Bristol Energy Network

• Bristol Energy Smart System Transformation (BESST)
• Replicate Project
• Bristol’s Big Energy Conversation
• Warm Up Skill Up – supporting The C.H.E.E.S.E Project and Re:Work Anchor organisations to develop a community led Retro-fit scheme
• Energy Learning Zone – supporting Ambition Lawrence Weston develop a sector based energy skill academy
Organisations we’ve worked with..
Champions events and training
Co-design workshop with KWMC Co-design workshops of #FutureHome & Designed & Built by Mufti Games
Community Energy? – or local energy?

Partnerships and collaborations:
Neighbourhood groups
Advice centres,
Community Centres
Community Fairs
School Fairs
Informal park gatherings
Building long-term resilience with our community partners
Bristol project honoured at national innovation awards
Bristol Energy Smart System Transformation (BESST)

Project Overview
Industrial Strategy Challenge Fund: Prospering from the Energy Revolution

Bristol Energy Smart System Transformation (BESST)

The project’s goal is to create clusters of smart energy businesses and homes, digitally integrated within a local energy system platform, that will enable the delivery of innovative energy and transport service propositions.

The project is intended to demonstrate how public private investment in replicable local solutions, using digital technology, could transform the UK’s energy system to deliver reductions in carbon, pollution and fuel poverty in a healthier more sustainable society.
9 Community energy

Current Situation – What is it like now?
- Fuel Poverty: 70% of households are struggling with their energy bill
- Approx. 40% of houses are semi-detached, while 28% are terraced and 25% are flats
- Half of homes are owner-occupied, while the majority of the remaining (40%) are social housing. Only a small proportion (5%) are privately rented
- Approx. 41% of homes in Avonmouth and Lawrence Weston could benefit from topping up their loft insulation levels, while a further 30% could be improved by installing cavity wall insulation
- Approx. 25% of properties in the local area require solid wall insulation
- Approx. 33% of homes have been identified as needing gas boiler upgrades
- Approx. 74% of homes would benefit from floor insulation
- Approx. 19% of homes would benefit from installing double glazing
- Approx. 11% of homes may be suitable for heat pumps (i.e. those not on the gas network)
- Approx. 70% of homes have been identified as being suitable for solar PV/thermal panels

What changes are on the horizon?
- Energy prices are predicted to go up over the coming years increasing pressures on households to manage their energy bills
- New housing will be developed in Lawrence Weston; LWPG will seek to influence developers to build energy efficient homes
- ALW aim to develop retrofit (improve energy efficiency) programme to work alongside Bristol City Council and other providers
- ALW to develop new community owned energy projects, current projects include large scale community wind turbine which aims to generate significant returns for the community and lower energy bills

NEW HOUSING WILL BE DEVELOPED IN LAWRENCE WESTON, LWPG WILL SEEK TO INFLUENCE DEVELOPERS TO BUILD ENERGY EFFICIENT HOMES

How do residents want it to be? – quotes taken from the survey:
- 75% of residents surveyed support the idea of renewable/green energy in principle with 26% not sure as they needed more information
- 70% of residents surveyed said their energy bills cause them financial strain
- 68% of residents surveyed supported our project idea to develop one or more wind turbines in Avonmouth, situated away from residential areas
- 38% of people surveyed said they worry about turning their heating up to keep warm because they fear getting into debt
- 46% of residents surveyed said they would be interested in a CHEESE survey, which uses thermal imaging to understand where and how much heat is being lost in their home
## 9 Community Energy

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<th>Action</th>
<th>Description</th>
<th>Who leads, who else?</th>
<th>Possible resources or funding</th>
<th>Timescales</th>
<th>How will we know it has been achieved?</th>
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<td><strong>9.1 Community Led Renewable Energy</strong></td>
<td>• Development of a wind turbine</td>
<td>• Ambition Community Energy (ACE) CIC</td>
<td>• ACE CIC</td>
<td>2021 – 2025</td>
<td>• Wind turbine built, new installation of solar panels</td>
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<td>• More renewable energy</td>
<td>• BCC</td>
<td>• External Investment and/or funding</td>
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<td>• Heat Networks</td>
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<td><strong>9.2 Retrofit &amp; New Build</strong></td>
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<td>• Local developers</td>
<td>• NSCC</td>
<td>2018 ongoing</td>
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<td>• Well-designed houses and retrofit measures</td>
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<td>• Local landlords</td>
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<td>• Home owners</td>
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<td><strong>9.3 Energy Learning Zone</strong> (see action 4.6)</td>
<td>• Raising skill level of residents</td>
<td>• ALW – ACE CIC</td>
<td>• Low Carbon Gordano</td>
<td>2021</td>
<td>• Energy learning zone realised</td>
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<td>• Energy events</td>
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<td><strong>9.4 Electric vehicles</strong></td>
<td>• Encourage take up of electric vehicle charging stations</td>
<td>• Bristol Energy Network</td>
<td>• External funding</td>
<td>2018-Ongoing</td>
<td>• More take up of electric vehicles</td>
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<td>• Schools and training providers</td>
<td>• Big Local</td>
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<td>• More electric charging points across the community</td>
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ALS is a community led energy group creating new opportunities for social action on energy goals.

ALS was created from Ambition Lawrence Weston’s energy project in order to reach the whole ward following recent boundary changes, in order to harness the potential in our wider local community.

We’re a diverse group of local residents working together to bring a variety of skills and knowledge to the table, increasing capability of our local energy group. We firmly believe community led action can be more effective than the government alone.

Community groups can help locals access the benefits of changes taking place in the current energy market. We are also exploring the support for a community led wind turbine project away from residential areas.

ALS has now employed three local residents on an energy internship including a volunteer’s scheme that will offer free trusted energy advice to local residents such as:

- Advice on switching energy supplier
- Community led wind turbine project
- Solar panel workshop
- Providing information on renewable energy
- The Cheese project (Cold Homes Energy Efficiency Survey Experts).
Using thermal imaging to better insulate buildings.

Our recent event ‘Make Sunday Special’ Avonmouth was an opportunity to broaden our engagement with local residents, to gain feedback on energy saving and renewable projects.

Our questionnaire highlighted that 79.2% of our residents are spending too much on their energy bills, and 55.8% are finding it a financial strain. 98.1% of our residents support renewable energy and 96.2% supported our proposed community owned wind turbine.

Lawrence Weston held an identical questionnaire this mirrored that of Avonmouth’s.

We will hosting an energy stall during the Big Energy Savings fortnight on the 27th October for the Apple day event at Lawrence Weston Community Farm from 1-4PM.

This will be an opportunity for residents to come along to our pop up shop to find out how much could be saved on energy bills. You will be given free trusted advice from the group on switching to the best energy supplier.

We welcome residents who wish to be part of this fantastic growing group, we offer a flexible volunteer scheme that will support and train individuals, providing a wealth of knowledge, experience and transferable skills, thus enhancing future career opportunities.

For more information on the Big Energy Savings fortnight please visit:
www.bigenergysavingweek.org.uk

For more information on our group and it’s activities you can follow us on twitter:
www.twitter.com/ALS_EnergyGroup

You can also contact us by email alscommunityenergy@gmail.com or by phone 07846057470.
Bristol Big Energy
Conversation:
Smart Homes Community Engagement
David Tudgey, Bristol Energy