	£189.3	£0.0	£0.0
TOTAL FUNDS x £1000					£530.1	£560.2	£526.1	£494.1	£464.3	£436.7	£337.2	£500.5	£488.7