



 **BiG SOLAR CO-OP**

Share Offer
Autumn 2024

Join us and
build (a lot)
more of
these

Our mission is pretty simple. **We just think big rooftops should have solar.**

We got tired of waiting for somebody else to get solar built on large buildings that are perfect for it. **So we decided to get on and do it ourselves.**

We're a not-for-profit cooperative 100% owned by our members, who want the UK to have cleaner energy fast.

Anybody can join us. **If you have £100 or more, you can buy shares and get a fair return on your investment.**

There are already more than 500 of us (and counting) from all over the UK. **Together, we own 6 large solar rooftops, and we've got a further 40 projects ready to roll out.** All we need is your support.

We'd love you to join us.

*Jon, Sonya, Shamsher,
Tom, Rob,
Noël & Gordon*



Directors, Big Solar Co-op

You can apply for shares online at:

<https://apply.shareenergy.coop/big solar>

- 3** Our vision and structure
- 5** Governance and staff
- 7** Where we work and how
- 11** Share offer, Projections, Risks
- 15** Society information
- 17** Terms & Conditions

Our vision

There's a huge amount of solar potential across the UK – on large rooftops of buildings which use lots of electricity. Why hasn't every big roof got solar panels? In a climate emergency, in an energy crisis, it does not make sense.

We're dedicated to breaking down the barriers to get that solar built as fast as possible.

UK-wide. Big Solar Co-op is set up to operate anywhere in the UK. If you know a possible solar site, we can work with you to get it built.

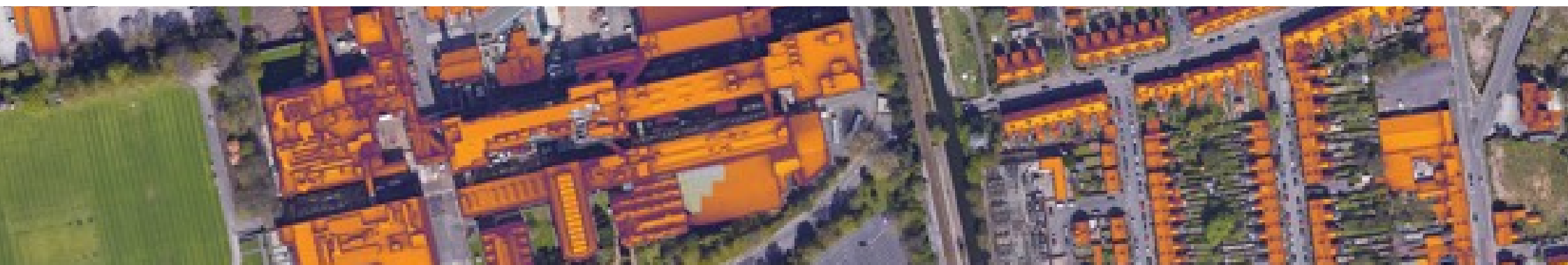
Ambitious. We aim to build 100 MW of brand new solar PV capacity, mostly on rooftops, by 2030.

Experienced. The Big Solar Co-op was started by Sharenergy Co-operative and grew out of their 12+ years of experience delivering solar co-ops

Ethical. We are a not-for-profit Society and proudly part of the co-operative movement. We aspire to lead in the sourcing of ethical solar panels and the creation of fair agreements with our clients.

Carbon-first. Our core aim is to combat climate change through reduction of carbon emissions.

Member-owned, member-led. Our co-op is owned by its members, including investors and volunteers supported by training, tools, peer mentoring and expert staff where needed.



Our structure

The Big Solar Co-op is owned by members of the public who either work with us, invest in us, or both.

Volunteer Members

Members of the public with skills and time to contribute can join us by signing a standard agreement and agreeing to do a certain amount of voluntary work. Volunteer Members control 75% of the votes in the Big Solar Co-op.

Investor Members

Supporters can buy shares in the Big Solar Co-op and become Investor Members. Investor Members control 25% of the votes in the Big Solar Co-op. Any Investor Member who wishes to do so can become a Volunteer Member. Come and join us, we need your skills!

Groups

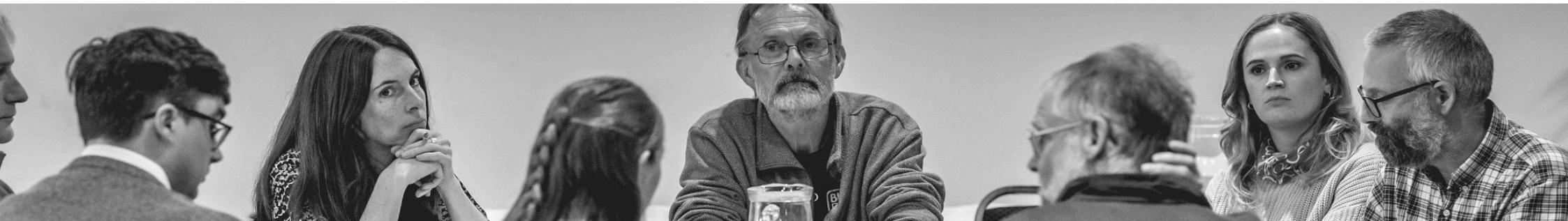
We work together in groups. A group can be based on a shared task (we have a site design group for example) or a geographical area. We currently work with regional groups in Birmingham, the Forest of Dean, Shropshire and Derbyshire.

Training and support

We have an active programme of training sessions, where members can learn skills such as solar site finding, solar design or how to be a solar Project Champion

Working together

We collaborate using online tools like our forum, OpenSolar design software and Sol (our in-house software platform for keeping track of sites, contacts and tasks). We also keep in touch through regular video calls and in-person events.



Governance

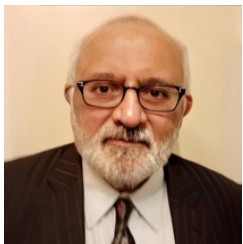
We are governed by a Board elected from our members:



Sonya Bedford. Having worked for over 18 years in the energy legal sector, Sonya has acted for many community energy groups alongside local authorities, developers, landowners and funders. Sonya has experience in all aspects of renewable energy projects and across all the key technologies and has been awarded an MBE for her services to Community Energy.



Gordon Coppock. Gordon's personal journey with solar started in the 1980s. Following a career with Siemens, culminating as a director for the Asia Pacific region, Gordon decided to focus his work on climate change, working with solar pioneers Wind and Sun and several community energy groups.



Shamsheer Dharsani. Shamsheer has management experience at senior level in economic development, education and social services. He has a long association with the co-operative movement and is currently Capacity Development coach for Sandwell Council of Voluntary Organisations.



Tom Johnstone. Tom is a CIMA-qualified accountant with c35 years experience working in industry in various different sectors. He became involved in a community energy project some years ago and supported it through initial concept and development through inception and running of a solar farm in Charlbury, Oxfordshire.



Rob Jones. Rob brings his extensive experience of accounting, auditing, corporate advisory and financial analysis to influence BSC'S financial wellbeing. At home Rob has solar panels, a heat pump and an EV. He runs his village's climate action group and is interested in sustainable investment generally. He is a trustee for a charity that helps children with disabilities.



Noël Lambert. As a founding board member Noël has extensive experience and insight into the strategic development of the Big Solar Co-op. Noël has a background in community building, online systems configuration, digital strategy and technical communication. Noël has a keen interest in food security, social justice, local sustainability and gift economy systems.



Jon Hallé. Jon is a co-founder of the Big Solar Co-op. In his role as acting CEO, he has a wide remit from detailed support of individual projects to a nationwide strategic involvement with public, private and third sector bodies. Jon was a pioneer of community-owned solar in the UK and is a previous recipient of the Community Energy Champion Award.

Staff

We have a staff team of four. All the Big Solar Co-op staff are currently employed by Sharenergy, and their services are provided to the Big Solar Co-op at cost. We have an administrative contract with Sharenergy whose experienced Operations Team provide book-keeping, accountancy and specialist renewable energy industry support.



Where we work

You may have looked around in your town or village and wondered why so few big rooftops have solar. So did we! The Big Solar Co-op is designed to overcome the factors holding back rooftop solar in the UK:

Cost. Many organisations and businesses struggle to raise the funds to invest in solar on their own roof – it may make financial sense but the payback time is relatively long. We're in it for the long haul.

Uncertainty. Even large and well-established organisations may need to change their plans in the future – this holds them back from committing to solar. We are building a portfolio of solar installations large enough to be able to smooth out the impact of any one site changing its usage.

Trust. Solar is still seen as new and potentially risky – everybody has heard stories of dodgy solar companies! As a not-for-profit we're able to gain the trust of our solar hosts.

Our solar model works best for sites which have a tennis court sized available rooftop space (or larger) and where at least 50% of the energy we generate can be used on-site. Examples of suitable sites include:

- ☀ Commercial and industrial buildings
- ☀ Schools and other education centres
- ☀ Leisure centres
- ☀ Public buildings
- ☀ Care homes

In fact there are hundreds of thousands of potentially suitable buildings across the UK which still do not have solar PV. We calculate that these could contribute at least 5 GW of solar capacity – on a sunny day that would provide around 15% of UK electricity consumption.

Our focus is on large rooftops or relatively small ground-mounted systems, because it is here that we can make the greatest impact. Commercial developers are already building solar fields at large scale, and there is a thriving domestic solar installation sector.

Our operational sites

We've got five operational sites to date, totalling over 1000 kW of panels – that's about the same as 300 average-sized domestic rooftops!



Our pipeline of sites

We have been working hard on finding and assessing solar sites around the UK and we have a significant pipeline of sites under development across the UK including commercial premises and community buildings – a wide range of sites including a steel manufacturer, leisure centre, school, shopping centre, golf club, food packer, visitor centre and a historic hotel.

Each site that is submitted to us is triaged - if it looks feasible then an initial design is carried out. On the basis of our design work and assessment of the energy user's energy profile we put together a commercial proposal.

Midcounties Co-operative

We've signed a significant agreement with Midcounties Co-operative to deliver solar on 29 of their stores. We've already started on their HQ building in Warwick and are due to move on to stores across the Midlands over the next 18 months.

Whiteborough

We're working on a groundbreaking approach to ground-mount solar. This will be a relatively small ground-mount system on the site of an opencast mine in Nottinghamshire

which we will transform into the UK's lowest-carbon solar farm, producing enough electricity to power all the homes in the nearby large village of Huthwaite on a sunny day.



An ethical approach

It's not enough to just be a not-for-profit entity. We take an ethical approach to delivering solar across the board.

One of the most important areas is the choice of solar panels. Not all panels are equal from an ethical perspective. We know that raw materials in many solar panels are sourced from factories implicated in forced labour, and where the main source of energy is coal. There is currently no completely reliable way to find solar panels that are ethically sound –adequate regulation is not yet in place and independent audits are almost never available.

For our existing sites we have used solar panels from Meyer Burger. Meyer Burger have been able to provide evidence of an ethical supply chain. These are high-cost panels but technically among the most advanced, with high efficiencies and long warranties.

We will continue to work with the highest quality and most ethical suppliers and make sure have some influence on the wider solar sector.



Meyer Burger White

380 – 400 Wp

For higher energy yield over the same area:
Heterojunction high-performance solar module
with SmartWire Connection Technology (SWCT™).



Made in Germany. Designed in Switzerland.

Production and development according to the highest quality standards.



Highly profitable

More energy yield over the same area even on cloudy or hot days.



Extremely durable

Outstanding cell stability and high breakage resistance thanks to patented SmartWire Connection Technology.



Consistently sustainable

Regional value creation, made without lead and produced using 100 % renewable energy.



Guaranteed reliability

Industry-leading 25-year product and performance warranty.



Extremely aesthetic

Elegant Swiss design suitable for all roof shapes and



Share offer

The funds we raise through this offer will be used to finance new solar installations and to provide the working capital we need to get our pipeline of future solar projects built.

Our initial development was funded by grants and in-kind support from a range of organisations (listed on the last page of this document). This generous support enabled us to recruit staff and volunteers and identify our first solar sites.

Our first share offer in 2022 brought us the capital we needed to commit to our first installs. Since 2023 we have moved to a rolling share offer.

Share capital

If you wish to withdraw your capital, you can apply to sell the shares back to the Society. We can't guarantee to always be able to do this straight away - funds invested are locked up in solar as soon as possible - but we will actively seek to find new share investment to cover withdrawals.

Share interest

We aim to pay interest annually on all share capital we have deployed, at the rate of 2% above the base rate (or 5% if that's higher). We anticipate that it will take us around 3

years to meet this target, so in the interim we will offer a lower rate of interest if surpluses allow.

The point at which you will receive your first interest payment currently depends on when you invest: as a rule we need to get new solar built and working for one summer before it generates significant income. For funds invested in late 2024 we expect your first planned interest payment to be in mid 2026.

By investing in the Big Solar Co-op you will be helping to pioneer a new model in community solar. We greatly appreciate your support.

Share interest will be tax free for some shareholders under the Personal Savings Allowance scheme.

You can apply for between 100 and 100,000 £1 shares using our online application form at:

<https://apply.shareenergy.coop/bigsolar>

Financial projections

The Big Solar Co-op is in its start-up phase. This means overall financial projections can only be indicative – we don't know exactly how things will progress in the future.

We have a target of getting to 100 MW of installed solar. To achieve this by 2030 will require us to double our installs annually from 2025-2030. It's ambitious but we are sure the opportunities are there.

Modelling

We create detailed financial models for individual sites so we know whether they are viable. We use industry-standard software to design solar arrays and we can predict accurately how well solar output will match on-site energy usage. Our figures for the cost of operations are derived from Sharenergy's experience helping to run over 200 community solar sites.

Energy prices

We have been through a time of volatility in energy prices. Our projections are conservative and we assume that prices will largely stabilise over the next few years.

Legal agreements

Our standard leases and power purchase agreements are less onerous for solar host sites than is usual in the solar

industry. Instead of punitive legal clauses we have incorporated a risk rating into our financial models: from year 5 of every project we treat risk as an expense alongside any other – so we are budgeting for our hosts to change their energy usage, repair their roofs, or even for a proportion of them to go out of business.

Growth

The projections given here assume that we will continue to grow and build more solar year on year over a 12-year period, and that growth will then tail off over time during an operational phase when we concentrate on returning capital to investor members. In practice we hope to continue developing solar for a longer period, but this serves to illustrate our overall financial model.

Our standard lease period is 30 years, and we expect our installations to remain operational for at least that long in most cases. Projections on the next page are given annually to 2032 and then summarised over 5 and 10-year periods to aid legibility and show the whole capital repayment process.

This is a simplified model which assumes we raise all capital through shares – in practice we already have a bridging loan in place and we are putting in place a long-term bank debt facility to help us build more solar than we can finance by shares alone.

Financial model

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033-2037	2038-2042	2043-2052
SOLAR												
Total Installed MWp at period end	4	7	10	15	21	28	37	49	63	103	103	103
Generation MWh	850	2,125	4,667	7,835	11,788	16,722	22,880	30,571	40,176	375,997	420,963	817,035
CO2e saving tonnes	196	489	1,073	1,802	2,711	3,846	5,262	7,031	9,240	86,479	96,822	187,918
CAPITAL £000												
Capital invested in period	2,250	2,754	3,297	3,948	4,738	5,941	7,453	9,355	11,748	33,312	-	-
Capital repaid in period	-	-	-	-	-	-	-	-	-	(28,305)	(40,684)	(17,009)
Total equity at end of period	3,450	6,204	9,501	13,449	18,188	24,129	31,582	40,937	52,685	57,693	17,009	-
REVENUE £000												
Income	136	351	788	1,347	2,073	3,009	4,212	5,757	7,740	78,003	97,373	224,566
Operating costs	(33)	(64)	(105)	(157)	(223)	(307)	(417)	(557)	(738)	(6,245)	(7,368)	(17,769)
Risk adjustment	-	-	-	-	(448)	(650)	(910)	(1,244)	(1,673)	(16,857)	(21,042)	(48,529)
Operating surplus	103	286	683	1,190	1,403	2,051	2,885	3,956	5,329	54,902	68,962	158,268
Core costs	(74)	(135)	(206)	(277)	(327)	(338)	(380)	(428)	(481)	(3,378)	(3,855)	(7,710)
Depreciation	-	(75)	(167)	(277)	(408)	(566)	(764)	(1,013)	(1,325)	(12,404)	(14,133)	(28,266)
Member interest	(60)	(173)	(310)	(475)	(672)	(909)	(1,206)	(1,579)	(2,047)	(17,874)	(10,568)	(1,226)
Taxation	-	-	-	-	-	-	-	-	-	(5,400)	(11,454)	(34,564)
Surplus	(31)	(96)	(0)	162	(5)	238	534	936	1,477	15,846	28,953	86,503
CASHFLOW £000												
Surplus add depn	(31)	(21)	167	438	403	804	1,298	1,949	2,801	28,250	43,086	114,769
Invested / Repaid	2,250	2,754	3,297	3,948	4,738	5,941	7,453	9,355	11,748	5,008	(40,684)	(17,009)
Capital outlay	(2,250)	(2,754)	(3,297)	(3,948)	(4,738)	(5,941)	(7,453)	(9,355)	(11,748)	(33,312)	-	-
Cashflow in period	(31)	(21)	167	438	403	804	1,298	1,949	2,801	(55)	2,402	97,760
Cash	269	248	414	853	1,256	2,059	3,358	5,307	8,108	8,053	10,455	108,215

Risks

All financial investments carry risk – and community energy projects are no exception. If performance is below expectations on any or all of the Big Solar Co-op's sites and/or higher costs are incurred than projected, you may receive less interest than projected. If something goes wrong on a longer-term basis, then your capital may be at risk.

We have made every effort to minimise risks to our shareholders. This is a summary of key assumptions and risks, along with measures we have taken to minimise them across all our sites:

- ☀️ **Solar resource.** Our projections are based on estimates using standard industry practice. Lower levels of insolation over time would affect performance. *In practice solar output does not vary greatly over time. We have made provision for panel efficiency reducing over time according to solar panel warranties.*
- ☀️ **Site problems.** If any of our solar host sites change their usage, need extensive roof repairs, or go bust, our income will reduce. *We have made provision for all these risks in our*

finance model by assuming reduced income proportionate to risks present at each site.

- ☀️ **Export electricity price.** If wholesale prices drop, income drops. *Electricity prices have fallen from historic highs. We have used the long-term price average for financial modelling.*
- ☀️ **Equipment reliability.** Major outages for maintenance or replacement would reduce income. *The technology we have selected is the best available. We have factored in the costs of monitoring and preventative maintenance and insurance against loss of income. Our solar panels have long warranties which are the best in the solar industry.*
- ☀️ **Operational costs.** Higher costs for service, admin, insurance and rates would reduce performance. *Where possible we have tied in 5-year service contracts. These costs are a relatively small part of the overall model.*
- ☀️ **Development costs.** If our development costs fail to result in a pipeline of new projects then financial performance will suffer. *Our projections are based on achievable assumptions about what is achievable with our resource. We have scaled up staffing and overhead levels in our modelling as we grow.*

Society information

Incorporation

The Big Solar Co-operative Ltd ('the Society') is a Co-operative Society registered with the Financial Conduct Authority and incorporated on 13 January 2022. Its financial year-end is 31 March. The Society is governed according to a set of rules registered with the FCA and which can be downloaded from the FCA website <https://mutuals.fca.org.uk/Search/Society/31100>

Members

Any person over the age of 16 can become a Volunteer Member and/or Investor Member. Any incorporated body (company, society or charity) can become an Investor member. Investor Members must invest at least £100. Volunteer Members must buy one £1 share and sign a volunteer agreement. If you wish to become a Volunteer Member, please contact the Society (see contact details on last page of this document).

The Board

Board elections are held at each AGM and all Investor Members and Volunteer Members are eligible and encouraged to stand for election to the board.

Board composition

Our rules specify that the Board must comprise at least 3 directors, and that there must be more Volunteer Members on the board than Investor Members.

Directors' shares

Current Directors hold 2350 shares in total.

Board Practices

Directors are currently unpaid and beyond reimbursement of expenses, there are no other benefits for Directors. Day-to-day operations are managed by the Society, under Board supervision.

Conflicts of Interest

Jon Hallé and Noël Lambert are employed by Sharenergy Co-operative, which provides services to the Society.

Administration

Sharenergy provides an on-going administration and management service for the Society for an annual fee which varies with the number of Investor Members, sites and solar generation capacity installed.

Distribution of surplus

All surplus will be re-invested in developing and building new solar generation. Interest will be paid on shares and on any loans or bonds issued, but there is no intention to pay a dividend to members.

Audit

The Society's accounts are subject to annual audit.

Legal proceedings

There have been no governmental, legal or arbitration proceedings relating to the Society and none are pending or threatened which could have a significant effect on the financial position or profitability of the Society.

Future developments

The Society is actively working to develop future solar projects.

Disclosure

None of the directors of the Society have, for at least the past five years, received any convictions (for any fraudulent offence or otherwise), or been involved in any bankruptcies or receiverships, or received any public recrimination or sanction by a statutory or regulatory authority or designated professional body, or been disqualified from any function by any court.

General information sourced from third parties in this Offer Document has been accurately reproduced. As far as the Directors are aware, no facts have been omitted which would render the information inaccurate or misleading.

In making an application you are making an irrevocable offer to enter into a contract with the Society.

Under Money Laundering Regulations, you may be required to produce evidence of your identity and it is a condition of the Offer that you do so as requested. Non-UK residents must take responsibility for ensuring that there are no laws or regulations in their own country that would prevent them from investing in or receiving income from a UK Society.

Terms & Conditions

The Share Offer	Shares of £1 are offered at par value and payable in full on acceptance of an application on the Terms and Conditions of this Offer Document.
Eligibility	The Offer is open to any person (at least 16 years old) or organisation meeting the membership requirements in the Rules.
Application	You can apply online at https://apply.shareenergy.coop/big solar By making an application you are subscribing, on these Terms and Conditions, for the number of shares specified, or such lesser number as may be allocated. An application once made cannot be withdrawn. The price of each share is £1. The minimum number is 100. The maximum holding per member across all share offers is 100,000 shares.
Allocation	Shares will be allocated on a first come first served basis.

Procedures on application receipt	<ul style="list-style-type: none"> Any cheques/bankers' drafts will be presented on receipt and may be rejected if they do not clear. Applications may be rejected in whole, or in part, or be scaled down. Monies in respect of any rejected or scaled-down applications shall be returned no later than one month after the end of each quarter. No interest is payable on submitted application monies which become returnable. Incomplete or inaccurate Application Forms may be accepted as if complete and accurate. Share certificates will be issued to successful applicants on a quarterly basis.
Offer timetable	The Offer will remain open until the Society decides to withdraw it
Minimum raise	There is no minimum raise.

Interest	Interest will be paid on all shares held during a year from the second full elapsed year from share issuance, subject to the financial performance of the Society. The target interest rate is 2% above the prevailing Bank of England base rate (or 5% if base rate falls below 3%).
Taxation	Share interest payments are made gross of tax.
Interest payments	Interest will be calculated on an annual basis. Interest is paid annually after the AGM.
Priority of bonds, debt and shares	Any interest payments relating to future loans or bonds will take priority over share interest and capital payments.
Capital repayments	The Society does not intend to make scheduled repayments of capital to shareholders until such time as it no longer requires new capital.
Redeeming shares	Shareholders may apply to withdraw all or part of their shareholding. Withdrawal of shares is at the Board's discretion. The Board will seek additional share capital in order to permit such withdrawals where necessary.

Pricing	Shares are offered at their par value of £1. The underlying asset value of each Share will not rise above £1.
Trading	Shares are not transferable (except in the case of the death or disqualification of a member) and cannot be traded on any market.
Shareholder rights	Shareholders have a right to vote at AGMs or any other formal meeting. Investor Members are collectively limited to 25% of the total vote except where they are also Volunteer Members of the Society.
Provisions on death of shareholder	On death of a shareholder, their personal representative can apply for transfer of the share capital to a named beneficiary, or for withdrawal of the share capital. Return of capital on death of shareholders will be prioritised by the Board over any other return of capital.

Contacting us

The share application form is online at <https://apply.shareenergy.coop/big solar>

For all enquiries email info@big solar.coop or call Shareenergy on **01743 835242**
Our website can be found at www.big solar.coop or follow our social media updates.



The Big Solar Co-operative Ltd is a Co-operative Society Registered with the Financial Conduct Authority (no. **4877**)

Cover image: Our 288 kWp solar array at Kerry Taste and Nutrition, Tenbury Wells.

Photo credits: **p3** Google Environmental Insights Explorer, **p4** Aaron Child www.paintedlife.com, **pp10,19** Meyer Burger. Other images provided by people and businesses as labelled or taken by Big Solar Co-op.

The Big Solar Co-op has benefitted from very generous support from:



Incubated by Shareenergy



MEYER BURGER
WHITE
Power class (P_{max})
Power class (P_{max})