



exeter community energy

Exeter Community Energy
Annual Report
1 April 2022 – 31 March 2023

INTRODUCTION

This year, the energy crisis caused by the war in Ukraine has driven big change in ECOE's activities. It caused growth in the Healthy Homes for Wellbeing project, as people needed more support to reduce their energy bills. Consequently, we recruited more contractors, and we appointed Matthew Axe as a team leader, supporting project manager Tara Bowers.



Figure 1: The ECOE directors meet at one of our generation sites, Exeter Library, with a collection of the awards ECOE has won.

Revenue at ECOE's solar photovoltaic (PV) sites increased as we raised our prices in line with inflation and electricity companies offered us better deals for the power we sell them. We continued to develop new potential PV sites, including gaining informal agreement to proceed with one partner organisation, before hitting an obstacle that has again delayed progress.

Meanwhile, there remains great interest in improving home energy efficiency through retrofitting buildings to insulate them better. ECOE has started its efforts to meet that demand but is still building its capacity.

During the year, finance director Trevor Crawford stood down, and Ionna Trofimova-Elliott succeeded him. Lenka Hill also stood down as a director, but Emma Sueref and Giles Booth joined the board.

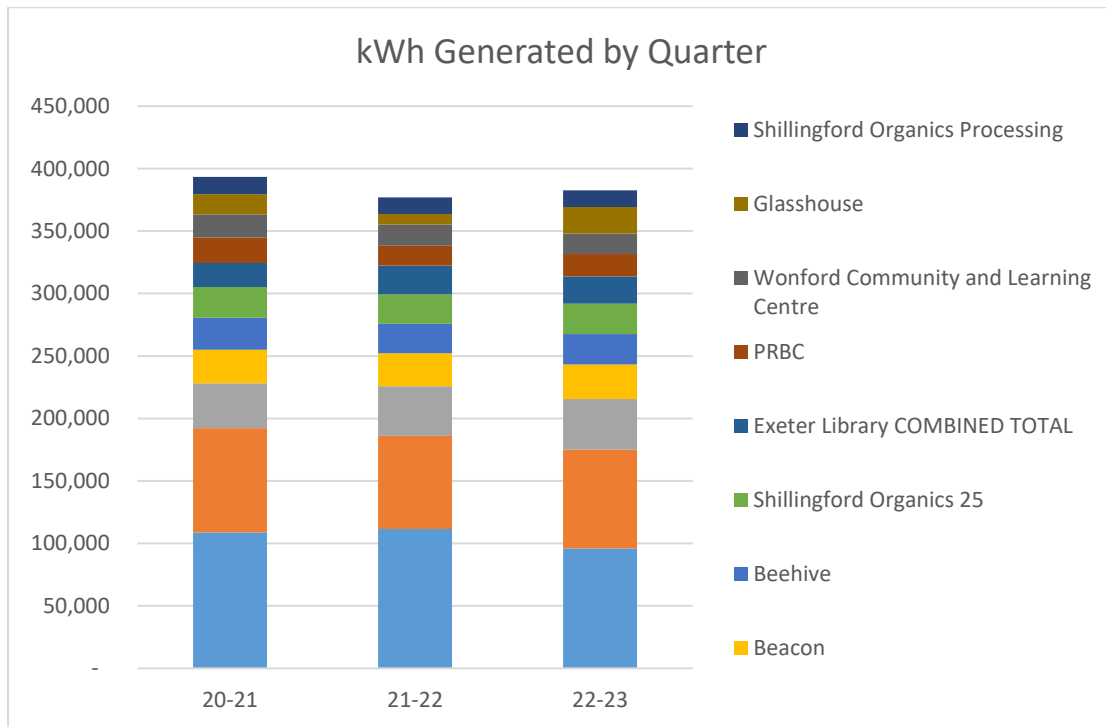
PROJECTS

Solar Power Generation

During the year to March 2023 all sites performed reasonably well; there were no significant losses of generation. In total, ECOE avoided approximately 83 tonnes of carbon dioxide emissions, the equivalent of around 16 British people's annual carbon footprint. That assumes that each kWh of electricity consumed from the main grid causes 217g of carbon dioxide emissions.

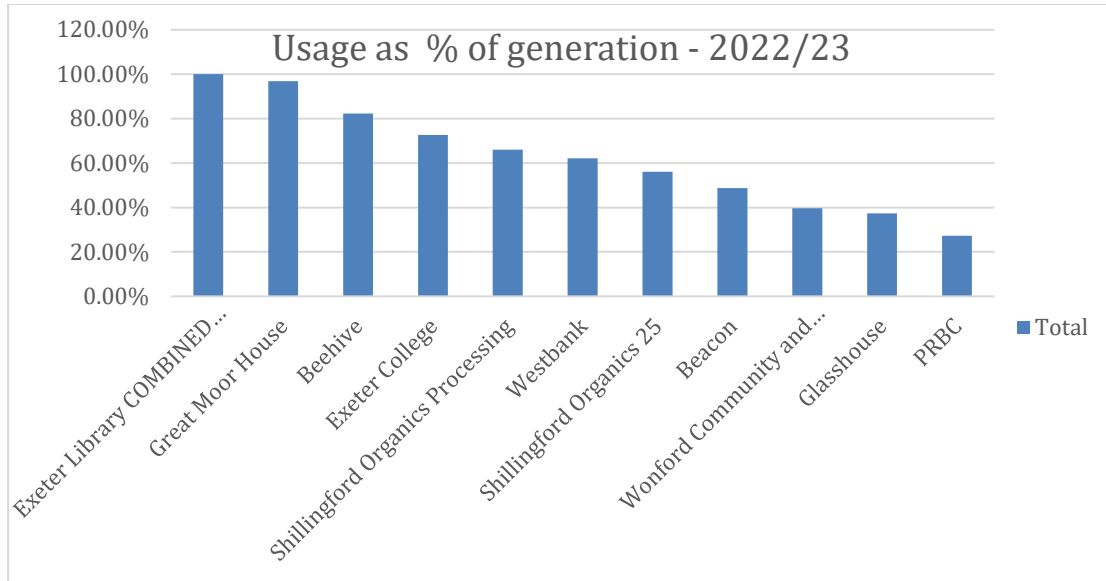
As expected, solar panel performance is degrading. There is some degradation in performance occurring, as expected. Some panels are no longer working, particularly at Exeter College Technology Centre. However, we can't do repairs until the cost of scaffolding is justifiable, or until the site is scaffolded anyway. During this year Devon County Council did work at Great Moor House needing scaffolding, meaning that we could replace faulty optimisers and clean the panels at a reasonable cost.

We've had communication problems with the monitoring platform at several sites, meaning we can't get up-to-the-minute data remotely. The system does record the data locally, though, so we can go and collect it in person. We are considering changing the communication infrastructure to prevent this.



Energy Generation at ECOE's Solar sites in 2022-2023

For maximum benefit, we would like to see as much as possible of the electricity generated consumed on site. We have had conversations with Shillingford Organics, Beehive and Pinhoe Road Baptist Church (PRBC) about this, but there are no specific plans yet.



Energy Usage at ECOE's Solar sites in 2022-2023

Healthy Homes for Wellbeing

Last year saw big growth again for ECOE's Healthy Homes for Wellbeing project. The team grew to 22 people, and we secured lots of new funding. However, it was also a challenging year when we couldn't do as much to help people. We couldn't switch people to cheaper electricity tariffs, as they all cost the same now. The Warm Home Discount has changed to be automatic, so people don't need our help to access it. The fourth round of Energy Company Obligation funding (ECO4) was delayed and poorly executed. Devon County Council's grant funding scheme, Sustainable Warmth, also saw delays. Our historical key funding partner, the Local Energy Advice Partnership (LEAP) also closed for three months while they restructured the service, and awaited approval from Ofgem.

Healthy Homes for Wellbeing

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|---|--|
| <p>No of events/clinics</p> <p>Y22/23 450 Y21/22 128 ↑ 252%</p> <p>No of enquiries</p> <p>Y22/23 2073 Y21/22 1005 ↑ 106%</p> <p>No of interactions (non LEAP)</p> <p>Y22/23 3118 Y21/22 2328 ↑ 34%</p> <p>No of LEAPs</p> <p>Y22/23 811* Y21/22 950 ↓ 15%</p> | <p>Revenue</p> <p>Y22/23 £339.9k ↑ 100%</p> <p>Y21/22 £169.5k</p> <p>Household Savings/Benefits</p> <p>Y22/23 £1.63m** ↓ 5%</p> <p>Y21/22 £1.72m</p> <p>Paid team members</p> <p>Y22/23 22 (FTE 16) ↑ 57%</p> <p>Y21/22 14 (FTE 9)</p> |
|---|--|

*LEAP closed for 3 months in 2022, and reduced funding

**lack of switching, LEAP closure, delayed grant schemes

In the early part of last year our enquiry line was inundated, with a 300% increase in phone calls. Thankfully it quietened down when the government started paying

everyone to cover their energy bills. We focused more on behaviour, taking more time to educate people about energy use, and for the first time in years people actually listened, thanks to the energy crisis. We did this mainly by telephone and at drop-in clinics and events, including 'warm spaces' that people can go to when it's cold. Notably we strengthened relations with the local authorities, some of whom are now funding us to deliver free energy support in the community.

We were approached by British Gas to bid for funding for an Exeter-based project, and we were successful. We were also successful in mid-Devon in a joint bid with the Communities Housing Action Team (CHAT). Both projects deliver face-to-face advice to residents in fuel poverty, and secured funding for two years in those areas. We have recently also been successful with significant funding to support Torbay. We have a contract with LEAP to visit 2,000 homes this year, and a total of about £600,000 of funding in place.

We celebrated our fifth anniversary in November. We have helped over 5,000 households and visited over 2,400 homes. We estimate that we have saved our clients over £2,674,700 and prevented 1,000 tonnes of carbon dioxide emissions. Those emissions savings are equivalent to the annual carbon footprint of about 185 British people. We won a Community Energy England award in January for our fuel poverty work, the fourth award in four years for the Healthy Homes team.

ECOE also now runs a Community Energy Champions Programme overseen by the Energy Champion Manager, Sarah Reeves. Volunteers attend ECOE's in-house two-day training, covering five modules: energy efficiency quick wins; tariffs and discounts; the Priority Services Register (PSR); grants; and putting into practice. After this they shadow a drop-in advice clinic and a home visit with one of our advice team. They also have the chance to attend some of National Energy Action's webinars and do its e-learning modules.

The Community Energy Champions volunteering programme has developed during 2022/23 thanks to a National Lottery Awards for All grant. The funding provided additional capacity to develop a co-create a standard training programme and materials with Energise Sussex Coast, create an online resource hub and increase the number of training sessions and mentoring for 30 volunteers. The role of Energy Champions is led by the needs of their community, their interest and skills and specialism, supported and mentored by ECOE staff for example:

- ECOE leaflet and top tips information included in a Warm Delivery Box for vulnerable residents with Volunteering in Health Charity in Teignbridge
- Supporting Winter Warmth campaigns and the annual Fuel Poverty Day.
- Hosting regular energy advice clinics and information days in their neighbourhood
- Distributing posters and leaflets in rural communities and noticeboards.
- Hosting energy information stalls at community fetes and events
- Liaising with local organisations, churches, GP surgeries, food banks and community advice centres to ensure they are linked up with ECOE's talks, training and referrals.

We started off the programme in 2021-2022 with six champions. In 2022-2023 we trained 21 people. The champions are a mix of local residents who want to help

educate people about energy use, and also members of sustainability groups in places like Bradninch, Tiverton and Teignbridge.

Retrofit

There are two main aspects to our retrofit advice services. First, we are delivering projects funded by Devon County Council (DCC) grants. The first is called Sustainable Warmth, for which installations must be complete by August 25th. The second is called the Home Upgrade Grant 2 (HUG2), which could bring ECOE significant income. We already have six people working on that project and may need more.

Sustainable Warmth

157 properties registered

14 dropped out

21 off-gas properties are progressing under HUG1

19 on-gas properties are also progressing

78 off-gas properties are moving over to HUG2

25 on-gas homeowners lost out.

Estimated total income to ECOE from Sustainable Warmth is £75,000

HUG2 is government funding for improving homes, delivered by local authorities. We're working with DCC and their retrofit teams, to supply the retrofit assessments and coordination. It is a two-year project potentially helping 350 homes in our area.

The 'able to pay' service which ECOE has previously hasn't got off the ground yet, due to numerous delays outside of our control. These include the general project framework, software delays and problems getting insurance cover. A new project manager is in place, working one day per week to help us progress this as part of a team of eight. We have 216 people on our waiting list and have contacted 110. 11 of these have signed contracts and are awaiting assessment. 86 are ready to receive contracts.

We are part of a new Devon/Cornwall funded project which will help us train the team, test out different levels of advice services and push retrofit forward in our area. Excitingly, we are recruiting to boost our team. We have also gained a potential pilot project to retrofit an entire Exeter street.

COMMUNICATIONS

This year ECOE performed exceptionally in renewable energy and sustainability awards at a local and national level. In April 2022, won Community Energy Initiative at this year's UK Green Energy Awards. That primarily reflects the Healthy Homes for Wellbeing scheme, which has helped people around Devon out of fuel poverty. ECOE's original chair and CEO Gill Wyatt wanted clean energy projects to help the poorest. This award finally reflects ECOE's hard work doing that, from paid contractors to volunteers and members who fund us.



ECOE director Andy Extance (right) receives ECOE's Green Energy Award from sponsors Western Power Distribution. Credit: Regen/Tom Smith Photography

The Green Energy Awards are a leading national celebration of innovative technologies, pioneering companies, and inspiring individuals shaking up the energy system and driving towards a zero-carbon future.



ECOE wins the community group/charity/non-profit award

Exeter Community Energy (ECOE) also won the Community Group/Charity/Non-Profit category in [the 2022 Exeter Sustainability Awards](#). The awards follow Exeter City Council declaring a commitment to make Exeter carbon neutral by 2030. In particular they recognise and champion those who are making strides in this area. Princesshay Exeter, Exeter City Futures, Exeter City Council, In Exeter, The Exeter Magazine, the University of Exeter and Devon Contract Waste Ltd back the awards.



Jilly Scheepers (left) and David Bacon (centre) receive the Exeter Sustainability award in the Community Group/ Charity/Non Profit category

We are showing the amazing things that are possible when the community comes together to deal with our problems. The award is for everyone from our members to our expert team of Home Energy Advisors. All of us are heroes. Now, the whole city of Exeter has rewarded our efforts as well.

ECOE then started 2023 with a 'highly commended' award for Fuel Poverty Action at Community Energy England's awards. Four members of the ECOE team were at City Hall in London on January 20th to collect the award. Healthy Homes for Wellbeing Project Manager and ECOE Director Tara Bowers also told 150 attendees about energy efficiency's importance, and the challenges involved. ECOE director Prina Sumaria also presented an award in her main role as Local Energy Coordinator at Regen. Paul Whittall, Healthy Homes for Wellbeing Home Energy Advisor, and Andy Extance, ECOE director, joined Prina and Tara.



From left-right Andy Extance, Paul Whittall, Tara Bowers and Prina Sumaria collect the Highly Commended Fuel Poverty Action award

Currently 559 people receive our main newsletter, which has fallen as we clean up non-responsive email accounts. On social media, at the end of the financial year our Twitter follower count was up to 1,992 from 1,934 last year. Our Facebook page had 1092 followers, up from 975 last year. We had 513 LinkedIn followers, up from 355 last year.

SUMMARY FINANCIAL POSITION AT 31 MARCH 2023

The accounts for this financial period to 31 March 2023 show a surplus of £3,470. This has turned the overall trading surplus through ECOE's history of £11,949 at the start of the period to a surplus of £15,419 at the end of the period. This surplus is after taking account of the proposed 5% interest payment on members' shares.

This is the fifth successive year in which ECOE has made a surplus. There has been an increase in turnover in the year of 33%, excluding grants and donations, from £210,097 to £279,728. The increase in turnover was driven by the Healthy Homes for Wellbeing project which saw an increase in home visits of 54% and the provision of services increased by 152%.

When considering the current year's performance and surplus, it should be noted that grants are received over the winter period. Most of the grant income are accounted for on receipt in accordance with accounting regulations, whereas the project's expenditure will continue throughout the year. Consequently, if we were to look at the figures in a few months' time, part of that surplus will have been spent.

ECOE's cashflow has remained positive during the year. ECOE will continue to seek to use surplus funds to repay share capital and medium terms loan investments where requested. As we repay more of our loan and share investments, interest payments will reduce, and surpluses will increase.

On the strength of the results and of the financial projections going forward, the Directors will recommend to members at the AGM that a transfer is made to the Community Fund of £5,000 this year based on the surplus generated and anticipated future income from Solar PV and Healthy Homes for Wellbeing projects. This may be supplemented by donations from members.

COMMUNITY FUND



SEADREAM incorporates virtual reality into its environmental education. Now ECOE is funding it to do so for energy efficiency. Image credit: SEADREAM

In November 2022, ECOE awarded £5,307 in grants to five local groups to make buildings greener – including virtual reality energy efficiency education. ECOE's community fund provides grants to groups in and near Exeter working on clean energy and fuel poverty. The fund draws on the income from our ten solar power sites, donations from ECOE members and surplus income from our Healthy Homes for Wellbeing project. We expect ECOE's community fund to make over £170,000 available over the 20-year lifespan of our solar panels.

This year, ECOE had nine applicants for the community fund. We made awards to five groups: Alphington Community Association, Countess Wear Village Hall, Exeter Phoenix, SEADREAM and Whipton Village Hall.

Alphington Community Association

The Alphington Community Association runs the Alphington Village Hall and Community Centre to provide the community with space for activities and social and organised meetings. We awarded this group £1,000 to go towards replacing its noisy blow heaters with thermostatically controlled radiators. This system will help reduce the building's energy consumption, reducing carbon dioxide emissions and cutting electricity bills. While the original Village Hall is an 1830 building, it was refurbished in 2017, so is well insulated, though the large windows are only double glazed.

Countess Wear Village Hall

The second funding award went to Countess Wear Village Hall, which likewise provides a venue for local people to meet and do things in. Accordingly, we awarded this group £1,307 as part of a match-funded grant to install solar panels and a battery at the hall. The group estimates that the system will mean it cuts its usage of electricity generated elsewhere by about two-thirds. As well as cutting its carbon footprint, that will cut its bills by about £1,000 per year. As such, it will be able to keep the prices to hire the hall lower.

Exeter Phoenix

Thirdly, we awarded funding to Exeter Phoenix, to improve energy efficiency at the contemporary art and music venue's beautiful building in the city centre. 350,000 people visit the building each year. However, it has 106 large, single-glazed, metal-framed windows. While the windows fill the building with light, they lose a lot of heat in colder months. So, ECOE has awarded the Phoenix £1,000 towards installing secondary glazing on some of the windows.

SEADREAM

The fourth award went to SEADREAM, which stands for Science and Engineering Around Devon, Research, Education And More! SEADREAM's directors are three female doctorates. They are all passionate about inclusivity and accessibility to fun and meaningful Science, Technology, Engineering, Art and Maths (STEAM). So they deliver inspiring activities across the south west that shatter gender stereotypes and promote care for the environment. They won the Prince of Wales Award for their Ocean Discovery Zone outreach at the Devon County Show in 2022. That included the launch of SEADREAM's educational activities using virtual reality (VR) headsets.

Now ECOE has awarded SEADREAM £1,500 to produce new educational resources with the theme of energy efficiency. They intend to use these resources in schools and community groups in Exeter. Afterwards, they will bring them to wider community events. Also, SEADREAM would like to collaborate with a farm in Exeter to provide a series of interactive displays and activities. We will hopefully bring this resource to an ECOE event at some point in 2023.



Exeter Phoenix was able to secondary glaze the lower windows in this picture. This infra-red image shows that much less heat is leaking out of those windows; hence they appear darker than the higher windows. Credit: Exeter Phoenix.

Whipton Community Hall

The fifth award went to Whipton Village Hall, another venue for local people to meet and do things in. A former church built in the 1800s, it has single-glazed leaded windows. The hall has been working to improve its energy efficiency. Now, ECOE has awarded it £500 to install secondary glazing units.

Lenka Hill, the director who had been overseeing ECOE's community fund, has now stood down. We'd very much like to thank Lenka for all her hard work. Prina Sumaria saw the 2022/2023 award through to completion and Emma Sueref has now taken over the 2023/2024 award.

GOVERNMENT POLICY UPDATE

ECOE is maintaining a close watch on developments in the Energy Bill as new business models for community-owned energy may become viable. Also, political changes at the next general election may lead to a surge in support for community energy, and ECOE will have a pipeline of projects ready. Furthermore, energy flexibility will become increasingly valuable as we move to a more renewable based system. This may provide an additional funding stream for ECOE through flexible operation of its assets in the future.

The Energy Bill follows on from the British Energy Security Strategy in spring 2022, designed to enact changes to deliver the strategy. At our AGM it was still in the House of Commons following amendments in the Lords. The most important amendment for community energy is one that would allow community energy schemes to sell their clean, renewable power to local people - as well as providing a guaranteed price for their electricity. This would allow ECOE to sell surplus energy generated from solar installations to local people, rather than only to the organisation under the rooftop. It could also simplify the grid connection process and open new business models for ECOE such as a community-owned solar farm or wind turbine. The government has however been lukewarm in responding to this amendment, indicating their preference for local energy solutions to be bought forward "through competitive market-based solutions".

Other amendments in the House of Lords include clauses to ban new coal mining in the UK, include plans for low-carbon heat and building energy efficiency, and ensuring a net-zero remit for Ofgem.

Meanwhile Labour plan to invest £400m/year into community energy and a further £600m/year to local authorities to build clean power. This investment is conditional on local communities seeing the benefit of this clean power in direct cost of living support, namely energy bill reductions.

The main themes for local and community energy in recent network innovation projects has been in realising flexibility. For example, a major project in this area has just wrapped up - Project LEO. LEO, or Local Energy Oxfordshire, was a project trialling smart local energy flexibility. Flexibility was sourced from, amongst other assets, a community owned solar farm, along with innovations in energy markets to allow sale of local energy. Network innovation projects in the pipeline are studying the value that energy flexibility can offer the consumer at the system and network level.

FUTURE STRATEGY

Solar PV4

ECOE is currently talking with a Devon-based educational institution about new solar PV installations at three sites. Each array would be relatively large by ECOE standards, in the 80-90kW peak output range. This would be a significant achievement, as our first sites without Feed-in-Tariff subsidies. As such, most of our income will come from selling electricity directly to the host. This brings extra challenges, and some or all of the sites may not be viable under this model. However, there's an energy crisis, and people are paying very high rates for their electricity, creating a viable model.

Since last summer, we've been scoping out these and other sites, some have dropped in, some have dropped back out again. Each of them has some very individual little problems that we're trying to overcome, and that may also contribute to delays. Also, in the last couple of months, a big organisation has approached ECOE to develop some new PV sites for them, and that looks quite promising.

We won a £14,900 bid for funding from Reach to work on moving towards a new share offering to raise the money for these sites. We've recruited a new project manager, Rachel Kelly, who's working very hard on getting the sites up and running. We've done various basics, like get the legal side in motion to get leases agreed and get power purchase agreements in place, which is what we need for the sites to be able to pay us. However, we're still awaiting full agreement from our lead partner. At this point we hope for agreement and to proceed to a share offer, hopefully in 2024.

Just transition

ECOE has a strong sense of social justice, as seen in its Healthy Homes for Wellbeing project, and the community fund set up to distribute income from ECOE's solar projects. At ECOE's strategy day 2023 director Prina Sumaria led a discussion on the need to make sure that the transition from fossil fuels to renewables doesn't impact people negatively, and instead benefits everyone. That especially means marginalised groups, including disabled and elderly people. Prina shared the Scottish Government's statement on a just transition:

"As we tackle emissions, this is also an opportunity to seek out lasting positive societal change: for example, ensuring our efforts to tackle the climate crisis support our efforts to deliver social justice."

Community energy is well placed to deliver social value, as organisations like ECOE are non-profits, and not seeking to maximise financial returns. One of the key points for ECOE was to make the share-owning membership more inclusive. This will likely involve reducing the minimum investment required and could involve volunteers receiving shares or some other benefit, such as voting rights, for their time.

Another key point was about who can access the community fund. Are the groups most likely to succeed those with most experience of applying for funding? Might we need to support less expert groups more? And who knows about the opportunity? What does ECOE need to do to make it better known amongst more diverse groups?