Shropshire and Telford Community Energy Business Plan 2023-2025

V7c   14.7.23

Disclaimer
This document sets out how the Directors of Shropshire & Telford Community Energy (STCE) envisage the society developing over the three years 2023-2025. It is presented as information for members and the wider public, it should not be taken in whole or in part to be a financial offering. We will compile a fully detailed share offer document when we are ready to issue shares, which will be July 2023 at the earliest.

STCE is a registered Community Benefit Society,
Registration number 8829
www.stcenergy.org.uk

Contents

1. Who We Are

Shropshire and Telford Community Energy (STCE or the Society) has been operating as a working group since March 2020, we registered as a Community Benefit Society (CBS) in March 2022. A CBS is a particular type of society regulated by the Financial Conduct Authority that is allowed to raise capital by issuing shares. It is sometimes called a BenCom for short. There are at least 150 Community Energy Societies registered in England, Wales & NI *(Community England State of Sector report 2020*.) We are a social enterprise, run by its members for the benefit of the community it serves. We are democratic and transparent.

STCE has been supported by the Next Generation project, and has worked with Community Owned Renewables (CORE) and the Centre for Sustainable Energy (CSE) with local assistance from Sharenergy. CORE has funding from Power to Change and Big Society Capital to assist in the transfer of solar farms across the UK to community ownership. One of these sites is at Twemlows, nr Whitchurch in North Shropshire. STCE was set up specifically to take on this 10MW solar farm, negotiations on this continue and should come to fruition during 2023. We also intend to develop other projects. The working group was set up after a series of public meetings in Whitchurch, Shrewsbury, Telford and Bishop's Castle in the previous month.

2. Our Objects

The objects of the society as stated in our rules are to

> *"carry on any business for the benefit of the community by promoting, facilitating and developing community owned renewable energy, low carbon energy and energy efficiency projects, concentrated in the areas of Shropshire and Telford."*

Our main current focus is the purchase of Twemlows solar farm, Nr Whitchurch *(see section10)* but we see this as an initial step that will help to establish the Society and lead to many further projects. Mostly these will be in the areas of Shropshire and Telford & Wrekin, but we have not excluded the possibility of working outside of those areas.

3. Our Purpose

Our main purpose is to generate renewable energy and encourage energy efficiency to assist with the move to a low carbon society. We will also be providing an opportunity for local people to invest in locally generated renewable energy. We will be providing and securing jobs on the projects that we develop, we will be looking to improve the biodiversity of our sites and we will be generating funds for wider community benefit *(see section 7).*

We are only aware of three community energy schemes in Shropshire and Telford, the Ludlow and Neen Sollars Hydros and the Sheriffhales solar farm which has recently moved into community ownership. For comparison Herefordshire has a sizeable community solar farm (Pomona) and two community heat projects, Cheshire has a new community hydro being built as does Reading. Wales has several community wind turbines (Small Wind Co & Awel) and £2m of community owned rooftop solar is being fitted by Egni. Oxfordshire has multiple community energy schemes (inc Sandford Lock Hydro).

We have been actively investigating possible new community energy schemes in the Shropshire and Telford area with the help of Sharenergy using funding from Power to Change's Next Generation Grant.

This work has focussed on the Heat and Wind project in Bishop's Castle[1] but other schemes are also being investigated.

We have also partnered with the Big Solar Co-op for the delivery of rooftop solar in Shropshire and Telford[2] with the assistance of Shropshire Council. Big Solar launched their share offer in late 2022, this is now a permanent rolling offer, see www.bigsolar.coop/invest.

Meanwhile Shropshire and Telford Councils have both declared a Climate Emergency as have many of the local town and parish councils. If we are to achieve massive reductions in our carbon emissions then a rapid expansion of renewable energy and energy efficiency are both vital, we believe that Community Energy can play an important role in that transition by bringing forward projects with the support of the community that would struggle without community involvement.

4. Our Role

We aim to work with the local councils, businesses and community organisations not only to deliver our own projects but also to encourage others to develop their own, and working in partnership with similar organisations, such as the Big Solar Co-op. This working in collaboration and by example will help to bring about the transition to a low carbon economy. *(see section 14 for more on the market and regulatory context and how we fit into that)*

5. STCE Membership & Investment

Membership of STCE is open to all who invest. Investing Members have a single vote, irrespective of the amount invested; community benefit societies are run on a democratic 'one member, one vote' basis. People who live in the areas of Shropshire and Telford will be encouraged to be members, but membership will also be open to those who live elsewhere.

To be a member someone must own at least one £1 share. However, for administrative purposes on individual share offers there will be a minimum number of shares that can be bought. This will vary from offer to offer but will be at least £100. FCA rules impose a maximum share limit of £100,000.

Members will be paid interest on their shares, dependent on the performance of our projects. This cannot be guaranteed, and all community energy investments are taken at the risk of the investor. The society cannot pay more in dividends than is justified by the cost of raising the capital. The risks to the society and to capital invested in it are identified in section 17, further details of the risks of each project and what STCE will do to minimise and overcome those risks will be available in each Share Offer Document.

Money put into any Community Energy project should be considered as a long-term investment, though the Society will be looking to re-pay all investments over the life of a project rather than keeping all the capital for a full 20 years or longer. Anyone wishing to withdraw their investment early is likely to get very low returns and early repayment is at the discretion of the Board.

[1] See https://lightfootenterprises.org/climate-action/

[2] See www.bigsolar.coop

6. Use of Assets and Surpluses

The assets of the Society must be used for Community Benefit, this includes both physical assets such as a solar farm and the year-on-year surpluses generated by the projects. The FCA rules insist on an asset lock so that the assets of the Society cannot be transferred except to another similar organisation.

Any annual surplus (after all expenses including payment of interest and capital repayments) must be either put into a general reserve for the development of the Society or paid out for social or community purposes within the areas of Shropshire and Telford.

7. Community Benefit Funds

If STCE proceed with the purchase of the Twemlows solar farm nr Whitchurch there should be a sizeable surplus generated, up to £4m over 18 years, though actual figures will depend on the performance not only of the Twemlows site but also other sites in the same portfolio *(see sections 10 and 11 and appendices 1-3).* This surplus will be split between investments in other renewable energy projects and distributions to local causes through a Community Benefit Fund.

Twemlows has been generating electricity since 2016 and Community Benefit Funds have been paid out over the last five years. This fund was initially managed partly by Gower Power, partly by the Shropshire Rural Community Council (now known as Community Resource), in the last two years STCE have taken over Gower Power's role. Beneficiaries have included the Whitchurch Blackberry Fair, a community orchard and several village halls. £20,000 was made available in early 2022 and £22,500 in early 2023. Half of this is being administered by the Community Resource for community projects within 15 miles of Twemlows. The other half is available for environmental projects throughout Shropshire and Telford including:

- Household Energy Surveys delivered by Lightfoot in South Shropshire. This money helped to fund a review of the service, updating report and survey documents, training of new volunteers and some subsidised surveys.
- New lighting and rainwater harvesting for the Park Lane Centre, Telford.
- Solar panels for the Festival Drayton Centre, Market Drayton.
- Insulation work for Longnor Village Hall.
- Energy efficiency measures for the United Reformed Church, Shrewsbury.

STCE are keen to maintain payments at a similar level to similar projects in the Whitchurch area. The Society would also like to see money invested in further community energy projects around Shropshire and Telford.

Any future projects STCE undertake are not likely to generate substantial community benefit funds, or at least not in the early years, as the Feed In Tariff, which has helped to generate these funds, is no longer available for new projects. The main community benefit of future projects will be in the form of reduced carbon emissions, jobs, biodiversity on our project sites and local investment opportunities.

8. Our Key Aims 2023-25

Our key aims in the next three years are to:

1, Carry out the purchase of Twemlows solar farm, *(see section 10)*, inc running a successful share offer, but this is dependent on the successful conclusion to negotiations with CORE.

2, Ensure that any sites we control are well managed, including working on improving biodiversity.

3, Encourage learning opportunities around the site and any other sites we develop, including school visits, working with the local community etc.

4, Develop a good reputation and working relationship with local Councils, businesses and community groups.

5, Investigate feasibility of at least 3 other renewable energy or energy efficiency schemes, this to include pursuing the possibility of a heat network and wind turbine scheme in Bishop's Castle.

6, Work towards bringing at least two other renewable or energy efficiency schemes to fruition.

9. Activities in 2021 and 2022

With funding from the Next Generation grant scheme we undertook six main activities:-

1, A scoping study, carried out by Sharenergy for community renewables options in Shropshire and Telford, the most likely option arising from this work is the idea of a heat network and wind turbine project in Bishop's Castle.

2, Early work on the Bishop's Castle Heat and Wind project including

- commissioning a wind constraints study by Locogen,
- undertaking a public consultation which included a survey and public meeting. The survey showed 82% strong support for the heat network and 78% strong support for the wind turbine.
- submission of a proposal to include both the heat network and wind turbine in the Bishop's Castle Neighbourhood plan.
- commissioning a landscape and visual impact appraisal (LVIA) for two potential wind turbine sites from Amalgam Landscape,
- commissioning a pre-application submission to Shropshire Council,
- commissioning a heat network study from Carbon Alternatives and Sharenergy.

3, Investigation by Sharenergy of a heat network for Shrewsbury Town Centre, including assessment of current energy use for the library, theatre, swimming pool and two shopping centres. A report was handed to Shropshire Council who are preparing a Heat Network Development Unit funding bid to take the proposal forward.

4, Modelling of renewables options for the Marches (Herefordshire, Shropshire and Telford & Wrekin) to get us to 50% of local electricity use being sourced by local renewables in line with the Local Enterprise Partnership. This work was carried out by Marches Energy Agency (MEA), it shows that to achieve this target a mix of renewables will be required, including a considerable number of wind turbines.

5, Work on energy efficiency action within the Whitchurch area. This work was also undertaken by MEA who made contact with a number of local organisations and held a public meeting online.

6, Partnered with Big Solar Co-op for the delivery of rooftop solar in the Shropshire and Telford area. Funding gained from Shropshire Council has enabled the appointment of a part time Shropshire & Telford co-ordinator for the Big Solar Co-op, Kevin Oubridge. We have been working closely with Kevin and expect sites to move to the delivery phase later in 2023.

In addition, we have continued discussions with CORE re the potential purchase of Twemlows solar farm and have joined the working group set up to manage this transition, alongside groups in Somerset, Wales, Kent and the Isle of Wight.

10. Twemlows Solar Farm

The Twemlows solar farm is a 10MW facility, that is around 40,000 panels, producing enough electricity to power around 3,400 homes. It is just south of Whitchurch and was commissioned in 2016. Twemlows is a well built and well managed facility with good quality equipment and wide spacing between the rows which gives very good production figures. The site is registered for the Feed in Tariff until 2036, this also provides a guaranteed export price for the electricity produced. All the electricity produced is exported to the grid as there are no major users nearby for a direct wire arrangement.

The original idea was that at least half of this site would be in community ownership, but this has not yet happened.

STCE will be buying the Twemlows solar farm from Community Owned Renewable Energy LLP (CORE), a vehicle set up by Big Society Capital (BSC) and Power to Change (PtC) to oversee the transfer of solar farms into community ownership. CORE is also working with four other societies across England & Wales with a total portfolio of 36MW. We will be working collaboratively with the 4 other like-minded communities whilst the senior debt finance remains in place, for about 13 years. Our inter community group is called Community Energy Together *(see section 11).* Each society gets one seat on the board of CET.

The five groups will each own their own sites, but we have committed to working together and supporting each other. The total solar portfolio will add a significant 20% to the total of community owned solar in England and Wales.

CORE has set up two Community Interest Companies, one for each half of the Twemlows site. If the purchase proceeds STCE will take over ownership of the two CICs through a subsidiary.

One senior lender (abrdn) is providing most of the capital for the portfolio with an additional short term junior loan provided by PtC and BSC. The current plan is that STCE will raise around £730k in a local share offer, we are currently working to issue this share offer in July 2023.

The portfolio of sites will be managed by Bright Renewables, STCE will be a member client of Bright.

Details of CORE, the Next Generation programme and of the other groups involved can be found here, https://www.next-generation.org.uk/community-solar.

Twemlows solar farm is registered for the FiT, which will give a guaranteed income of 8.6p/kWh initially, yielding £854,000 income in the first year (2023-24), and which is index linked. The current Power Purchase Agreement (PPA) should bring in £790,000 in year one and a PPA has been agreed up until 2026 with EDF. Finance Earth have produced a finance model for Twemlows which shows total revenues over the next 18 years are projected to be around £28M, although this depends on a number of factors, including inflation, with around £4.5m to distribute after STCE's costs have been covered. This model has been checked for us by Sharenergy.

Finance Earth have also modelled some downside scenarios: (see appendix 3)

1. whereby generation is reduced.

2. whereby power prices are reduced (after the already agreed PPA ends).

3. whereby inflation is lower.

Each scenario reduces the income available whilst having less effect on costs, so the surpluses generated are reduced. However, they do not appear to affect STCE's ability to repay the loans and share capital or to pay interest to its shareholders. A perfect storm of multiple downsides is always possible but is considered to be unlikely.

The surpluses generated by Twemlows will pay for the costs of running STCE (including accounts, insurance, etc) and provide around £4.5m for investing in other renewable energy projects or donating to other local projects through a Community Benefit Fund.

Details of the finances of Twemlows and the overall portfolio can be found in Appendices 1 to 3.

11. Community Energy Together (CET)

Community Energy Together Ltd has a number of roles:

1. It manages junior debt finance provided by Power to Change and Big Society Capital. The junior debt term is 5 years.

2. It owns CORE Portfolio Investments Ltd which manages cross collateralised senior debt finance provided by lender abrdn. . The senior debt term is 15 years. (CORE Portfolio Investments Ltd is to be renamed CET Portfolio Investments Ltd once the communities have completed their transactions)

3. It arranges the contract with Bright for asset management of the portfolio of solar sites.

4. It arranges inter group loans as required.

5. It may also arrange a portfolio wide bond offer to repay more of the junior debt.

Once the loans are repaid CET could be dissolved.

Figure 1 is a diagram to illustrate these loan flow and security arrangements post community purchase of assets, and during the lifespan of the junior loan.

Loan structure at completion

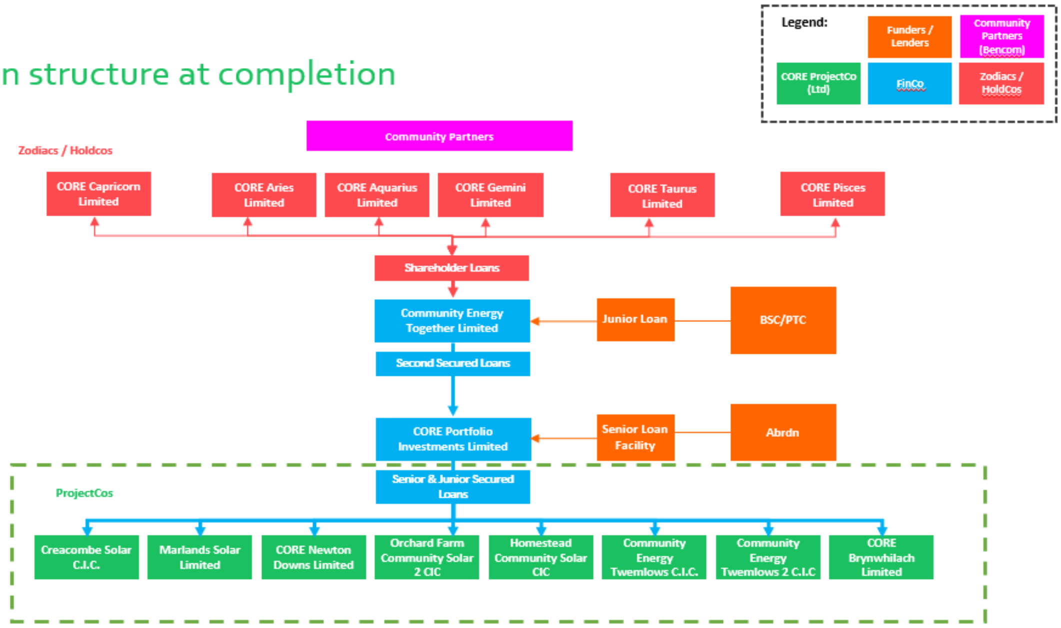

Figure 1– Loan Structure at Completion

Figure 2 is a diagram to illustrate entity ownership structures.

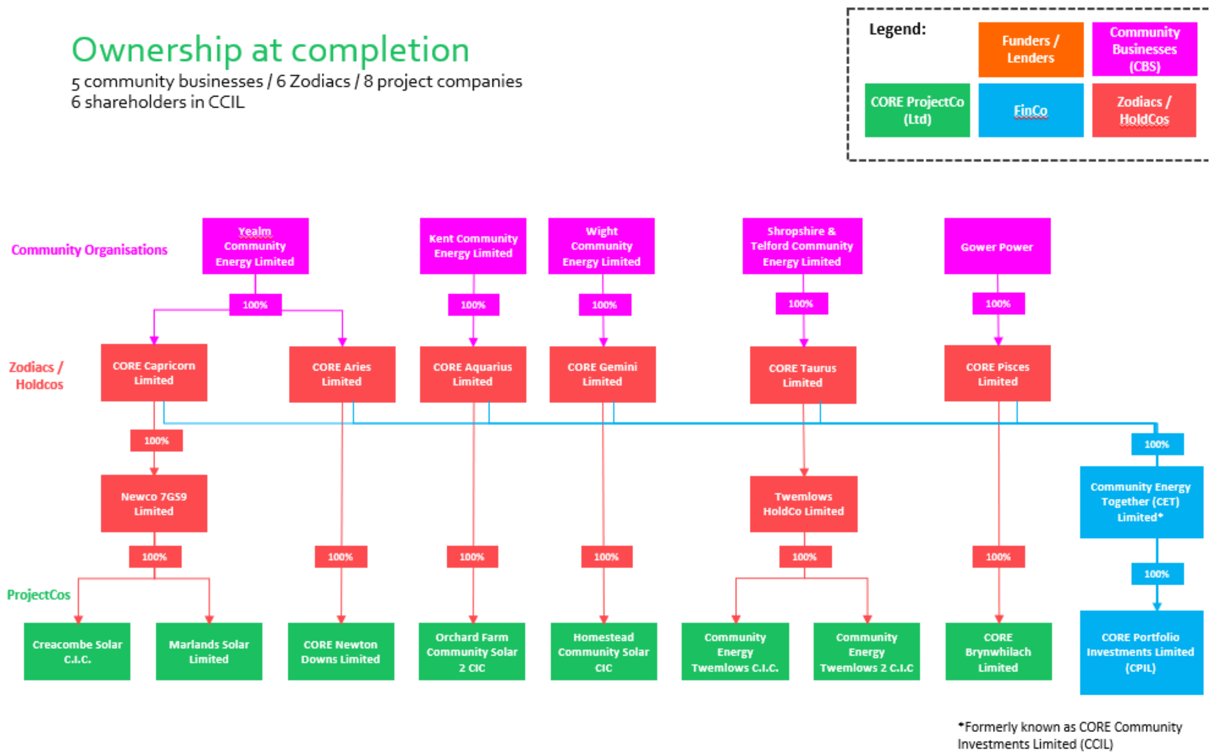

Figure 2 – Ownership Structure at Completion

Further information on the other Community Benefit Societies in CET

Community group	Solar assets to be acquired	CORE acquisition date	Description
Yealm Community Energy (YCE)	Newton Downs, a 5MW solar farm near Plymouth and Creacombe and Marlands, respectively a 4.4MW and 2.9MW site in South Devon	2017; Creacombe commissioned 2019, Marlands commissioned 2020	YCE is a Devon-based community benefit society, which was established in July 2015. Key objectives: • The Yealm area to generate its own low carbon energy from community-owned generation. • Generating a community fund to re-invest in the local community. • Supporting energy saving and local sustainable energy generation, both to decarbonise and reduce energy poverty.
Kent Community Energy (KCE)	Orchard 2, a 5MW solar farm near Sittingbourne	2018	KCE is a community benefit society based in Kent. Key objectives: • Improving the biodiversity of the site.

			• Supporting sustainable energy initiatives across the whole Kent County Council area.
Wight Community Energy (WCE)	Homestead, a 3.9MW solar farm near Newport on the Isle of Wight.	2019	WCE is a community benefit society on the Isle of Wight. WCE had been involved in managing the Homestead site since 2016, and has carried out a successful share raise for £700,000 community shares. Key objectives: • Addressing the fuel poverty levels on the island. • Increasing awareness around energy efficiency • Increasing the supply of renewable energy.
Gower Power	Brynwhilach, a 5MW solar farm near Swansea	2019	Gower Power is based in Swansea and is in the process of converting into a community benefit society. Key objectives: • Develop more renewable energy generation and supply. • Pilot and establish innovative nature-oriented health and well-being interventions. • Create and support more ecologically sensitive food supply chains. • Facilitate meaningful community participation through shared ownership.

Further Information on Bright Renewables

Bright Renewables will continue to offer us and our partnering communities a full range of asset management services post asset purchase. These services include contract management, technical management, financial control & reporting, company secretarial services and board support. Their staff draw on expertise in a range of sectors, from operational asset management, policy development and energy supply.

Bright Renewables' industry position gives them the advantage of scale when arranging and negotiating portfolio-level and individual contracts, from preferential rates on Power Purchase Agreements to reduced insurance premiums. They work continually to optimise all the value of the assets they manage, including lease and planning extensions, Power Purchase Agreements, operational efficiency, and new renewable project initiatives. Each community group will be a member of Bright Renewables post asset purchase, some are members already.

12. Next Generation Grant

As part of the CORE process in transferring the ownership of Twemlows into community ownership significant support has been made available to STCE. This has included invaluable training in how to set up and run a CBS, support in agreeing our rules, advice on running community benefit funds, on marketing and social media. In addition, we were invited to apply for funds through the Next

Generation programme. This money can be spent on developing our materials, web site, share offer etc but also on feasibility studies for other potential projects around Shropshire and Telford. We can apply for up to £225k from the Next Generation Fund. There is also some in kind support, this grant will need to be drawn down by the end of 2023.

13. Other Opportunities

The community renewables scoping study carried out for STCE by Sharenergy in 2021 highlighted the issues around developing Community Energy without the assistance of a Feed in Tariff. There are severe planning issues around wind turbines, ground mounted solar installations are difficult to make pay without the Feed in Tariff. There are very few hydro possibilities in the area, though there is the possibility of a hydro on the weir in Shrewsbury, work on this is being led by Shropshire Council. This leaves rooftop solar, heat pumps, heat networks, and energy efficiency as the most likely projects to take forward. We are actively exploring the possibility of a wind turbine linked to the heat network proposal in Bishop's Castle and have applied for additional funding from the Marches Local Enterprise Partnership (LEP) to take this scheme forward.

14. Market and Regulatory Context

The Twemlows site benefits from the Feed In Tariff, this continues to 2036 and is index linked. Being registered for the FiT also gives the site a guaranteed minimum electricity export price. Electricity prices rose significantly in the second half of 2021 and attractive Power Purchase Agreements (PPAs) have been signed through to 2026. Any new schemes to generate electricity will not get the FiT or a guaranteed export price and therefore will need to sell the electricity either directly to a user or through a Power Purchase Agreement.

Domestic renewable heat projects can no longer qualify for the Renewable Heat Incentive which provides quarterly payments over 7 or 20 years. The replacement Boiler Upgrade Scheme offers a £5k upfront grant for air source heat pumps and £6k for ground source. There is no non-domestic equivalent scheme, funding is available however for larger heat networks (100 dwellings plus) through the Green Heat Network Fund.

There are severe planning restrictions on onshore wind turbines, there are proposals to relax these restrictions, we have taken part in consultation on these changes.

Battery storage is currently still fairly expensive, but the price should fall rapidly and the price differential for electricity at different times of day is likely to increase so we will be keeping an eye on the market to see when we can instigate a battery storage scheme.

We expect this market and regulatory situation to change rapidly over the next few years as the Government and local councils have committed to decarbonisation of the UK economy by 2050 or earlier and this has wide public support. The Marches Local Enterprise Partnership (which includes Shropshire and Telford & Wrekin Councils) has a target for 50% of the area's electricity use to come from locally generated renewables by 2030. In addition, moves to electrify our transport and heating will increase electricity demand at a greater rate than can be covered by increased efficiency and this will result in a need for additional renewable energy capacity. We intend to place ourselves in a position where we can encourage and take advantage of these changes.

15. Financing STCE

Development costs for the society have been included in our Next Generation grant application. This includes funds for:

- Further work on this business plan.
- Negotiations and advice re purchasing Twemlows.
- Issuing a share offer document.
- Setting up an improved website and social media communications.
- Management costs for the first year of operation, (to end of December 2023).
- Feasibility studies for further renewable energy and energy efficiency schemes.
- Improving the biodiversity of the Twemlows site.

From Jan 2024 the society's costs will be covered by surpluses created by the Twemlows solar farm, if the purchase proceeds. A minimum surplus of £30k per year should be available from Twemlows, after covering the costs of running STCE this should leave around £20k/annum for Community Benefit. These figures will rise significantly after the junior loans to PtC and BSC are paid back in 2029.

If the Twemlows site is not purchased, then STCE will have to find alternative income if it wishes to continue. STCE will not receive income from any Big Solar sites.

16. Governance of STCE

The founder members of STCE came from the working group set up in 2020 with two members leaving in 2022 (Nick Saxby and Noami Wrighton), one leaving in 2023 (Tim Baldwin) and two joining in 2023 (Mark Latham as a co-opted director and Clare Bellingham as a supporter). They will see STCE through the purchasing of Twemlows and the associated share offer. STCE's first AGM was held on June 22nd 2023. In the summer of 2024 a second AGM will be held to appoint a new board to carry on the work of STCE from that point. Any member of STCE will be eligible to stand for election to the new board. After that at each AGM one third of the current Directors will stand down but they can choose to re-stand if they wish to.

Two members of the STCE board currently work for Sharenergy. Sharenergy has supported the setting up of STCE but is also quoting for work on the development phase, including working on feasibility studies, finalising the Twemlows share offer and managing STCE in it's first year. The two Sharenergy employees will not take part in any decisions on these quotes to avoid any conflict of interest.

Sharenergy was set up in 2011 to develop, encourage and manage co-operatives and Community Benefit Societies working on energy projects. It works with over 50 such groups across the UK. It has recently helped Reading Hydro and Corwen Hydro with their share offers and is undertaking a number of renewable energy feasibility studies using RCEF funding.

The STCE Directors' give their time on a voluntary basis. However, Directors can carry out paid work for organisations employed by STCE to carry out specific tasks, such work is covered by STCE's conflict of interest policy.

Bright Renewables will manage the running of Twemlows solar farm and of the two CICs associated with it. Bright is a 100% community owned company that manages the UK's largest portfolio of community-owned renewable energy assets, specialising in both ground mount and rooftop solar sites. Bright's goal is to start a community renewables revolution in the UK by delivering cost-effective asset management services of the highest quality.

STCE's first financial year ended on the 31st of March 2023, the only income in that year was from the Next Generation grant. In future years the financial year will end on 31st December to line up with the accounts of the Twemlows companies.

17. Risks

These risks will be covered in more detail in the individual share offers as they relate to individual projects.

Risk	**Response**
1, Twemlows underperforms once bought, there are technical issues	Solar is a relatively reliable technology, Twemlows is a well-engineered site with a good track record. If problems do occur, then the community benefit fund and share dividends would need to be reduced. In a severe situation, if this is not enough, we will be able to call for assistance from the other sites in the portfolio. *(see note 1 below).* Downside scenarios are covered in Appendix 3
2, Electricity prices fall	Twemlows has PPAs signed until 2025 and a guaranteed export price, linked to inflation till 2036, by that time most of the loans should have been paid off, a significant fall in electricity prices could however affect our income in later years and reduce amounts available for the community fund and share dividends.
3, The FiT tariff is withdrawn	This is highly unlikely; the Government has effectively signed a contract to continue FiT payments linked to inflation for schemes already registered.
4, Inflation is more, or less, than predicted	Higher inflation would increase our FiT income and export price and would be likely to increase electricity prices post 2036 so is not a risk. Low inflation would lower our income but also lower our costs for operations and asset management.
5, Other sites in the portfolio underperform or lose income	All the schemes are ground mounted solar, all are up and running with known track records and solar is a relatively reliable technology, much less likely to have issues than hydro or wind schemes. There should be enough financial room within each scheme to allow for any problems to be sorted internally. In an extreme case we might be called upon to help with inter group loans. This risk is balanced by the lower cost of borrowing from being in the portfolio and the possibility of support if we are the scheme that has problems. *(see note 1 below)*
6, The landlord wants the Twemlows site back	The landlord for the Twemlows site has signed a 25-year lease with the possibility of a 5-year extension.
7, Planning issues restrict life of Twemlows site	The Twemlows site has 25-year planning permission in place. It is possible we could apply for an extension to this, but this would be an extra, we have not assumed any extension in our financial forecasts.
8, Twemlows site clear up costs are prohibitive	It will be STCE's responsibility to clear the site when the planning permission expires. The Community Benefit Fund is arranged such that sufficient funds are held back to cover any site clear up costs. These are expected to be low as there should be significant recyclate value in the materials to be removed.
9, Other STCE schemes have financial issues	We will need to assess other schemes on a case-by-case basis, do separate share offers for any other schemes and keep a distance between them. New schemes will need to be approved by the

	current members. We will look to do a variety of schemes to spread the risk.
10, STCE fail to raise enough in shares to cover costs of buying Twemlows or other projects	The share offer will be managed by Ethex, a national body with considerable expertise in this field. Sufficient funds for advertising the offer and for use of website, social media, developing local contacts etc have been included in the Next Generation grant application. Inter group loans are available if some groups raise more than their target and others raise less. CORE is likely to grant an extension if enough share capital isn't raised to purchase Twemlows in our offer window. We could extend the offer, carry out a second share offer or do a bond offer. Future projects will only go ahead if a minimum set amount can be raised in shares.

Note 1 - Procedure to be followed if one of the CET groups has financial issues.

All the solar farms are covered by insurance, however, there is the possibility that issues affecting any of the other solar farms could limit the ability of STCE to pay interest to its members but only after working capital is used up and the following step by step procedure is followed:

1, The society which owns the problem asset forgoes its £1,000 per MW additional Community Benefit Fund for that year.

2, That society's shareholders receive reduced or zero interest on their shares for that year.

3, Additional surpluses that would be otherwise available to the other societies are utilised.

4, The other societies have their extra Community Benefit Fund reduced.

Only if the above four mechanisms are not sufficient to cover the issue will the other societies' shareholders' interest payments be affected.

The interest repayments on the loans are protected unless the above mechanisms are not sufficient to cover the issue. It is considered that the advantages of the group set up of CET outweigh this risk of potential reduced income if one or more of the other groups have issues with their solar farms.

18. Directors and Advisors

STCE Founding Directors

Robert Saunders, Chair

Robert has been active in environmental organising and campaigning since 1979. He is Vice-Chair, Transition Telford; Secretary, Wellington LA21; a founding member of Zero Carbon Shropshire and a member of the Marches LEP energy strategy group. He holds a Dip. HE, in Environmental Science, and a B.Sc. Managerial and Administrative Studies.

Robert formerly worked for Marches Energy Agency on energy efficiency and renewables projects, for the Neighbourhood Initiatives Foundation on community participation and various businesses in purchasing.

Fran Hunt, Secretary

Fran worked for the Automobile Association for 10 years as an IT Project Leader. She has since worked as a Project Manager/Coordinator at a number of environmental and charitable organisations including the Small Woods Association, Shropshire Wildlife Trust and Marches Energy Agency. Fran is currently employed by Sharenergy as a Development Project Officer, and volunteers with many organisations in her spare time!

Dave Green, Treasurer and CET Representative

Dave has worked in community energy, energy advice, assessment and training for over 15 years. He was energy officer for the award-winning Household Energy Service in Bishop's Castle from 2005-10, he was a Director of Shrewsbury Hydro from 2015-17, he has worked with a number of community energy groups, including Stretton Climate Care, South Staffs Community Energy and Greening Alton.

Dave is a registered domestic and non-domestic energy assessor with clients including the National Trust and the Central England Co-op. Dave currently works as Development Manager at Sharenergy and is working on a number of projects including renewable studies for a parish in Worcestershire, studies for a potential 2MW solar farm in Lancashire and heat projects in Gloucester & Shropshire.

Dave has a BA and Diploma in Architecture and numerous qualifications in energy advice and assessment. He has helped to set up a housing co-op and a co-operative consortium of energy advisors. He was a trustee of Shropshire Wildlife Trust for seven years and Treasurer for two years.

Howard Betts

Howard is retired from being part owner and Director (technical sales) of a new company Univercell Battery co, which worked in the design and manufacture of special batteries. That business was acquired by Aceon when he retired and is still going with its new owners. Previously he worked in technical management with Ever Ready in the UK and overseas.

Howard has a BSc Chemical Engineering and a DMS post grad Diploma in Management Studies, he is a Member of the Institute of Chemical Engineers and of the Institute of Quality Assurance.
Since retirement Howard has been involved with the local village hall and Parish Council, leading the projects to get 10kW PV, LED lighting upgrade and storage batteries for Little Wenlock Village Hall.

Mark Latham

Mark is an ecologist with over 15 years of practical experience working for academic institutions, private ecological consultancies, statutory nature conservation organisations and local government.

Mark is a Technical Director at a leading UK infrastructure services and engineering company where his work seeks to embed Biodiversity Net Gain and Nature Based Solutions into development projects. He has worked on the ecological elements of onshore wind, micro-hydro, offshore tidal and solar farm developments, including some of the largest schemes in the UK and Europe.

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• Appendix 1 Twemlows Finances

(information supplied by Finance Earth)

Twemlows 1&2 Historic Performance

Twemlows 1 financial snapshot

Select financial information	FY 2019	FY 2020	FY 2021	FY 2022
Revenue ('000s)	**694.6**	**597.0**	**662.3**	**726.9**
Operating expenses ('000s)				
Insurance	5.0	4.9	5.1	6.2
Electricity (import)	20.9	16.1	34.5	31.8
O&M	42.8	45.4	33.3	35.3
Business rates	8.1	9.5	9.4	9.5
Rent	31.4	32.2	32.9	35.2
Meter operator costs	13.4	1.6	1.8	1.8
Management charges	15.0	20.0	20.0	0.0
Asset management	10.0	31.5	10.0	30.0
Audit and accounting fees	10.2	14.9	2.9	7.2
Community benefit fund	14.5	11.3	11.9	22.5
Portfolio support costs	0.0	0.0	0.0	19.8
Other administrative expenses	0.7	0.8	1.1	1.8
Total operating expenses	**172.0**	**188.1**	**163.0**	**201.1**
EBITDA (adjusted)	**522.6**	**408.9**	**499.3**	**525.8**

EBITDA = earnings before interest, tax, depreciation and amortisation.

Twemlows 2 financial snapshot

Select financial information	FY 2019	FY 2020	FY 2021	FY 2022
Revenue ('000s)	**696.6**	**605.3**	**644.3**	**777.2**
Operating expenses ('000s)				
Insurance	4.9	6.7	5.1	6.0
Electricity (import)	6.7	9.6	28.5	42.1
O&M	32.2	42.0	34.5	36.0
Business rates	9.9	9.5	9.4	9.5
Rent	32.3	33.2	33.8	36.2
Meter operator costs	13.5	1.6	1.8	1.8
Management charges	10.0	20.0	20.0	0.0
Asset management	15.0	29.0	30.0	30.0
Audit and accounting fees	9.6	14.2	3.6	7.2
Community benefit fund	14.5	15.1	11.9	22.5
Portfolio support costs	0.0	0.0	0.0	19.8
Other administrative expenses	0.8	0.7	1.5	1.8
Total operating expenses	**149.2**	**181.6**	**180.1**	**212.9**
EBITDA (adjusted)	**547.3**	**423.7**	**464.2**	**564.2**

Commentary on historic financial performance

- Financial information for FY19, FY20 and FY21 is derived from audited accounts after making adjustments for non-recurring items.
- Financial information for FY22 is derived from pre-audited management accounts after making adjustments for non-recurring items.
- All information in the historic performance and financial forecast sections is deemed to be correct as of the share offer launch date.

Revenues

- Revenue is generated from two sources, the sale of power and from public subsidy.
- Power is sold based on pre-agreed power purchase agreements (PPAs). PPA revenues in the model are based on outstanding contracts for the assets, which run until 31st March 2026. Future PPA revenues are modelled based on power curves provided by specialist providers, AFRY, Aurora and Baringa.
- In addition to revenues from PPAs, both Twemlows 1&2 generate revenues from government-backed subsidies. Both assets generate subsidy revenue through the feed-in tariff (FiT) regime, which provides a quarterly payment from the government based on renewable electricity generation. Prices under the subsidy scheme are indexed to RPI and increase with inflation.
- All revenues are linked to the assets' power generation. The level of generation has fluctuated year-on-year depending on factors such as generating conditions, e.g. irradiance, air temperature. While generation fluctuates on a year to year basis, long term forecasts provide an effective tool to understand revenue generation.

Total revenue for the Twemlows 1&2 was £1.2m in 2020, £1.3m in 2021 and £1.5m in 2022. Compound annual growth rate for revenues from 2020 to 2022 was 11.8%. This uplift is primarily driven by improved power market conditions in 2022 and better than forecasted generation and irradiation.

Operating expenses

- Insurance – cover is held for both Operational and Terrorism risks with Allianz. This cover has been secured through to May 2025. Insurance for the asset is periodically renewed and is actively managed by the broker, Sustain IB.
- Electricity (import) - consists of energy supply costs for onsite energy usage. Energy Supply contracts are actively managed by Bright Renewables, who regularly test the market to maximise value for money for the asset.
- “O&M” - represents the operation and maintenance costs for maintaining the asset. Twemlows 1& 2 have O&M service contracts with PSH through December of 2026. This contract is actively managed by Bright Renewables who work closely with PSH to facilitate efficient operations.
- Business Rates – or National Non Domestic Rates are charged by the local council. These fees are charged at the rateable value of each asset. The local council for Twemlows 1&2 is Shropshire District Council.
- Management charges are fees paid to the parent company of each asset. Management costs associated with the current owner, CORE LLP, are not incurred from 2022. From 2022 onwards, fees paid to the parent company are to pay CBF, and so management charges are now accrued

under the community benefit fund line. Management costs associated with the current owner, CORE LLP, will not be incurred after the sale of the assets to the Community.

- Asset management relates to fees and other costs due to the asset manager, Bright Renewables. As asset manager, Bright Renewables provide a suite of services spanning technical, operational, financial and governance matters. Key services include brokering the sale of energy to offtakers and managing key stakeholder contracts such as O&M providers, insurer, and landowners.
- Community benefit fund covers distributions made to Shropshire and Telford Community Energy for reinvestment in community energy projects and environmental and social initiatives across the County of Shropshire and Telford. The variance in community benefit fund payments between 2020 and 2021 is due to additional variable CBF distributions made during the COVID-19 pandemic in 2020.
- 2022 costs include portfolio support costs, which are the costs of maintaining the entities and structures needed to service the Abrdn senior debt, which has been in place since December 2021.

Total operating expenses for Twemlows 1&2 were £370k in 2020, £343k in 2021 and £414k in 2022. From 2020 to 2022, operating costs grew at a compound annual growth rate of 5.8%. Operating costs are largely fixed and mainly increase by RPI. Compound annual growth rate for RPI for 2020 to 2022 was 7.8% for comparison (4.1% in 2021 and 11.6% in 2022). The increase in operating costs above inflation was primarily driven by the addition of portfolio support costs tied to the Abrdn senior debt.

Conclusion

- EBITDA (Earnings before Interest, Tax, Depreciation & Amortisation) is derived from audited accounts and un-audited accounts for FY 2022 and has been adjusted for non-recurring items, such as refinancing fees. Combined EBITDA for Twemlows 1&2 was £833k in 2020, £964k in 2021 and £1.1m in 2022. Compound annual growth rate for EBITDA from 2020 to 2020 was 14.4%. EBITDA improvement from 2020 to 2022 was primarily driven by the increase in revenues mentioned above.

Twemlows 1&2 forecast

Cashflow projections (£000s)	**Years 1-5**	**Years 6-10**	**Years 11-15**	**Years 16-18**
Total revenues	9,911	9,264	7,139	2,024
Total operating expenses	(1,941)	(2,117)	(2,295)	(1,068)
EBITDA	**7,970**	**7,147**	**4,844**	**957**
Corporation tax	(259)	(1,203)	(932)	267
Movement in working capital/VAT	81	21	228	(49)
Senior debt (interest and capital)	(3,852)	(3,543)	(2,865)	-
Junior debt (interest and capital)	(3,182)	(852)	-	-
Community equity rate	(209)	(910)	-	-
Net Cash Movements Across Refinancings	(6)	36	179	-
Reserve movements (DSRA/MRA)	(403)	(186)	570	-
Movement in Period	**140**	**509**	**2,023**	**1,174**
Opening cash	426	565	1,074	3,097
Movement in period	140	509	2,023	1,174
Closing cash	565	1,074	3,097	4,271
Reserves (DSRA/MRA)	851	815	-	-
Closing cash + reserves	**1,417**	**1,889**	**3,097**	**4,271**

Commentary on Twemlows financial forecasts

The key assumptions underlying these projections are as follows:

- Shropshire & Telford Community Energy raises £730k through the Share Offer.
- CET community groups raise combined £2.5m through the Share Offers.
- CET community groups raise £10.5m of Junior Loan capital from Big Society Capital and Power to Change, which is due to complete at the same time as completing this Share Offer. The Junior Loan of £10.5m is based on forecasted cash available and £2.5m combined equity raise. If the cash position at closing or combined equity raise is lower than expected, the Junior Loan will need to be increased.
- The capital raised from this Share Offer, the other community groups Share Offers and the Junior Loan Capital is used to repay CORE and transaction costs associated with the financing.

- This will bring the solar assets Twemlows 1&2 into the full ownership of Shropshire & Telford Community Energy.
- Collectively, Twemlows 1&2 generate around 9,800 MWh of electricity each year (decreasing by 0.4% each year to account for panel degradation). This is based on the long-term average yield across the solar assets as advised in 2021 by CET's technical adviser, Everoze Partners.
- Both Twemlows 1&2 receive payments to June 2036 through the Feed-in Tariff generation tariff at a rate of £86.1/MWh (8.61p/ kWh) (as at 1st April 2023, increased each year in line with RPI).
- Both assets have entered into forward sales contracts, or power purchase agreements (PPAs), for the sale of power exported at a contracted fixed price up to March 2026. Under the PPAs, exported electricity is sold at a fixed contracted price. PPA prices for years October 2023-March 2026 are, on average: £100.56/MWh across the two assets.
- Thereafter, the solar assets are modelled to sell exported electricity at a price derived from a blended power curve against forecasts from Afry, Aurora, and Baringa in Q3 2022.
- Inflation assumptions have been aligned with UK government (OBR) forecasts, as per the latest update in March 2023, subject to a floor of 0% (i.e. no deflation). Forecast inflation is assumed to taper to a long-term flat 2.5% lifetime Retail Price Index (RPI) and flat 2.5% lifetime Consumer Price Index (CPI).
- Corporation tax is assumed to be banded consistent with the proposed changes to corporation tax, effective from April 2023.
- Junior Loan capital is repaid on an available cash basis starting in 2024, with the final repayment modelled in 31 December 2028. Any amounts outstanding at maturity are assumed to be refinanced with further community share raises at a 6% interest rate. Please note, the refinancing is a shared responsibility across CET.
- Community share capital repayments commence following the Junior Loan redemption. Community share capital repayments are made at the discretion of Shropshire & Telford Community Energy's board, and are modelled to be fully repaid by the end of Q3 2033 (Year 10).
- Established reserve accounts (Maintenance Reserve Account "MRA", and Debt Service Reserve Accounts "DSRA") are maintained under the terms of the abrdn Senior loan agreement. The balance in the DSRA is held to meet the forecast payment due under the senior loan agreement in the next 6 month period. The balance in the MRA is held to cover forecasted maintenance capital expenditures. Any amounts unused in these reserve accounts is returned to the project at the end of the senior debt life.

Abrdn Loan (Senior debt)

The CET Community Groups have a loan from abrdn in place with an outstanding balance of £24.2m as at 30 September 2023. The senior loan is allocated across the underlying solar assets that Yealm Community Energy, Wight Community Energy, Kent Community Energy, Shropshire & Telford Community Energy, Gower Power Ltd are looking to acquire. The proportion of the senior loan balance allocated to Twemlows 1&2 is c. £7.7m as at 30 September 2023.

The abrdn loan is repaid collectively by the solar assets based on a fixed semi-annual repayment profile with the final repayment being made in December 2036. The abrdn loan bears interest at a rate of 0.1% and both interest and capital repayments are indexed to RPI. The abrdn loan is cross-collateralised with first ranking security interest over the solar array assets and shares across the group structure.

Big Society Capital / Power to Change Loan (Junior loan)

The community groups have received an offer from Big Society Capital (BSC) and Power to Change (PtC) to provide a 5-year loan of £10.5m to Community Energy Together Ltd (CET Ltd) to be invested upon successful completion of the Share Offers. The Junior Loan of £10.5m is based on forecasted cash available and £2.5m combined equity raise. If the cash position at closing or combined equity raise is lower than expected, the Junior Loan will need to be increased. The BSC/PtC loan is allocated across the underlying solar assets. Twemlows 1&2's planned share of the BSC/PtC loan is in total c. £3.1m.

The BSC/PtC loan is being progressed in parallel with this Share Offer and the Share Offers of Kent Community Energy, Yealm Community Energy, Wight Community Energy and Gower Power. Gower Power's launch may be shortly after the other four.

Whilst all the required legal documents have not yet been formally agreed, the Directors expect that the BSC/PtC Loan will complete at the same time as the completion of the five Share Offers. The Shares will not be issued unless the BSC/PtC Loan documents are signed and the funds are available to draw down. In the situation that the BSC/PtC Loan does not complete, investor funds will be returned in full.

The BSC/PtC loan interest consists of 7% per annum of fixed cash paid interest, paid semi-annually, and 1.5% fixed accrued interest annually over the capital outstanding in year 1-3, and 2.5% fixed accrued interest annually over year 4-5, due to be paid at the time of the final capital repayment. The BSC/PtC loan capital is repaid on a variable semi-annual repayment profile, based on surplus cash available after servicing all operating expenses, debt servicing to the Senior Lender, fulfilment of cash reserve requirements as set by the Senior Lender, minimum Community Benefit Fund payments, and servicing of minimum yield on community shares, subject to an overperformance clause under the Junior Loan. The overperformance clause allows for the distribution of further community benefit subject to meeting a pre-defined base case model repayment schedule.

The loan maturity is 31.3.2029 and any remaining capital at this date will need to be refinanced by CET. The BSC/PtC loan will be second ranking secured over the solar array assets and the shares across the group structure. Please note that intercreditor agreements will be in place to confirm that the Community Shares from this Share Offer will rank behind BSC/PtC loan (who rank behind the abrdn loan) in priority from payments from Twemlows 1&2.

Default arrangements

If the solar assets (on a combined basis) fail to service the abrdn and/or BSC/PtC loan then this will amount to an Event of Default. In the case of an event of default the assets may be subject to financial lock-up, and should the default not be rectified, abrdn and/or BSC/PtC may exercise their right to enforce security. Should this occur, any investments may be lost.

Security

The Community equity shares are unsecured. Shareholders cannot rely on the underlying value of the solar assets in order to cover any failure by Shropshire & Telford Community Energy to pay capital or interest on the share equity. It also means that shareholders rank behind the abrdn loan and BSC/PtC loan in respect of the payments due to investors in Shropshire & Telford Community Energy. Therefore, the ability for shareholders to enforce a claim against Shropshire & Telford Community Energy will be limited whilst the abrdn and BSC/PtC loans are outstanding.

Financial commitments

Shropshire & Telford Community Energy may raise further capital in the future to refinance the BSC/PtC loan and/or to fund further community energy and related activities.

Cash waterfall

There are several operating and financial costs to be paid by the Twemlows Assets, Shropshire & Telford Community Energy and the wider CET Community Groups in an agreed order. This is typical of renewable energy projects of this nature.

Please note that the order of payments in the cash waterfall sets out the required order in which certain costs and financing obligations (e.g. loan repayments) must be met from revenues generated by the project. Shareholders will only receive repayments on their capital after the junior loan is repaid or refinanced, at the close of its five year term, except in exceptional circumstances.

Simplified cash waterfall up to Q3 2028 (Year 5, end of the junior loan term):

1. Twemlows 1&2 operating costs.
2. Working capital buffer maintained at £30k.
3. CPIL/CET Portfolio Investments ltd operating costs.
4. Abrdn senior debt servicing.
5. Payments into reserve accounts: abrdn loan requires a portfolio debt service reserve account (DSRA) and maintenance reserve account (MRA).
6. First community benefit payment: fixed payment of £2k/MW (+RPI) made by each asset to Shropshire & Telford Community Energy (via CORE Taurus).
7. CET ltd operating costs.
8. Junior BSC/PtC debt service – cash interest is paid.
9. Community equity (interest) – once the junior BSC/PtC debt has been serviced, community interest is paid. (Community share capital repayments begin only once the junior BSC/PtC loan has been repaid.)
10. Additional community benefit payment – a further £1k/MW (+RPI) is released to Shropshire & Telford Community Energy (from the assets, via CORE Taurus).
11. All remaining funds are used to pay down the BSC/PtC loan capital (and for the final capital payment the accrued interest), subject to item 12.
12. Where Twemlows1&2, together with the solar assets that Yealm Community Energy, Wight Community Energy, Kent Community Energy, Gower Power Ltd are looking to acquire, have met minimum sculpted junior capital repayments, an Overpayment clause is triggered under the BSC/PtC loan, allowing for additional community benefit payment distributions to Shropshire & Telford Community Energy. Additional community benefits of up to £3k/MW can be retained and distributed in the case of portfolio overperformance.

Following full repayment of the Junior loan, retained funds will be returned to the ProjectCos to be distributed at the discretion of the Community Group.

Simplified cash waterfall from Q3 2028 (Year 6, following end of the BSC/PtC loan term):

1. Twemlows 1&2 operating costs.
2. Working capital buffer maintained at £30k.
3. CPIL/CET Portfolio Investments ltd operating costs.
4. abdrn senior debt service.
5. Payments into reserve accounts: abrdn loan requires a portfolio debt service reserve account (DSRA) and maintenance reserve account (MRA).
6. First community benefit payment: fixed payment of £2k/MW (+RPI) made by each asset to Shropshire and Telford Community Energy (via CORE Taurus).
7. CET ltd operating costs.
8. Community equity (capital and interest) – once the junior BSC/PtC debt has been repaid in full, Shropshire & Telford Community Energy will work to repay community share capital and interest.

9. Additional community benefit payment from remaining cash.

Simplified cash waterfall from January 2037 (end of the abrdn loan term):

1. Twemlows 1&2 operating costs.
2. First community benefit payment: fixed payment of £2k/MW (+RPI) made by each asset.
3. Community equity (capital and interest) – once the junior BSC/PtC debt has been repaid in full, Shropshire & Telford Community Energy will work to repay community share capital and interest.
4. Additional community benefit payment from remaining cash.

Appendix 2 CET Portfolio Finances

(information supplied by Finance Earth)

Community Energy Together Portfolio Forecast

Cashflow projections (£1000s)	Years 1-5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	Years 26-30
Total revenues	33,051	30,604	24,962	12,775	7,258	1,296
Total operating expenses	(6,885)	(7,492)	(8,070)	(6,041)	(3,563)	(668)
EBITDA[1]	**26,166**	**23,112**	**16,892**	**6,735**	**3,695**	**627**
Corporation tax	(1,178)	(3,914)	(3,281)	(691)	(647)	(81)
Movement in working capital/VAT	178	79	846	(80)	72	(49)
Senior debt (interest and capital)	(12,125)	(11,153)	(9,019)	-	-	-
Junior debt (interest and capital)	(9,871)	(4,013)	-	-	-	-
Community equity rate	(1,742)	(1,262)	(2,595)	(141)	-	-
Net cash movements across refinancings	66	128	465	-	-	-
Reserve movements (DSRA/MRA)[2]	(1,552)	(800)	1,728	-	-	-
Movement in period	**(58)**	**2,178**	**5,035**	**5,823**	**3,119**	**496**
Opening cash	1,771	1,713	3,891	8,926	14,750	17,868
Movement in period	(58)	2,178	5,035	5,823	3,119	496
Closing cash	1,713	3,891	8,926	14,750	17,868	18,365
Reserves (DSRA/MRA)[2]	2,594	2,467	-	-	-	-
Closing cash + reserves	**4,307**	**6,358**	**8,926**	**14,750**	**17,868**	**18,365**

[1] EBITDA is defined as earnings before interest, tax, depreciation and amortisation
[2]DSRA ("Debt Service Reserve Account") and MRA ("Maintenance Reserve Account") are part of the senior debt requirements

Commentary on Community Energy Together Limited portfolio financial forecasts

- Twemlows is part of a larger portfolio of 8 assets across the five Communities around England and Wales forming a combined 36.2MW total installed capacity.
- The portfolio has an average remaining life across the 8 assets of c. 21 years from the model start date of October 2023.
- These assets are cross collateralised under the abrdn loan (Senior Debt) and BSC/PtC loan (Junior debt) debt agreement, which ensures that if any asset underperforms (e.g. with meeting debt obligations), then the other assets will contribute towards supporting the underperforming asset, thereby maintaining integrity of the portfolio.
- In order to provide a view of the portfolio as a whole, the following financial forecasts are provided from a combined portfolio financial model, which includes all of the underlying assets:

Cashflows

- Revenues are generated from a combination of subsided income from Feed-in Tariffs (FiTs) (five assets) and Renewables Obligation Certificates (ROCs) (two assets), and unsubsidised income (one asset). Total forecast lifetime revenues are c. £110m.
- The cost items at the portfolio level are the same across the assets, on an aggregated basis. Total operating costs are modelled to increase annually with inflation until they peak at c. £1.7m in year 13 (September 2036), following which they are expected to decrease as assets reach their expected end date. Total forecast lifetime costs are c. £33m.
- Therefore, total forecast lifetime EBITDA is c. £77m.
- Total senior debt, outstanding with abrdn, at the time the transaction is expected to close is c.£24.2m. A portion of the senior debt is attributed to each of the 8 assets, which includes the cross-collateralisation aspect. The applicable financing terms are consistent across the assets (see individual descriptions for details).
- Total junior loan that is expected to be provided by BSC/PtC is £10.5m, which is expected to mature in September 2028 and is repaid on a cash available basis Any amounts remaining at maturity are assumed to be refinanced by a further community equity raise, and is the responsibility of CET. The model forecasts that c. £2.9m will be required to be refinanced at or before maturity. Financing terms are consistent across the assets.
- Community share capital inflow totals £2.35m (which is based on the combined raise of £2.5m, adjusted for transaction related costs), with capital repayments commencing following the junior loan redemption. Repayments are made at the individual societies' discretion and will vary across the five groups whilst the model forecasts that the full amount is repaid by 2039.
  Overall, the cashflows generated across the portfolio are expected to support all costs and financing in addition to a forecasted combined lifetime CBF payments of c. £20m.

Appendix 3 Downside Scenarios

(information supplied by Finance Earth)

Twemlows Downside scenarios

As part of the financial modelling, three downside scenarios have been developed, in order to visualise the impact of changes to three key assumptions.

Scenario 1: Energy generation is lower than expected

- The forecast model projects the energy generation from a site by taking an 'opening' assessed energy generation provided by a technical advisor, assessed by looking at specific site irradiation (solar irradiation based on local pyrometers and satellite data records) and the specific technical design of the site (equipment used, orientation, positioning of key engineering components) and then reduced each year for panel degradation (in this case a figure of 0.4% per annum has been advised by the technical advisor).
- For Shropshire and Telford Community Energy solar assets (Twemlows 1 & 2), the external technical advisor Everoze has provided energy generation forecasts as part of the senior debt due diligence process, on a P90 and P50 basis. Higher "P50" forecasts represent the forecast generation that Everoze modelling suggests has a 50% probability of being exceeded, while the lower "P90" forecasts have a 90% chance of being exceeded.
- P50 basis is the traditional accepted 'equity' case used by most 'owners' such as the large renewable power funds. P90 is the accepted 'debt' case used by most senior lenders to project a downside scenario to size their risk and thus what they are traditionally prepared to lend to a project. P90 is considered a prudent generation forecast view. Under a P50 case, the Twemlows 1 & 2 assets generate an average of c. 9,000 MWh of net electricity each year.
- To model a downside case of lower than expected energy generation, the expected energy generation has been changed from P50 to P90 generation curve for the lifetime of the project.
- As a result:
    - Under a P90 curve, Twemlows 1 & 2 generate c. 8,700 MWh of net electricity each year.
    - Total lifetime revenues are expected to be £27.3m, a reduction of -4%.
    - Operating costs are unaffected, with the exception of rent, which decreases by 0.4% due to the proportion of "income rent", which is calculated on a % of revenues (which have also decreased).
    - Senior debt payments are unaffected.
    - Junior capital repayments are resculpted, as the BSC/PtC loan is repaid on a variable semi-annual repayment profile, based on surplus cash available. Under this scenario, the amount outstanding at maturity of the junior loan is expected to increase to c. £600k, vs £255k in the base case.
    - Community shares capital repayments commence following the Junior loan redemption. Repayments are subject to Shropshire and Telford Community Energy's discretion and are modelled to be fully repaid by Q4 2033, vs Q2 2033 in the base case.
    - The forecasted cash balance at the end of the forecast in this scenario is £3.3m, vs £4.2m in the base case scenario. As a result, the forecasted total community benefit distribution potential could be up to c. £4m (i.e. £3.3m of cash + fixed CBF distributions of £700k), vs c. £5m in the base case (before CBS running costs are allowed for).

Scenario 2: Power prices (outside of contracted PPA period) are lower than expected

- The forecasted model assumes that all assets receive payments for exported electricity at the contracted fixed price for power purchase agreements (PPAs) to March 2026.

- Thereafter, the solar assets are modelled to sell exported electricity at a price derived from a blended power curve (forecast wholesale power prices from Q1 2023 to Q4 2060) against forecasts from Afry, Aurora, and Baringa provided in Q3 2022.
- To model the scenario that electricity is sold at a lower than expected power price, the blended power curve in this scenario is lowered by -10% for electricity sales from PPA expiry (March 2026) until the end of the project life.
- As a result:
    - Total lifetime revenues are expected to be £26.9m (-5%).
    - Operating costs are unaffected, with the exception of Rent, which decreases by 0.6%, in line with mechanics described in Scenario 1.
    - Senior debt payments are unaffected.
    - Junior capital repayments are resculpted, as the BSC/PtC loan is repaid on a variable semi-annual repayment profile, based on surplus cash available. Under this scenario, the amount outstanding at maturity of the junior loan is expected to increase to c. £570k vs £250k in the base case.
    - Community shares capital repayments commence following the Junior Loan redemption. Repayments are subject to Community discretion and are modelled to be fully repaid by Q4 2033, vs Q2 2033 in the base case.
    - The forecasted cash balance at the end of the forecast in this scenario is £3m, vs £4.2m in the base case scenario. As a result, the forecasted total community benefit distribution potential could be up to c. £3.7m (i.e. £3m of cash + fixed CBF distributions of £700k), vs c. £5m in the base case. (before CBS running costs are allowed for)

Scenario 3: Inflation is lower than expected

- Both the project's expected revenues as well as various cost items are impacted by inflation, as electricity prices are influenced by inflation, whilst subsidy revenues, senior debt interest and capital, and most cost contracts are also linked to inflation. As per Scenario 2, the impact on PPA revenues due to lower electricity prices only occurs post March 2026.
- In general, higher inflation is positive as the revenue increase in absolute terms is larger than the costs increase, resulting in an overall increase of profits.
- In the base case model, inflation assumptions have been aligned with UK government (OBR) forecasts, from November 2022, subject to a floor of 0% (i.e. no deflation). Future estimates are assumed to taper to a flat 2.5% lifetime Retail Prices Index (RPI) and flat 2.5% lifetime Consumer Prices Index (CPI) measures.
- To model the impact of lower-than-expected inflation, both the RPI and CPI curve have been reduced by -1% per annum, subject to a floor of 0%.
- As a result:
    - Total lifetime revenues are expected to be £26.7m (-6%).
    - Operating costs are expected to be £6.9m (-7%). The higher % decrease in costs vs revenue is due to the additional decrease in income rent in line with reduced revenues, and the decrease in PPA revenues only impacting post-PPA expiry in March 2036. Absolute decrease, however, is greater for revenues.
    - Senior debt capital payments are impacted, as the senior debt capital repayments and interest payments are RPI indexed. In this scenario, total senior debt payments are expected to be £9.8m (-4%).
    - Junior capital repayments are re-sculpted, as the BSC/PtC loan is repaid on a variable semi-annual repayment profile, based on surplus cash available. Under this scenario, the amount outstanding at maturity of the junior loan is expected to increase to c. £275k, vs £250k in the base case.

- Community shares capital repayments commence following the Junior Loan redemption. Repayments are subject to Community discretion and are modelled to be fully repaid by Q2 2033, in line with the base case.
- The forecasted cash balance at the end of the forecast in this scenario is £3.7m, vs £4.2m in the base case scenario. As a result, the forecasted total community benefit distribution potential could be up to c. £4.4m (i.e. £3.7m of cash + fixed CBF distributions of c. £650k), vs c. £5.1m in the base case (before CBS running costs are allowed for).

Appendix 4, Organisations Involved

CORE: Community Owned Renewable Energy LLP. A £40 million investment partnership between Power to Change and Big Society Capital to acquire operational, ground mounted solar farms in England on behalf of community energy groups and transfer them into community ownership. The aim is to maximise their financial, environmental and social impact (www.corepartners.org.uk).

FE: Finance Earth (previously Environmental Finance) FE developed the CORE investment structure and now serves as adviser to CORE. FE specialises in the creation and management of innovative, investable, environmental projects and investment funds specifically structured to deliver quality returns for investors, local communities, and the environment at large (https://finance.earth/).

PtC: Power to Change PtC is an independent trust supporting community businesses in England. These are locally rooted, community-led, trade for community benefit, and make life better for local people. To date there are nearly 7,000 community businesses across England employing 35,500 people, with a combined income of £1.2bn. (www.powertochange.org.uk). PtC received an endowment from the Big Lottery Fund in 2015.

BSC: Big Society Capital BSC improves the lives of people in the UK by connecting social investment to charities and social enterprises, helping charities and social enterprises achieve more: the greatest chance to improve lives comes when both investors and enterprises are motivated by social mission. BSC engages with investors, fund managers, charities, and social enterprises to make it easier to use social investment. With co-investors, it has made over £1.7bn of new capital available to organisations with a social mission, through investments into fund managers and social banks (www.bigsocietycapital.com).

Centre for Sustainable Energy, is an independent national charity that works to help people change the way they think and act on energy. They have around 60 projects on the go at any time, each helping to meet CSE's goals of finding solutions to the threat of climate change and the misery of cold homes.

Co-operative Futures, is a business development consultancy specialising in co-operative, mutual and community led businesses. Founded in 2000 it was set up to provide direct advice and support services and to engage in debates to find mutual solutions for challenges being faced by communities.

Bright Renewables, is a 100% community owned company that manages the UK's largest portfolio of community-owned renewable energy assets, specialising in both ground mount and rooftop solar sites. Bright's goal is to start a community renewables revolution in the UK by delivering cost-effective asset management services of the highest quality.

Sharenergy, was set up in 2011 to develop, encourage and manage Community Benefit Societies working on energy projects. It works with over 50 such groups across the UK. It has recently helped Reading Hydro and Corwen Hydro with their share offers, has set up the Big Solar Co-op and is currently undertaking a number of renewable energy feasibility studies using RCEF funding.

Appendix 5, List of Abbreviations

- AGM: Annual General meeting
- BSC: Big Society Capital
- CBS: Community Benefit Society
- CET: Community Energy Together
- CIC: Community Interest Company
- CORE: Community-Owned Renewable Energy
- FE: Finance Earth
- FCA: Financial Conduct Authority
- FIT: Feed in Tariff
- KCE: Kent Community Energy
- MW: MegaWatt –1,000 kiloWatts
- PtC: Power to Change
- RHI: Renewable Heat Incentive
- WCE: Wight Community Energy
- YCE: Yealm Community Energy

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