

Annual Report 2024















Introduction



Pete CapenerManaging Director



Chris Crookall-Fallon Chair

We're delighted to share our annual report, outlining BWCE's continued growth in scope and scale over the last financial year.

Growth is exciting, but we remain committed to keeping a clear focus on how we develop as a community organisation, working closely with communities across our local area. Whether it's rolling out Green Open Homes, showcasing greener homes in Bath and beyond; partnering with parish councils and local community groups to develop new renewables projects; or collaborating with partners to build a community-led home energy service to create warmer, lower carbon and cheaper-to-heat homes.

This report outlines an organisation that is financially strong, with a model that prioritises development, financing and operating renewable energy projects for and on behalf of local communities. It illustrates how in recent years we have also built around this a programme of energy-efficiency retrofit and local energy supply that will in time grow into a holistic and integrated approach linking generation, supply and demand at a local level.

We believe this puts BWCE in a strong place as we start the development of our next business plan which will take us from March 2025 through to 2030. A period during which climate scientists have said we will need to see rapid change within our energy system to meet the challenges presented by the climate emergency. This is also a time in which we see a new government that has committed itself to decarbonising the energy system by 2030 and implementing a Local Power Plan that seeks to rapidly scale local and community energy.

As part of our next business plan, we will be scoping out the role that BWCE can play in all this as we seek to maximise our impact as a Community Benefit Society. We believe that a not-for-profit community business like BWCE, which is accountable to local people and generates direct benefit to our local communities, rather than distant corporates, can help to increase trust and participation in the transition to net zero. Time will tell the scale of impact this approach will have.

Over the last year we have worked with many wonderful partners from across public, private and community sectors and we continue to receive exceptional support from our members and investors. We think we are on the right track, and whilst there is much still to do and to learn, we have been enthused and inspired by so many people in our community as they progress through their own decarbonisation journeys.

Thank you to all those that have supported BWCE and helped us to get where we are now. We look forward to more work together during the next phase of the journey.

A year of milestones for our community

400,000

Together, we have saved 400,000 tonnes of CO2

The last year has marked a huge milestone for BWCE. We've installed over 2 MWp of rooftop solar in a post Feed in Tariff (FiT) world. Following the withdrawal of the (FiT), many community energy groups up and down the country had struggled to find a model that worked for all parties. In contrast we've installed eight rooftop systems in 2023-24.

We are proud to say that we have found a way to support dozens of schools, community buildings, and leisure centres to drive down their carbon footprint.

What was the Feed in Tariff?

The Feed in Tariff (FiT) was a government scheme, introduced in 2010 to encourage the use of renewable energy and reduce the UK's dependence on fossil fuels. Homeowners and businesses were paid for their own surplus generated electricity (from renewable or low-carbon sources), that went into the Grid. The (FiT) closed to new applicants in April 2019.

Together, we have saved 400,000 tonnes of CO2, and collectively saved the sites hundreds of thousands of pounds, and because of our innovative business model, generated a surplus income to be invested into the BWCE Fund so we can provide grants to other community groups in the local area whose projects are focused on reducing carbon emissions, reducing waste or supporting those in fuel poverty. (For more information on groups we have supported this year see page 5)

Looking ahead we have a huge pipeline of new renewable projects, 15 MW over the next couple of years across rooftop solar schemes, solar farms and potential for onshore wind development. These have the potential to double our existing capacity.





Where we have installed solar panels in 2023-24

St Mark's School, Bath April 2023 – 70 kWp

St John's School, Midsomer NortonApril 2023 – 37.2 kWp

St Augustine's Catholic College, TrowbridgeApril 2023 – 72 kWp

St Mary's School, TimsburyJune 2023 – 24.8 kWp

Sheldon School, Chippenham August 2023 – 214 kWp

Dragonfly Leisure Centre, Midsomer NortonAugust 2023 – 188 kWp

Sir Bernard Lovell Academy, Oldland CommonOctober 2023 – 277.6 kWp

Colerne Primary School, ColerneFebruary 2024 – 36.7 kWp

Renewables portfolio performance

During 2023-24 our community renewables portfolio grew by 7% to a total of 14.29 MW of community solar and one small hydro, with the addition of 920 kW of rooftop solar schemes. During the year these projects generated over 12,841 MWh, enough electricity to meet the equivalent annual electricity demand from nearly 4,750 typical UK homes. This would be over 5,000 homes with a full year of generation from our new rooftop solar schemes installed during the year.

5,000

We've generated enough power for the equivalent of 5,000 homes a year 1,000

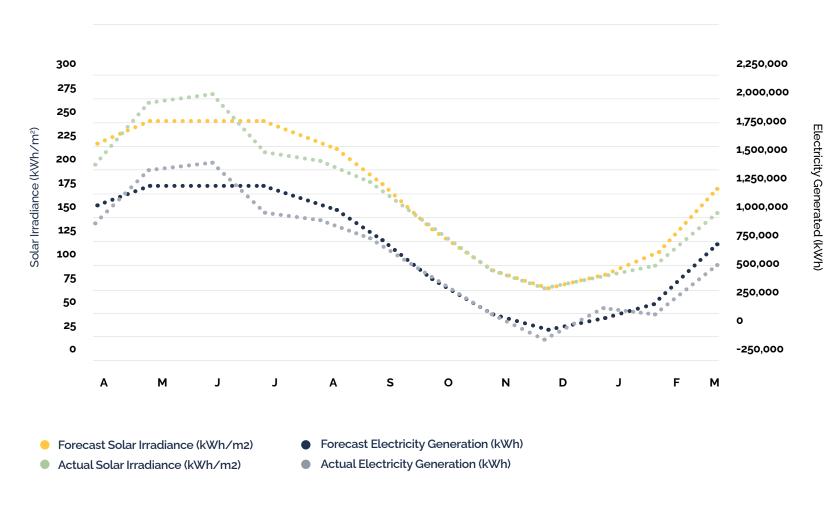
We've matched the carbon footprint from 1,000 B&NES residents 700k

We've retained nearly £700k in local economy

All our community renewables projects together reduce CO2 emissions by the equivalent of the carbon footprint of 1,000 B&NES residents. As a result of our community model, BWCE has retained nearly £700,000 of income in the local economy that would have otherwise drained out of the area.

Sunshine levels across the year were below average. The graph shows that exceptionally hot months in May and June 2023 produced very high levels of solar generation but were offset by very poor months in April 2023 and February and March 2024. The graph confirms it is lower than average solar irradiance that is the main driving force behind lower project performance, rather than any technical problems with the projects themselves.

BWCE Renewables Portfolio Perfomance 2023-24



Assumes 2,700 kWh per year consumed by a typical home without electric storage heaters. From Ofgem, updated in 2023

Assumes 0.225 kg CO2e/kWh of electricity generated, including transmission and distribution losses

Assumes 3.1 tonnes CO2e emissions/capita for residents in Bath & North East Somerset.

Community fund



BWCE supported a pilot project in schools where we delivered workshops on the circular economy, which we're now being funded to deliver to schools in rural communities

Hila Horosov,

Bath Share and Repair Community Engagement Manager



Jane WildbloodChair

BWCE's innovative community business model focuses on maximising local environmental and social benefit. Surplus income from renewable energy projects is reinvested back into the local community via the BWCE Fund.

Since 2015 the BWCE Fund has invested £380,000 into 101 local community projects focused on reducing carbon emissions and/or addressing fuel poverty. Carbon reduction doesn't just mean energy projects; it includes local food, sustainable transport and waste reduction projects too.





£380,000 has been invested into the BWCE Fund since 2015

£40,500 has been awarded to these community projects in 2024

- Bath Community Kitchen
- Bath Share & Repair
- Bishop Sutton Village Hall
- Climate Hub Bath and
 North East Somerset
- Cycle Chippenham
- Freshford & Limpley Stoke
 Home Energy Group
- Friends of MarksburySchool PTA
- Genesis Trust
- More Trees B&NES
- Transition Bath

Jane Wildblood, Chair David Daniels Leigh Fairbrother Simon Forsyth Sheila Gundry Sophie Hooper Lea Alex Jones Alastair Singleton

BWCE Fund Trustees



Flex Community Trials

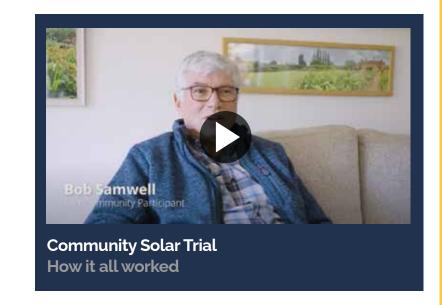
46%

46% of the UK's electricity came from renewables in 2023

BWCE's energy vision is to supply renewable energy direct to local people and so reduce the demand for high carbon electricity generation delivered via a congested electricity network.

The Flex Community[™] trial (funded via the EU ReDREAM project) explored the potential for establishing a community of participants willing to try, where possible, to match their energy use to times when local renewables were generating.

Community Solar Trial: in which we simulated the consumption of solar electricity from our Stowey Farm solar farm by 14 local households using our Flex Community™ app.



Solar Electricity Trading Trial:

here we simulated the 'trade' of solar electricity from households with solar panels to those without (known as peer-to-peer trading), in three household clusters in Bath, and an additional rural setting, again by using our Flex Community™ app.

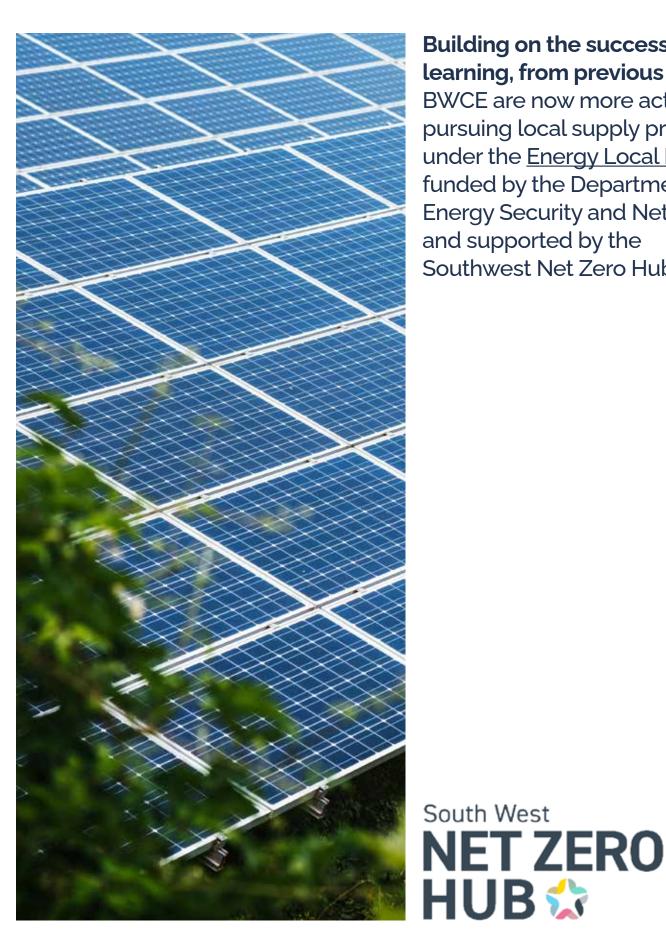


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The aim of these trials was to measure active behaviour change in electricity consumption in response to information about the electricity market. The Flex Community™ app clearly showed all the participating householders the financial and carbon savings they would have made by shifting their consumption to times when the cheaper locally generated solar electricity was available.

We also installed monitoring and control equipment in 11 households with heat pumps, electric vehicles and immersion heaters (high electricity use technologies) to trial their remote control in response to market signals. Whilst technically challenging, it did allow flexibility to be offered to the local grid, but more work is needed to secure householder confidence.

The Flex Community™ project successfully focused on consumer decision-making regarding their engagement and interaction with energy and produced insightful results.



Building on the success, and learning, from previous trials BWCE are now more actively pursuing local supply projects under the **Energy Local Model**, funded by the Department for Energy Security and Net Zero and supported by the

Project 1

To explore how 'spill' (surplus electricity that would be exported to the grid) from two of our school roof-top solar projects in Bath, can be offered to local householders.

gauge how attractive this would be for householders to engage with.

Project 2

To examine the business case for alternative solar farm designs that generate less energy at mid-day but more in the afternoons and mornings when electricity is in higher demand.

To keep up to date on these projects, follow our news or subscribe to on our newsletter at www.bwce.coop



Beechencliff School, Bath - Part of project 1

We are setting up a focus group Southwest Net Zero Hub. in Bath, to help us clearly explain the project aims, what would be required from participants and to

Home energy service

17%

Homes accounted for 17% of the UK's carbon emissions in 2022

Homes accounted for 38% of the Bath & **North East Somerset** carbon emissions in 2022

To meet net zero by 2030, 66,000 homes will need to be retrofitted in Bath & **North East Somerset**

This year BWCE moved to address the other side of the community energy coin - helping people reduce energy demand in their homes. BWCE is using its unique position as a trusted local non-profit business to support householders in addressing the challenge of retrofitting inefficient this project with grant funding. and draughty homes.

BWCE Home Energy

There are many homeowners who can afford to retrofit their homes but are unsure where to start. Helping people in this position is crucial for reducing carbon emissions, as we know that higher-income households produce more carbon than those on lower incomes.

BWCE has brought together a team of experts to provide independent energy surveys, giving householders a road map for warmer homes that are cheaper to heat. We can also provide project management support to get the work started or oversee the whole process.

We have been able to kickstart Householders can benefit from discount vouchers funded by the West of England Combined Authority (WECA) through Retrofit West that reduce the cost of our energy surveys. We are testing if our service can be financially sustainable and, if it can, our vision is to use our revenues to support people at risk of fuel poverty, in line with BWCE's community benefit model. We have received excellent feedback on our surveys so far. We plan to scale up and offer new types of home survey in the future.







For more information see www.bwce.homeenergy.coop

Showcasing green homes

BWCE re-started The Green
Open Homes B&NES project in
2023 after a nine-year hiatus.
The 2023 event was the result
of a strong partnership initiative
within Bath & North East Somerset
(B&NES) focused on inspiring
and educating individuals
about sustainable living in the
B&NES area.

Most people who visit Open Homes events go on to install retrofit measures in their own homes. This is testament to the power of seeing and hearing first-hand from people in the community about their experience of retrofit; the cost, installation, energy savings and benefits.

Our event in November 2023 saw 788 visitors to our Open Homes events in Bath and the Chew Valley, with 22 eco-home pioneers opening their doors to showcase a range of technologies, from heat pumps, to listed building retrofit, natural insulation and batteries, helped by a small army of 46 volunteers.

Visitors reported a 93% satisfaction rating and many of the home openers and volunteers are going to stay involved in the project. The 2023 event was again the result of a strong partnership with: B&NES Council, Bath Preservation Trust, Transition Bath, Buro Happold and the University of Bath.

We plan to deliver at least six more Open Homes events in 2024/25. As well as a Bath event, we are moving out into the district of Bath & North East Somerset, running events in partnership with communities such as Peasedown, Radstock, Pensford and Chew Valley. Community groups will decide the format of the events and bring local knowledge and networks to ensure success.

For more information on Green Open Homes see www.greenopenhomesbanes.org

70%

of visitors to Open Homes events go on to retrofit their own homes.





This event definitely made a difference – several people who visited said they have now decided to actually spend money on measures now they'd seen what we'd done

2023 Home Opener

Making heritage homes more energy efficient

Our local area has a high proportion of listed buildings – around 6,000 in Bath alone.

Many listed building owners feel that they won't get consent to retrofit their listed buildings, when, in fact, many retrofit measures are consented. We felt it was crucial for our locally rooted home energy work to address this.

We set up the Green Heritage
Homes project with funding from
South West Net Zero Hub's Local
Energy Advice Demonstrator (LEAD)
to explore how best to advise the
owners of listed buildings.





In a survey of historic building owners, 87% of respondents perceived planning permission and/or listed building consent is a barrier to improving energy efficiency.

93% of listed building consent applications are approved nationally.

We have strong partnerships with Bath & North East Somerset Council (B&NES), Bath Preservation Trust, the Centre for Sustainable Energy and People Powered Retrofit to offer the following approaches:

'Pre-Application Planning Advice'

- B&NES Council are innovating with a low cost 'Level Zero' Pre-Application Advice Service where a conservation officer does a site visit to suggest energy measures that are likely to be consented, before the homeowner has decided what to do.

Become a Listed Building

Champion – A joint planning and home energy advice visit from a B&NES conservation officer and a BWCE retrofit assessor for those listed building owners willing to become 'Champions' who share their positive experience of the listed building consent process.

Raising awareness of the positive news that 'yes, you can get consent' for retrofit measures for listed properties.

Free home energy visits – For members of Bath Preservation Trust.

Advice for landlords of listed buildings – The Centre for Sustainable Energy is developing advice for landlords who may be unaware that they are not automatically exempt from meeting energy-efficiency standards.

The following video gives you an overview of the work we are carrying out:



We are running a series of talks and webinars. Follow our YouTube Channel for more videos, coming soon. **abathwestcommunityenergy**

For more information on Green Heritage Homes see bwce.homeenergy.coop/listed-buildings

An exciting year for the BWCE team



It's been an exciting year for the BWCE team, with the addition of several new colleagues and the move to our new home in central Bath.

The team now has over 20 members of staff and continues to grow, as the launch of our home energy service takes off and more retrofit experts come on board as associates. New communications, finance and admin staff have underpinned this growth and BWCE's work on carbon reduction.

We've really enjoyed working from our new offices near Queen's Square in Bath. The move provided us with an office five days a week instead of just one, and being able to work side-by-side with colleagues more regularly has boosted our collaboration and knowledge-sharing opportunities.

Now, as residents of a beautiful Georgian building, we have first-hand experience of the carbon challenges that so many of Bath's historical buildings face, and that our Home Energy Efficiency team are working so hard to tackle!

Our team members travel from various locations around the local area. Whilst this means that we have excellent local knowledge, it can make getting together a bit of a challenge! This meant that we jumped at the opportunity to get together for Bath Boules and at Bath Carnival, where BWCE were sponsors of the main stage this summer.

The team has really enjoyed this stage of expansion and is looking forward to the next phase as renewable development, energy efficiency projects and the fundraising that underpins them grows from strength to strength and we can take advantage of new opportunities that appear on the horizon.

Board of Directors Rupert Atkinson, Sonya Bedford, Pete Capener, Chris Crookall-Fallon, Dr. Daniel Davies, Felicity Jones, Louise Daniels, Matt Harnack and Barney Rhys Jones. The growing BWCE
team now has over 20
members of staff and
will continue to expand
in coming years/months.

Our new office means that we can now work side-by-side for five days a week and have more opportunity for collaboration with colleagues.









Financial performance

£9,2m

Total funds are at £9.23 million well in excess of share capital at £6.97 million

We believe BWCE is in a strong financial position with a significant portfolio of renewables projects generating a healthy cash surplus.

BWCE has 14.28 MW of solar schemes and one small hydro scheme, together worth £16.89 million, delivering nearly 80% of BWCE's 2023-24 income of £3 million with the balance primarily from grants.

The BWCE group made an annual operating profit of £802,343 (before paying interest on capital raised) and a small net loss of £19,287 following below target performance from the renewable project portfolio, due primarily to lower than average levels of sunshine during the year.

The balance sheet shows a strong net current asset position of £1.73 million, which, after taking into account reserved and designated funds (work in progress, maintenance and debt service reserves and capital funds raised but still remaining for investment), is still nearly £530k of 'free reserves', up from around £480k in the previous year. Total funds are at £9.23 million, well in excess of share capital at £6.97 million.

Each year, BWCE's projects are revalued based on the net present value of future cashflows, before interest, tax and depreciation. As part of this analysis, we use market-linked discount rates and industry-standard forecasts of future wholesale electricity prices. Revaluations are independently assessed each year.

At the end of 2023-24, projects were valued at £1.19 million/MW, down from £1.26 million/MW in the previous year and reflects higher interest rates and lower forward wholesale price forecasts.

Project development plans for 2024-25 are looking positive with plans to install a further 750-1500 kW of rooftop solar, revenue forecast to increase to over £3.5 million generating a net surplus and an increase in 'free reserves' as defined above.

Trading performance

Balance sheet

2022-23

16,888,233

567,272

1,293,122

1,860,394

18,748,627

(9,307,801)

9,440,826

7,027,268

2,413,558

9,440,826

	2023-24 £	2022-23 £	BWCE Assets	2023-24 £
Electricity Generation Income	2,360,980	1,984,537	Project Fixed Assets	19,940,087
Other income	651,022	416,428	Debtors less Creditors	279,568
Total Income	3,012,002	2,400,965	Cash at Bank	1,448,128
Cost of sales	(718,040)	(578,170)	Net Current Assets	1,727,696
Administrative expenses	(700,744)	(450,730)	Total Assets Less Current Liabilities	18,667,783
Depreciation	(790,875)	(726,172)	Less Long-Term Liabilities	(9,396,566)
Operating profit	802,343	645,892	Net Assets at Year End	9,271,217
Members' Interest	(430,812)	(412,308)		
Interest on loans and bonds (less interest earnt)	(390,818)	(412,780)	BWCE Capital & Reserves	
Profit & (Loss)	(19,287)	(179,196)	Share Capital	6,973,327
Revaluation of assets	(99,679)	346,559	Reserves less P&L account	2,297,890
Total Comprehensive Income	(118,966)	167,363	Total Group Funds	9,271,217





I first invested in BWCE, back in 2020, because I believe in what it's doing for both the environment and as an organisation which invests in the community. Their projects and ethos are all in line with my values and beliefs, and, investing is made so easy... and of course, the 5% return is great!

Lorna Montgomery

Become an investor

Investing in Bath & West
Community Energy helps us
to install more clean energy
installations. Your ethical
investment will enable BWCE
to deliver between 750 kW and
1,500 kW of new rooftop solar
over the next 12 months via a
strong community model. New
projects could deliver up to
£65k annually in reduced bills
and community funds.

Why invest?

Investors create tangible benefit for themselves as well as the local community and the wider environment. There is a sense of collective purpose, which you don't always get in other more traditional investments. Investing in shares or bonds supports the generation of renewable electricity which, due to our innovative community business model, is developed in such a way as to maximise social and environmental benefits across our local communities.

Surplus income from projects is reinvested back into the local community via the BWCE Fund which awards grants to projects focused on reducing carbon, minimising waste and supporting those in fuel poverty.

How to invest?

BWCE Investors are made up of shareholders (members) and bondholders (non-members).

Shareholders invest anything from £100 upwards to a maximum of £100,000. When a bond offer is open investors can invest anything from £200 upwards to a maximum of £100,000.

We plan to pay our investors a fair interest on their shares, depending on project performance. In 2023/24 this was 5%. As with all investments capital is always at risk.

As interest is capped, this is not a distribution of profits but is regarded by the Financial Conduct Authority simply as a cost on the business.

An ethical investment in BWCE creates tangible benefit for local communities, the environment and a fair return for the investor



Our share offer has received the Community Shares Standard Mark, awarded by the Community Shares Unit to offers that meet national standards of good practice. For more information about community shares, the Community Shares Standard Mark and the Community Shares Unit go to: www.communityshares.org.uk



To find out more visit www.bwce.coop/invest

With thanks to...

During 2023-24 BWCE received:

Grants from

- Energy Saving Trust (Redress Fund)
- Retrofit West
- South West Net Zero Hub(Rural Community Energy Fund)
- West of England Combined Authority
 (Local Energy Advice Demonstrator)
- The European Union Horizon2020 programme

A bond from

- Rewilding Wealth

Sponsorship from

- Buro Happold
- Good Energy
- Mitchell & Dickinson

Our partners, without whom we would not be able to deliver everything we have:

- Aniron
- Bath & North East
 Somerset Council
- Bath Preservation Trust
- Bright Renewables
- Buro Happold
- Centre for Sustainable Energy
- Communities for Renewables
- Fden Renewables
- Engain
- Ethex
- External Services
- Keynsham Community Energy
- Neville Registrars
- People Powered Retrofit
- PEP Renewables
- Retrofit West
- Transition Bath
- Triodos Bank
- University of Bath
- Wiltshire Council
- Zero Carbon Compton
- Zero North Wiltshire

We would also like to thank

The many site owners who are hosting our community renewable energy projects, our Board of Directors and BWCE Fund Trustees who give their time and expertise voluntarily. A special mention to the Green Open Homes project home openers and volunteers and the 1,000 plus members and bondholders whose support and investment have made it happen.

BWCE Fund Trustees

Jane Wildblood, Chair David Daniels Leigh Fairbrother Simon Forsyth Sheila Gundry Sophie Hooper Lea Alex Jones Alastair Singleton

Board of Directors

Pete Capener,
Chris Crookall-Fallon
Rupert Atkinson
Sonya Bedford
Louise Daniels
Dr. Daniel Davies
Felicity Jones
Matt Harnack
Barney Rhys Jones.

To find out more

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For home energy efficiency www.bwce.coop/home-energy

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