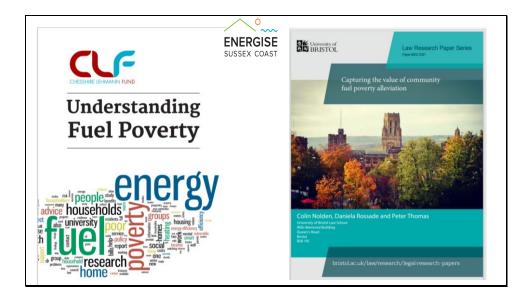


## How can community energy organisations support HAs through a Just transition to Net Zero?

**Richard Watson** 

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This is probably the worst sentence I have ever composed and I apologise. I hope it will mean a bit more when I get to the end of this presentation.



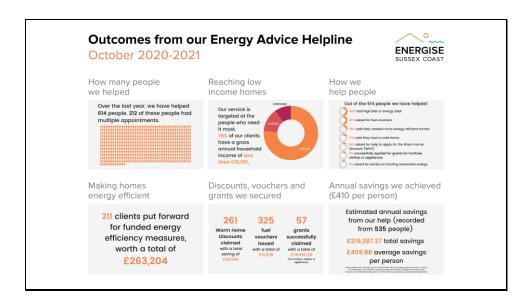
Hastings is one of the most deprived areas in the country and we started tackling fuel poverty in 2012. We were part of the Cheshire Lehmann funded research project in 2015, looking at the mental health impacts of worrying about energy bills, and what interventions could help that and we completed around 200 case studies, In 2021 researchers from Bristol university compared our data and that of a south London community energy co-op called SELCE to see what impact. One of the things they concluded was that we were pretty rubbish about collecting data – they said that was partly the funders fault, who were only interested in how many people switched tariff or were eligible for the Warm Home Discount, and all the interesting stuff underlying energy poverty was missing. One thing they calculated was that the social return on investment from our two organisations was 9:1 - £ 9 for every one pound spent, and that we were good at raising capabilities, i.e empowering people and not just providing a sticking plaster to insoluble problems.



So Kate on the left runs our team of 5 energy champions — she's been on BBC South East a few times to talk about energy poverty and the current crisis



We're a small organisation with a team of 5 energy advisers and a green handyperson – they do all the usual things you'd expect. A key thing to notice here is the cross referral partnership with a local Hastings benefits charity – with PIP claims they often raise incomes by up to £ 4000 per person they help.



This is a snapshot of what our team did in 2021 – after we set up a new helpline – I wont dwell on this slide but two things to notice are that 76% of our clients have household incomes of below £ 16000 a year – which means we are reaching the right target audience and we are doing this by having weekly energy desks at food banks and referral partnerships with HARC and Age UK. The other thing to note is that we referred 211 people for £ 263k of energy efficiency measures and that on average we saved clients £ 409 per person. Kate is currently training other community energy groups in Essex, Surrey and Hampshire to deliver this kind of service and there are other co-ops doing similar work all over the UK.



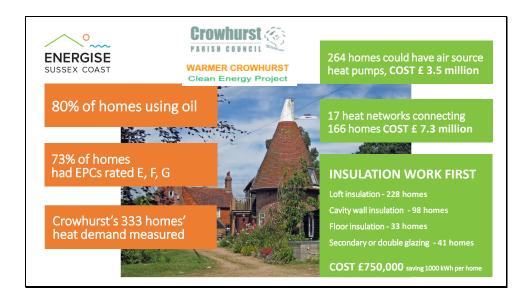
So we finally got to where we were aiming to get in 2019 – we wanted a community fund generated by installing community energy to pay for tackling fuel poverty. So we set up a second co-op that raises money through community investors, who become members of the co-op and we use this money to install and maintain solar systems or other renewable energy on schools, businesses and churches. We raised 450k in 2.5 months and installed 500 KW on 8 buildings in Hastings, 5 schools, a church hall, a charity and an innovation centre. Could we have installed free solar on HA buildings? Absolutely. The model is really simple. We charge a discounted price for the solar electricity used, pay back the members and their interest over 20 or 25 years ( at 3 to 5% interest) and then give the solar panels to the site, where they have another 15-20 years of use. What's different about community benefit societies is that Our directors are volunteers and we don't pay extra dividends, so any surplus income goes to tackle fuel poverty and goes back to the schools.



You can see from these numbers that this is a win win for everyone – the school on the left, which I say will be saving £ 268k over 20 years, will actually save more than twice that at current prices – because they pay us 8 p per kWh and the grid price is 26 p and going up.



The schools energy co-op which I helped set up in 2014 has now put free solar on 90 schools across the UK and Salisbury cathedral with a pipeline of 25 more schools. Like Energise South it is a member of the Energy 4 All co-op network , which has 30 co-ops, generating around 30 MW of green energy, and it has raised £80 mil to install green energy through 16500 investors. And this is just one cluster of UK co-ops. In the EU there is a projection that by 2050 280 million people will be involved with community energy in some way, and it will be responsible for producing 40% of Europe's energy.



So we are looking at ways to decarbonise whole villages, particularly those that are off gas or have high fuel poverty. We've just done a project measuring the energy footprint of Crowhurst, which has a mix of social and private housing. You can see from these numbers what a huge challenge it will be to decarbonise the UK, and how jaw droppingly expensive. We are starting to tackle this one step at a time – taking a fabric first approach and focusing on insulation.



One of the things we could do in this village is raise community shares to install solar panels on say, 100 homes, and sell the solar electricity at say 15pence per kWh to each home. If we did that we'd be able to gift the solar panels to the residents or landlords in less than 9 years. Effectively we are offering to co-ordinate a bulk buy scheme for a community, together with finding the grants and offering finance.

We'd like to do this with a CIC called Lendology based in the SW, which offers 4% loans to anyone who wants to buy their own panels or fund retrofit solutions.

• In this case study from Craig close, Crowhurst, the roof could have 8 panels, or just under 3 kW. It would save the homeowner £ 496 a year - £ 11,400 over 25 years - with a 9.7 year payback.

This model could apply to any HA



- Community owned solar farms could supply local green electricity to local people at affordable prices and use the profits to install solar panels on fuel poor homes.
- Crowhurst has a potential 5.8 MW solar farm that has a positive planning outcome but will be a challenge to connect to the grid. If we do it this would be able to supply the power for 2140 homes a year or 8 villages like Crowhurst. The village would be gifted the asset after 25 years.
- A solar farm is a nature reserve that also happens to generate renewable energy. This was said by Dr John Feltwell, a local ecologist who is chair of the Crowhurst environment group. The pictures are all examples of community owned solar farms

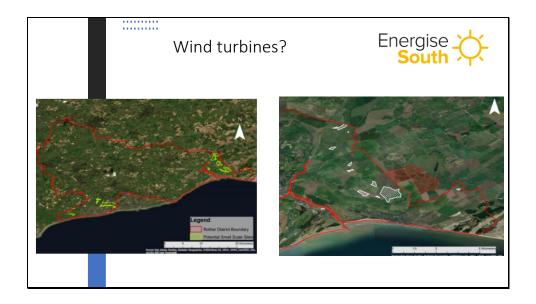


This is where it gets more relevant for HA's. This is a sheltered housing block of leaseholders over 60, though 80% are over 80 and several on pension credits.

We are going to install 78 KW of solar, mainly to the communal services, but also offer to supply any of the flats directly. There are two ways to do this – either through a landlord meter, which is the option we are exploring here, or through an Octopus type energy local tariff.

We will help the block upgrade its loft insulation and get cavity wall insulation first. One resident is paying 41 p/kWh on an EDF date rate, so if the landlord were to sell the solar electricity to the residents for say, 20p/kWh, everyone would benefit.

We – and other co-ops - can do this for HAs. It would be interesting to see how the community energy model differs from the commercial offers available. Perhaps it is the additionality that CE groups offer, and the gifting of the asset when it has repaid its investors.



We have just started another energy options project in Camber and Rye Harbour on the Sussex Coast, both off gas villages with high fuel poverty.

This even has potential for a community owned wind turbine. One recent inshore wind planning application near Bristol was successful and that included using the profits to address fuel poverty in an area of Bristol. We would take the same approach. The best site could have 6 medium sized turbines (2.3 MW each) and interestingly it would be on land adjacent to the existing wind farm owned by RWE at Little Cheyne Court. That would be a £ 15 - £ 20 mil project, so something that we would partner with other local energy co-ops to deliver. Offshore is one of the 4 designated UK offshore wind areas, with no bidders as yet. Who knows, if we can get a community wind farm project going onshore, we can think about going to the next scale, and getting involved in offshore wind.

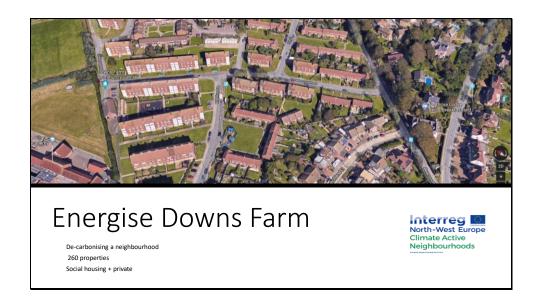
Energy 4 All are already doing this in Scotland. So watch this space.



We did a 4-year Interreg project with our local HA and local authority that was called Climate Active Neighbourhoods. It won an award but was administratively gruelling for us and we were disappointed not to see real outcomes for residents of the housing estates although the project was meant to deliver community solar.

Although UK regulations for sharing energy are still behind the rest of Europe it is now possible to install free community funded solar on housing estates so that all the residents benefit. There are schemes like Energy Local, energy clubs, Ofgem sandboxes and derogations and hopefully, the Local Electricity Bill, will become law in the not too distant future.

Smart energy systems will make fairer, more democratised and decentralised energy possible at last. The purpose of community energy is to empower residents to literally take back their own power.



Can HACT help us to engage with our local HA?

What we want to do in Hastings could be done by community energy organisations anywhere.

See the events listed in Community Energy England fortnight

https://communityenergyengland.org/pages/community-energy-fortnight