

Warm Homes and Wellbeing Research Project

Fuel Poverty Pilot, Hastings

The positive mental health benefits of
key interventions
What works? What are the policy implications?

East Sussex Energy Partnership and Cheshire Lehmann Fund Grant

The project aims were to provide energy advice to 200 vulnerable residents, to identify 75 case studies that provide anecdotal evidence of improvements (“what works”) and to examine the relevant policy implications. The CLF grant was supplemented by an award from East Sussex County Council to amplify the research and integrate it within the framework of the Fuel Poverty Reduction programme in East Sussex. Emergent policy recommendations would be of value to the commissioners of the Hastings and Rother clinical commissioning group (CCG) currently distributing a £ 5 million grant to address health inequalities in the area. These inequalities are particularly acute. For example, the Silchester Road office of Energise Sussex Coast is in a neighbourhood that ranks in the lowest 1% for health and disability in the UK. The difference in life expectancy for males between the poorest and least poor neighbourhoods in St Leonards is 11.1 years. In two neighbourhoods in North East Hastings child poverty is in the lowest 0.3 % in the UK.

Energise Sussex Coast (ESC)

ESC is a community benefit co-operative set up in 2012 to address Fuel Poverty in Hastings and Rother through the development of community owned renewable energy generation projects and energy saving schemes.

ESC first began giving energy advice and promoting the *CERT and *CESP schemes from a Rother District Council owned energy advice centre in 2012 but since 2013 has been running Pop-up Energy shops and energy advice desks at locations frequented by the fuel poor target groups (at Libraries, Town Halls, community centres, medical practices, Job centres and Day centres).

The Big Energy Saving Network (BESN) was established in 2013 to address exclusion in the energy market. The Network delivered face-to-face outreach, tailored to the needs of communities, through organisations they know and trust. It built on efforts of existing support networks and helped vulnerable consumers by developing the capability of advisors through training them on tariffs, switching and how to access energy efficiency programmes.

ESC was involved in the first Big Energy Saving Network (BESN) scheme in 2013/2014 and in 2015 led a group of 15 energy champion groups across Sussex and Kent who gave energy switching advice to 2150 vulnerable residents and trained 660 frontline staff. This was the BESN's largest regional group and one of its most successful.

*CERT = Carbon Emissions Reduction Target *CESP = Community Energy Saving Programme

The Fuel Poverty challenge for practitioners

The success of the BESN scheme, continued in 2016/2017, should not mask the very real challenge facing all voluntary and public sector organisations (especially post Green Deal/ECO 1): namely that there is little or no effective national energy advice infrastructure within the UK. Many organisations such as the Citizens Advice Bureaux, Local Authorities, Community organisations and charities such as NEA, Age UK, as well as local charities and for-profit organisations compete for ever diminishing sources of grant and statutory funding. As a result the energy advice space is crowded with similar competing schemes. Some of these are confined to specific areas, or target particular consumer groups and are limited in scope due to funding constraints. Many schemes last for 6 months and are seasonal when most practitioners would agree that the delivery of measurable interventions needs at least a year to evaluate. The Winter Home Check Service in East Sussex however is a year-round service, with clear geographic coverage and a three year contract. Most schemes seek limited outputs (*how many people switched on the day? How much did they save?*) rather than holistic outcomes or evidence of residents lifted out of fuel poverty as a consequence of interventions. Few schemes, if any, tackle whole neighbourhoods. The combined effect is a 'pepper pot' approach that will result in needy households not being captured by a programme. The stop-start nature of such energy advice schemes also confuses the public who see no consistency or continuity. It is difficult to evaluate what works and what the long term positive effects are of such

schemes (other than the initial one year cash savings generated from tariff switching for example).

There is a need for commissioners to cooperate with and encourage community led schemes and their practitioners to work together and collaborate with statutory partners such as the NHS, CCGs, social services and local authority housing staff.

Summary of fuel poverty challenges and policy implications:

- *Structured local and national energy advice infrastructure needed*
- *A mechanism in place to help organisations work together (including data sharing protocols)*
- *A map of energy advice services to look at geographical strengths and gaps*
- *A consistent annual approach to Fuel Poverty services (not seasonal)*

Building effective local partnerships

This project is intended to inform the debate around what a continuous community energy advice service might look like and, since one organisation cannot deliver every aspect of an integrated fuel poverty reduction service, what kind of partnerships with other organisations (following the NICE guidelines) would need to be in place.

During this project ESC was fortunate to work closely with many organisations and delivery partners who collectively form part of the East Sussex Energy Partnership (ESEP) delivering the Winter Home Check (WHC) service with a procured delivery partner (Osborne Energy). ESC also works with other partners outside the WHC scope such as Social Housing

Provider Amicus Horizon, the BESN champions and Community Energy South partners in other areas.

For this project ESC also partnered with Citizens Advice 1066 and the Seaview Charity for rough sleepers and the insecurely housed. ESC ran a weekly energy desk in the Seaview day centre which supports up to 100 service users per day. In 2015 the Seaview charity helped 1300 of the poorest residents of Hastings, one third of whom were rough sleepers and two thirds insecurely housed. The number of rough sleepers in Hastings has increased 5-fold in the last 3 years. A significant percentage of service users are under 35, have mental and physical disabilities and all are severely impoverished. What has emerged from this partnership in 2016 is the realisation that Seaview service users have contrasting energy needs to other vulnerable residents facing energy poverty. Usually we would try to steer those on low incomes away from prepayment meters (PPMs) because of the high cost of energy associated with them but the housing and support staff at Seaview convinced us that for those with chaotic lives PPMs are the best and often the only way to access energy regularly.

Hastings is now fortunate to have a new fuel bank (announced on May 13 2016) funded as a pilot by the Npower £ 26 million Ofgem fine. The fuel bank will provide Prepayment meter vouchers (for PPMs only) worth up to £ 150 a year per meter. According to Matthew Cole of Npower, this addresses the key problem of those in fuel poverty who self-disconnect from the grid. There are 4 million PPMs in the UK and in Npower's view many fuel poor homes that self-disconnect will go undetected as the change in the frequency of their payments is harder to measure for PPMs than standard credit meters. According to Seaview the vouchers could be equally important as a way to help their service users re-connect to the grid.

It will be important for local partners (CAB, ESC and Seaview) to lobby Npower and the local Food and Fuel bank to expand its reach and work

with local organisations to identify recipients whose needs are greatest *and also offer ongoing support to those most at risk.*

Ultimately, a scheme to make dwellings less energy wasteful, or more able to generate free energy for tenants (such as funding solar PV for fuel poor homes) would be a better long term use of energy company fines than extending the life of the inequitable and expensive prepay meters. This view contrasts with that of Seaview staff and underlines the complexity of the energy market and its excluded users and the need to avoid simplistic solutions to fuel poverty.

Future smart energy community work

The National Infrastructure Commission's advice on energy priorities highlights several opportunities for improving how electricity demand and supply could be better forecast and balanced in the future. A key recommendation in this report will be that NICs work must benefit domestic customers and build on successful trials such as those under the Low Carbon Network Fund (LCNF) or the network Innovation Allowance (NIA). This could be critical in galvanising DNOs, local authorities and other private sector partners to lead on city-wide domestic retrofit projects and help accelerate the UK Government's fuel poverty commitments in England over the next 14 years.

ESC is part of the Innovate UK funded ***Energy Local*** scheme to pioneer local energy generation and storage solutions together with Time of Use tariffs for groups of domestic consumers. This has the dual aim of reducing energy consumption and carbon emissions, and in the process offering

potential energy bill savings of between 5% and 30% for all residents who become part of the scheme by joining an *Energy Local Buying Club*.

This is the kind of smart energy project, linked to solar investment for social homes, that could have a significant impact in fuel poor and deprived (but sunny) neighbourhoods such as Hastings.

This is the aim behind a recent award of £ 900,000 over 3 years from Interreg North West Europe to Amicus Horizon with ESC and Hastings Borough Council as sub partners in the scheme (***Climate Active Neighbourhoods - CAN***). The project will enable Amicus to retrofit 100 homes in Ore and fund ESC and community partners to engage with and support homes in saving energy and exploring community solar tariffs and innovative financial schemes to make homes energy efficient and reduce carbon. It will also give ESC an opportunity to install the Energy Local smart meters with home energy management systems to 100 homes. The challenge for this project will be to demonstrate that low carbon innovation and smart energy interventions to reduce emissions can also reduce fuel poverty.

It was important for us that the Warm Homes and Wellbeing research project would help strengthen the local partnerships and deliver useful research outcomes and strategic insights to help us become more effective in reducing fuel poverty – an outcome that would be beneficial for the future delivery of both the CAN and Innovate UK projects as well as the SHINE project in St Leonards (currently under consideration).

Geographical focus area

Hastings (and St Leonards) and three urban neighbourhoods in Rother account for 47 of the 69 most deprived LSOAs in East Sussex with many in the lowest decile in the UK. Hastings ranks 19th out of all 326 local

authorities in England for local concentration of multiple deprivation; Central St Leonards and Gensing are two of the most deprived neighbourhoods in the SE with a high degree of social churn, only 56% of residents having lived there for 1 – 5 years. The wider area has the lowest life expectancy in the county partly caused by the condition of the housing stock. 62% of residents are 1 person households; 32% economically inactive; 26% with long-term health problems or disability, 15% aged 65+; median income per household is £20k per annum. Over 58% of dwellings in Central St Leonards are privately rented and approximately 49% of privately rented dwellings failed to meet the decent homes standard.

The Warm Homes and Wellbeing project also included engagement via Community Energy South partners in similar areas in Brighton and Faversham, Kent, Iden near Rye and rural Wealden. It also incorporated the learning outcomes from the Energy Express pilot in Hastings (2015-2016). In this pilot ESC identified 26 homes to volunteer for energy saving measures (up to 25 measures worth up to £ 500 including labour costs) which were subsequently fitted by Energy Express and local installer Paynes Heating. The effect of the measures were monitored over 1 year (see Appendix) and the pilot was intended to underpin a commercial energy saving service which has yet to prove viable.

Methodology

Part funded by BESN two Energy Champion staff members of ESC (Richard Watson and Deborah Derber) organised and ran regular energy advice desks in the Town Hall, at the Seaview Day centre and at various community centres. They were supported by 4 volunteers who assisted at the clinics, and a further 10 volunteers who helped at events. By running these desks regularly we reassured local people that this was a reliable and stable local service.

Establishing Vulnerability

We established vulnerability from a range of indicators, including

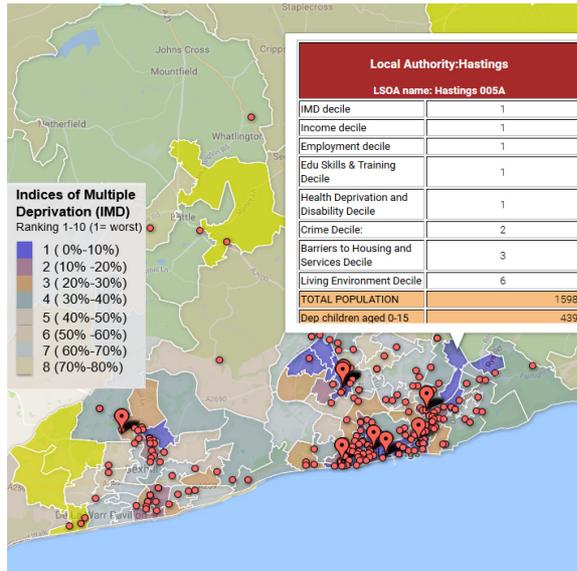
1. Age
2. Income/on benefits
3. Housing condition
4. Health issues/on DLA
5. Tenure and occupancy
6. Energy usage
7. Debt/inability to pay bills
8. Immobile or at risk from cold/ exposed to condensation/high humidity

Many case study referrals were from other agencies (Seaview, Age UK, and Steps support workers) who had already established vulnerability.

The case studies include clients from four Energise Sussex Coast projects:

- 371 clients via The Big Energy Saving Network 2015: See Appendix 2 for vulnerabilities analysis
- 220 fuel poor clients identified in 2016 – please see Appendix 3 for vulnerabilities analysis
- 21 Energy Express Clients – Please see Appendix 4
- 25 Amicus Horizon residents given Solar PVT and ASHP systems as part of NEA Technology Innovation Award – Please see Appendix 1
- 30 Seaview clients helped with energy bills (Appendix 6)

Indices of Multiple Deprivation



Map showing IMD neighbourhoods in Hastings and Bexhill with ESC clients overlaid ORE neighbourhood highlighted - lowest decile for income, employment, education and skills, health and disability

While ESC is committed to offering a free, impartial and independent energy advice service to all, the key focus given the shocking fuel poverty statistics in Hastings is to help the clients that need the service the most.

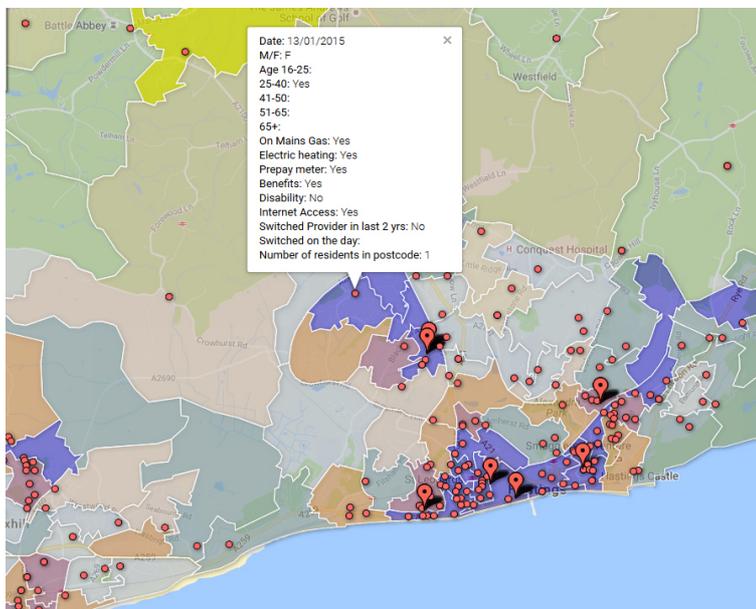
Along with targeting hard to reach vulnerable groups with the above range of vulnerabilities we also developed mapping tools to enable us to overlay client data and postcode locations onto maps which show the indices of Multiple Deprivation.

This enables us to see whether our current client base fits both the vulnerability criteria and map of deprived neighbourhoods. If a significant % of clients lived in close proximity to known IMD < 20% neighbourhoods this would give us an indication that we were successful in targeting our

work in the right areas. It will also enable us to identify neighbourhoods where we are failing to reach the target communities. What we learnt from this mapping exercise was that, broadly, there was a significant overlap between our clients and the IMD < 20% neighbourhoods.

We also noticed some deprived neighbourhoods (Ore for example) where we had only reached a limited number of clients. This was valuable in helping us to plan for the CAN project.

Mapping Samples. Client mapping (BESN)



Sample of interactive Map showing individual client data on IMD overlay

Notice absence of fuel poor clients in certain key deprived neighbourhoods (Hollington, Ore, Tressel, Baird) highlighting need for pop up energy desks in those areas

The energy champions made 1-2 home visits or offered clients extended interviews at energy clinics. ESC trained up a team of volunteer "warm home" volunteers who learnt how to install draught proofing and secondary magnetic glazing. However ESC did not offer this service and instead distributed Rexel funding to other community energy groups covering seaside areas with significant pockets of fuel poverty (Lewes,

Newhaven, Brighton and Worthing) where existing SNUG schemes were already in place.

Also, once we were informed that we would not be able to install energy saving measures ourselves for the EU funded projects but would need to procure this service from others we decided not to purchase stock and duplicate existing services. East Sussex County Council had already procured a delivery partner for the Winter Home Check Service and this partner provided energy saving measures to 600 fuel poor homes in East Sussex per year.

21 homes were provided with a range of energy saving measures by Paynes heating (an average of 19 actual measures per home) and this was funded by Energy Express (see Appendix 4). The difference between the Energy Express pilot and the Winter Home Check Service was that the pilot was aimed at the able-to-pay sector while the WHCS targeted vulnerable homes. Interestingly, the condition of the Hastings homes in the pilot was slightly worse (in terms of EPC ratings) than the homes of our target group, indicating the poor energy efficiency standards of many homes in Hastings and the need for an effective retrofit solution for all sectors if a low carbon transition is to be achieved.

Monitoring

In the Warm Homes and Wellbeing research project ESC aimed to monitor both energy and wellbeing improvements. Energy savings were recorded for many clients and are costed based on a range of assumptions (see Appendix 3). EPC scores were also recorded for some homes and a range of homes received EPCs as part of the project. In some interviews we were also able to capture WEMWBS scores (Warwick Edinburgh Wellbeing test).

The chart below illustrates that significant cost savings were achieved for the project's 220 clients. We are framing these as reasonable estimates at this stage, but since the project we and our delivery partner Citizens Advice 1066 have been undertaking a detailed evaluation with academic research partners that will more precisely evaluate the benefits, including to health and wellbeing, of this approach. Our method of estimation draws on the approach used by Dr Fergal Jones of Canterbury University for the FADES project commissioned by Citizens Advice 1066.

Savings are not assumed for every case study and those estimated belong to the sub set of case studies who were interviewed after the interventions were known to have taken place. Savings in kWh are assumed in some cases using the Energy Saving Trust assumptions but actual year on year savings would need to be verified by monitoring. (see Appendix 3).

£102,331 saved in total



The relatively short project period did not allow us to do “before and after” measurements. This needs a longer time frame and very engaged clients. Even the 21 Energy Express homeowners given free measures worth £ 250 were slow to respond to survey questions. However ESC has built in energy improvement monitoring into our latest project with the EU funded Climate Active Neighbourhood projects so will be able to get a clearer picture of the impact of energy improvements on energy use. The partnership with Parity Projects will also enable us to use their excellent CROHM tool to monitor costs with kWh and carbon savings.

Where the savings were exceptional and immediately noticeable (the 20 social homes given Solar PVT and ASHP) the tenants were

significantly happier as most were seeing 50% savings on energy costs.

Wellbeing improvements were harder to quantify and compare. Although the project gave us the opportunity to record some WEMWBS scores (average 41.7) we would need to revisit these clients after a year to measure any change. It was noticeable that some clients in appalling circumstances scored better than others with less challenging lives. Sometimes the test took place after improvements and savings had been made. This project has been extremely valuable in helping us and partners (Citizens Advice 1066) develop a comprehensive survey form in partnership with Dr Fergal Jones of Canterbury University that will enable us to better record health and wellbeing outcomes over a year – in addition to mapping energy savings and changes in fuel poverty status.

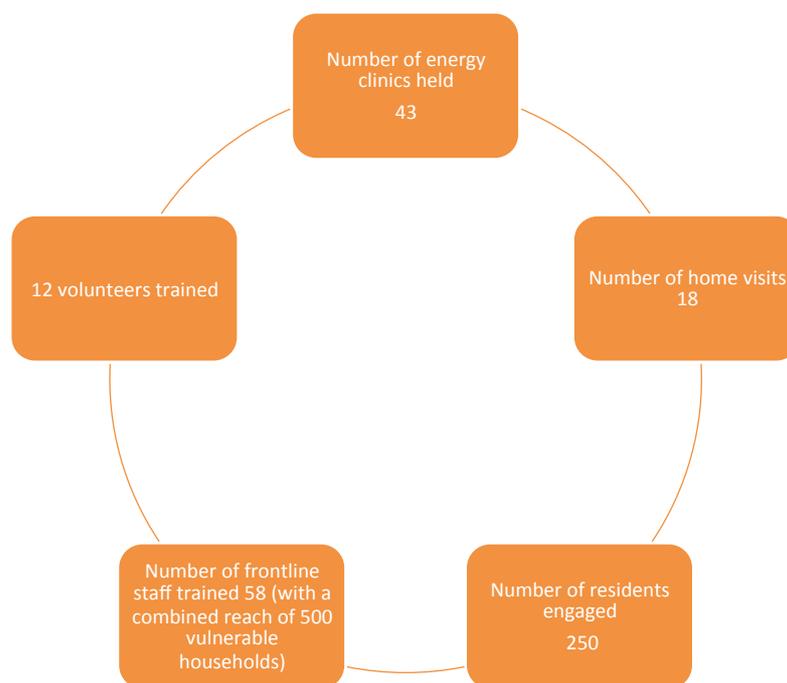
We were able to record some qualitative wellbeing improvements (e.g. “I feel I got my life back” from an 83 yr. old who received a £ 2185 refund from EDF) – these are described in the “outcome” box in the CLF case studies and in the “outcome” column of the 220 project case studies.

Establishing a list of measures that work

ESC's experience of the project has shown us that there are too many variables – both for each home's occupants' behaviour and lifestyle as well as for individual homes themselves - to come up with a generic list of measures that work. We have resisted the temptation to list and record measures without any reference to personal outcomes. However it is clear that improvements to the fabric of the property are the first priority for making homes warmer and more energy efficient, followed by improvements to the heating systems. Our latest survey form reflects this.

49% of the 220 case studies received over 2 hours of support time. Our work demonstrated that often the support itself was as important as any physical measures.

Case Studies : From Oct 2015 – April 6, 2016 Data collection summary



Another source of useful data for the project included the database of vulnerable BESN clients engaged in 2015 who were referred to the Winter Home Check service or to the Citizens Advice service for debt support (or to other support agencies). A selection of these clients were telephoned to establish what interventions had

taken place and whether the outcomes had been positive. These clients were also part of a database of 900 Big Energy Saving Network (BESN) clients across Sussex and Kent whose details were recorded in consumer evaluation reports in 2014/2015.

In total ESC collated 220 case studies which recorded situation, action and outcomes with data collected on a range of health, income and energy issues. Please see Appendix 5 for a complete list of case studies. **The breakdown of case studies is as follows:**

- 20 in depth case studies gathered for the CLF report detailed below
- An in depth case study following the BBC Panorama programme detailed below
- 4 case studies detailed in the Energy Express report (Appendix 4)
- 6 case studies detailed in the NEA Solar PVT report (Appendix 1)
- 220 Fuel Poverty Clients, the data from which includes some but not all the above case studies (please find summarised overview in Appendix 3 and full list in Appendix 5)
- 30 Seaview Case studies added in 2017

220 Fuel Poor Client Case Studies

The Warm Homes and Wellbeing research Case Study group contains the following fields

Name	Address	Phone	Case ID	Date seen	Adviser	situation	action	outcome	client dependency on further support	Advice hours (A = < 1, B = 1-2, C = 2-5, D = 5-10, E = >10)					
high bills - due to:	low income	dependent on benefits	poor housing	mental or physical illness	emotional cause (anxiety/single parent/ death of partner)	PPM	young children	pensionable age	homeowner	private tenant	social tenant	illness affected by cold	EPC	in debt	Warwick Edinburgh Wellbeing scale (WEMWBS)
Tariff	Usage														

Additional fields were added to record outcomes and savings.

During the course of the project our survey developed in an iterative way from the original 371 BESN client form which contained some key data capture questions, to the 20-50 CLF case studies, to a fuller 220 case study survey as part of the Warm Homes research. It has now progressed even further in collaboration with Citizens Advice 1066.

We have tried to illustrate the shifts in data capture through the mapping exercise – showing the BESN 2015 clients map (data survey Version 1) with the 220 fuel poor clients data map (version 2).

The CLF case studies included some clients in Brighton and Wealden who were excluded from the 220 case studies.

A key addition to this report is the enclosure of the CAB study in Hastings (Hastings Citizens Advice 1066: the FADES project, Debt Advice Health Outcomes)

Canterbury University is evaluating the county-wide project (known as FADES) on debt advice for people with mental health problems or other long term conditions. Through this project 850 clients have been seen in the last 2 years with over £7.5 million of debt being dealt with by Citizens Advice money advisers (Jones, 2016). This recent local East Sussex based study is the latest academic evidence demonstrating the link between social outcomes and mental health outcomes in debt advice.

The FADES project demonstrated that total savings on GP visits per client per annum are £228.80. This equates to total savings for 850 people in the project across East Sussex worth £194,480, but this figure is amplified by other contingent savings.

Area of work	Number of Clients	Amount of Debt	Average Debt	Savings on GP visits	Wider savings (health and social welfare)
FADES (mental health clients)	220	1,295,794	8,814	50,336	361,900
EBDX (energy bill debts)	95	93,375	4,668	21,736	156,275
MASDAP (debt advice for other client groups)	328	2,033,461	9,591	75,046	539,560
Hasting Borough Council (debt advice for other groups)	52	137,405	6,245	11,897	85,540
Hastings and Rother Universal Credit	1	150	150	228	1,645
TOTAL	696	3,560,187	29,472	159,244	1,144,920

We have not applied the CAB multiplier to our case studies but we understand that this methodology is transferable. In the case of energy debts this would equate to a saving in healthcare and general welfare costs to the NHS of roughly £ 1645 for every client supported with energy debts (see table).

Case Study 1 (A8) - The health and wellbeing impacts of fuel poverty

This case study was informative from a research perspective (we learnt things about humidity and health that we did not know) but disappointing in terms of positive interventions as the clients were obliged to move by the landlord who wished to sell the property.

"I had the sofa up against the wall over there and everything that was up against the wall... a buggy, laptop bag and a few other items, all had to be thrown in the bin due to white mould just being all over it. The back of the sofa, thankfully, was leather so I could wipe it off.



Situation 1	Intervention	Outcome
Hastings working family with 3 young children in receipt of working tax/child credits. On low incomes with water debt, struggling to stay warm for 5 years in private rented house with damp and mould issues.	H and family featured in the BBC Panorama – Too poor to stay warm. Offer of support from local MP (Rt Hon Amber Rudd) EPC and energy check completed (= E rated EPC (SAP score 51). House now for sale and tenant	Clear implications for landlord legislation in 2018 (where E rated EPC homes considered adequate). Data logger used to measure temp and humidity levels shows remarkable (unhealthy) outcomes for the family. Also exposed malfunctioning boiler and fluctuations in temp leading to

<p>Very old boiler last made in 1995. Rads with no TRVs. Repeated health issues. Using prepayment meters.</p>	<p>given Section 21 eviction notice so no further interventions possible during this study.</p>	<p>high gas costs. This home had a noticeable effect on children's learning, wellbeing and health (with humidity levels at 90%)</p>
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"In winter, I get really poorly and I'm up all night coughing. I'd like to move to a house that doesn't have any mould in the bedrooms or anywhere. That would be better really."

"The kids getting ill is one of my biggest worries. The situation has had me in tears several times," (H)

The family featured on the BBC Panorama programme "Too Poor to Stay Warm". They then received an offer of help from their local MP (RT Hon Amber Rudd). Energise Sussex Coast helped the family by conducting an EPC and energy check and installing a data logger to measure temperature and humidity levels. The EPC showed the house was E rated with a SAP score of 51.

Data logger results

A temperature and relative humidity data logger was installed in one of the bedrooms in the property. It was set to take readings every half hour and was left at the property from early February through to early April. Figure 1 shows the graphical results of what was



recorded. The **red** trace is the ambient temperature in Centigrade (left hand 'Y' axis). The **blue** trace is the relative humidity in percent (right hand 'Y' axis). The **green** trace is the dew point in Centigrade

(left hand 'Y' axis). This is a figure computed from the ambient temperature and relative humidity figures. Where the dew point exceeds the ambient temperature, one can expect condensation to form.

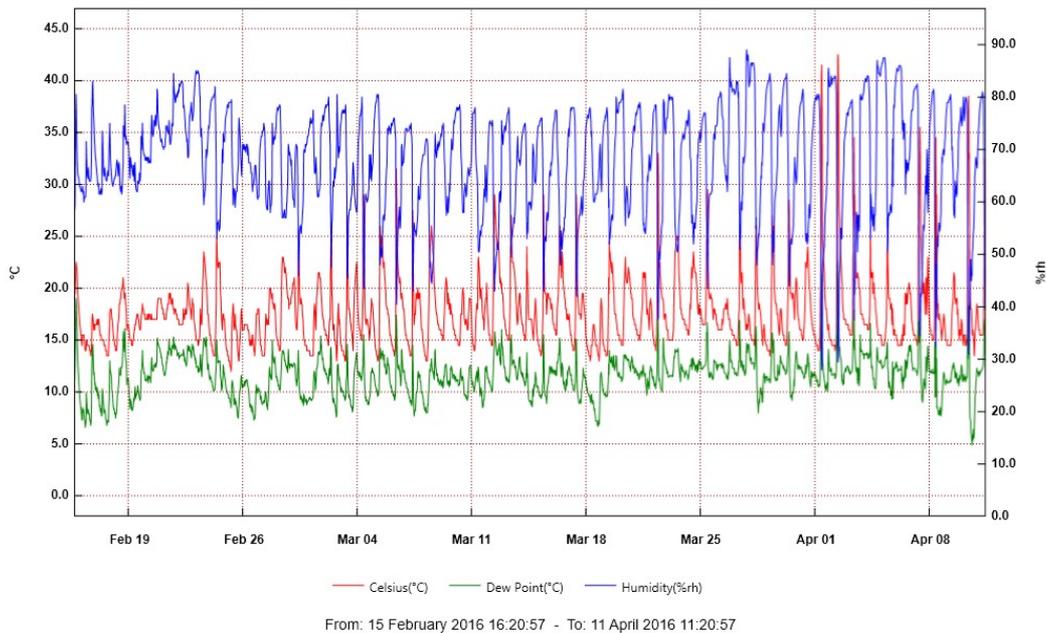


Figure 1: Temperature & humidity dataset

Detailed examination of the data shows the following:

- The heating comes on around 06:30 and goes off around 09:45;
- There is some heating most evenings but this is at a much reduced level to that which occurs in the morning. Peak temperatures in the evening are much lower than in the morning. Some evenings, there is no heating;



- The bedroom achieves peak temperature around 09:00. Most bedrooms could be expected to be unoccupied by this time;
- There are no, or inadequate, temperature controls:
 - The temperature normally peaks well above 20°C. The highest temperature recorded was 42°C. One would normally expect a bedroom to be at 18°C
 - The temperature would fall during the night, typically to 14°C;
- Relative humidity rose during the night as the ambient temperature fell. It was normally well above 70% for most of the night. The highest recorded humidity was 89%. One can normally expect increase in fungal spores at relative humidity levels above 60%;
- Whilst the dew point temperature was never recorded above the ambient temperature, it was quite close on several occasions. The data logger can only record the conditions in its own immediate locality. Given the proximity of the two temperatures, it is highly probable that the dew point was above the ambient temperature in colder parts of the room such as windows, window rebates & exterior walls. One would expect to see condensation and visible mould as a result.

Figure 2 shows a representative subset of the recorded data for 26th through 29th March. The extent of the daily fluctuations in temperature and humidity can be clearly seen from this subset.

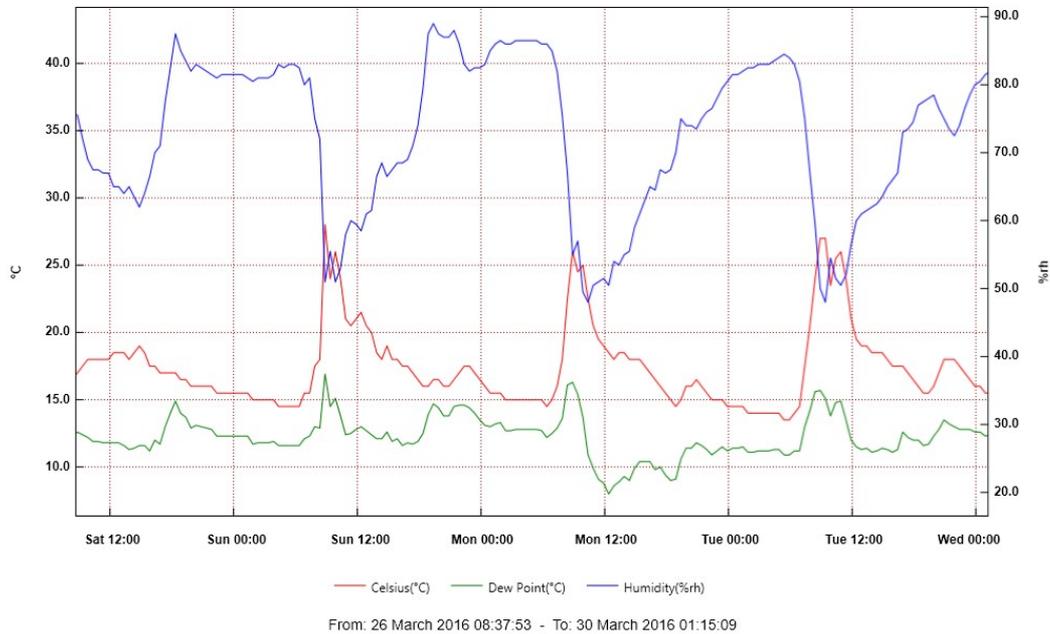


Figure 2: Temperature & humidity subset - 26th to 30th March 2016

The Domestic Energy Adviser who completed the EPC noted the following potential improvements to the property:

- 1) The boiler was last manufactured in 1993 so is at least 23 years old, & in the Home Heating Guide has a Seasonal Efficiency of under 68%. Recommendation is to replace.
- 2) The Radiators look like they need to be replaced with new & would suggest to have TRV's fitted.

General Areas

There are a lot of areas/rooms in the house that have mould especially in the back bedroom, lounge and bathroom.

This is mainly due to the poor condition of the guttering on the property which is causing water to run down the walls. The other main area is

outside at the back where the path way has been built up to the bottom of the air brick to the suspended timber floor to the ground floor. When it rains the water has nowhere to go but through the air brick to the area below the suspended timber floor (kitchen) which is causing major damp problems and rotting of the timber joists.

The Bathroom has been constructed at a later time (no date) than the main building and is of cavity construction there is no signs of any cavity wall filling would suggest this is checked by an installer. Again there is a problem with rainwater from the pathway being able to soak into the walls and feel this is the main reason why the walls are showing signs of damp.

Summary of this home's energy performance related features		
Element	Description	Energy Efficiency
Walls	Solid brick, as built, no insulation (assumed)	★☆☆☆☆
	Cavity wall, as built, no insulation (assumed)	★☆☆☆☆
Roof	Pitched, 300 mm loft insulation	★★★★★
	Flat, no insulation	★☆☆☆☆
Floor	Suspended, no insulation (assumed)	—
	Solid, no insulation (assumed)	—
Windows	Fully double glazed	★★★★☆☆
Main heating	Boiler and radiators, mains gas	★★★★☆☆
Main heating controls	Programmer and room thermostat	★★★★☆☆
Secondary heating	None	—
Hot water	From main system	★★★★☆☆
Lighting	Low energy lighting in all fixed outlets	★★★★★

Current primary energy use per square metre of floor area: 404 kWh/m² per year

The assessment does not take into consideration the physical condition of any element. 'Assumed' means that the insulation could not be inspected and an assumption has been made in the methodology based on age and type of construction.

Would suggest that some form of drainage is installed around the back of the house to take the water away from the building.

There are signs of damp to the ceiling of the bathroom which has mainly a flat roof would suggest that the roofing area is looked at.

Conclusions

The priority is keeping homes warmer and making homes healthier; mould growth is a very good indicator of unhealthy conditions. This key case study brought to national prominence by the BBC (**A8**) shows that a house that would meet the 2018 criteria for renting (EPC rate E) is nevertheless generating humidity levels of 80-90% in the children's bedroom. This has significant health impacts.

This case study neatly captures other issues faced by Hastings residents, namely significant health inequalities linked with fuel poverty, low wages, poor housing stock and low educational achievement - Hastings has a high % of failing schools. It also highlights the anomaly of an EPC rating that rewards a house with a working gas boiler and radiators even when the boiler is 23 years old and malfunctioning and the radiators have no thermostatic controls.

The key finding from the data logger is that the children's repeated illnesses (including visits to hospital) can be attributed to extremely high humidity levels (89%) and that the combination of cold and ill health in this case is affecting educational achievement as well as the wellbeing and happiness of the family.

Health implications:

The implications for the health of the family with humidity levels at 80-90% have been known since the research paper published in 1986 in PMC - *Environ Health Perspect. 1986 Mar; 65: 351-361* indirect health effects of relative humidity in indoor environments. A, E M Sterling, J H Biggin, and T D Sterling . Cited by other articles in PMC.

The key finding, highlighted in the Abstract is that *the majority of adverse health effects caused by relative humidity would be minimized by maintaining indoor levels between 40 and 60%.*

The incidence of absenteeism or respiratory infections was found to be lower among people working or living in environments with mid-range versus low or high relative humidities. The indoor size of allergenic mite and fungal populations is directly dependent upon the relative humidity. Mite populations are minimized when the relative humidity is below 50% and reach a maximum size at 80% relative humidity. Most species of fungi cannot grow unless the relative humidity exceeds 60%.

Further case studies 2-10 (vulnerable and elderly)

Situation	Intervention	Outcome
A55: Home owning Hastings couple in their 90's on pension credits and DLA with cold related illness and high bills and usage. Large temperature difference between living room and other rooms. Reluctance to downsize	Gas CH but also using night storage heaters and E7 tariff (so high Elec users but also had free solar panels installed!). BG service contract on their boiler. Meters not read for 1.5 yrs. £ 1100 in credit on estimated readings	BESN champion gave BG up to date meter reading. BG paid back £ 780 cheque. Switched supplier to save further £ 360 pa. Further work on water bills due. Working with Steps East support worker. Had winter home check. Couple delighted with savings but BG sent debt collection letter that distressed them.
A41: Private tenant 83, pension credit, no savings, lost interest and direction after car accident and death	Erroneous transfer by EDF meant he overpaid for 2 years. We interceded and eventually EDF refunded £ 2185. Applying for debt relief on other energy bills	This has changed his life - he came to a pot luck supper with Transition Town group. He feels he is "getting his life back". As a successful

<p>of partner after 40 years. Charged for electricity by two companies. In debt to Southern Water, BG and Eon. Ignored the brown envelopes (following his partner's death)</p>	<p>and water. Paying £ 90 /m payment plans. Had Winter Home Check.</p>	<p>comedian and raconteur we hope he will become an ambassador for pensioner groups</p>
<p>A54: Pensioner with mental health issues requiring carer support - on PPM with gas, thought boiler was broken down but turned out to be safety switch had cut gas supply- she had no heating and hot water for months. Referral from STEPS</p>	<p>Arranged EPC and plumber visit. This established the problem which was fixed.</p>	<p>Client was "over the moon" as she could wash herself again. Indicative of how vulnerable residents in fuel poverty often unable to pay the call out charge that might have avoided months of discomfort.</p>

Situation 5	Intervention	Outcome
<p>A 50: Single pensioner 76, living on Attendance Allowance and pension credit, no upstairs radiators, using kettle for hot water, suffered hypothermia and stroke in summer, hospitalised. Boiler system non-functioning. Homeowner but would not consider using equity in house to improve its efficiency (EPC E 48). Very low user of energy. 1600 kwh gas and 1000 kwh electricity on Age UK EON rate (not cheapest, but would not change). Big temperature difference between lower and upper floor (immersion heater upstairs)</p>	<p>Supported by Steps, obtained WHD and priority services, completed EPC. Now has new boiler installed. Downstairs room adapted to have bed. Partition with living room</p>	<p>Now much warmer and with hot water. Struggling with timer and controls so will get advice from installer next week.</p>
<p>A46: Wife very ill. Gas Boiler broken for 2 years. High electric usage. 1 room 24 degrees but corridors v cold. Pension credits but small work pension put joint income over threshold. Npower bill £ 2500 (using 11,500 kwh Elec). Several energy interventions possible. Wife no longer wished to go to hospital but had 11 illnesses and was recovering from multiple operations (but very resilient and keen to provide a home for 36 grandchildren).</p>	<p>EPC arranged. E 42 Bills assessed. Income added. With his SSE work pension total household income was £ 18 k making them ineligible for the Referral to winter home check</p>	<p>Switched Npower tariff saving 300 pa (further savings available if switching supplier). New boiler and CH system due to be installed 20/4/2016 taking 4 days. Loft cleared and due to get new insulation. Now qualified for extra benefits. Monthly energy payments down from 250/m to 130/m.</p>

<p>A45: Hastings husband in his 50's v ill (COPD, heart and breathing difficulties. Hospital needed) - boiler not working, leaking into loft which he could not access with his illness. Low income - pension credits for her, His illness and breathing difficulties meant he needed the windows open to breathe even when central heating was on (for her). Using 11000 kwh gas and 5000 kwh electricity annually. Help was needed urgently.</p>	<p>CLF and BESN funded Energy Champion obtained EPC, sent plumber to fix boiler temporarily. Applied to Npower Health through Warmth for new boiler (partnering with NEA).</p>	<p>New boiler installed, some insulation. Client very pleased and grateful though husband had to return to hospital for more treatment. Clear case of how collaboration between multiple agencies can support (and fund) essential repairs and energy efficiency improvements quickly. This is what ECO 2 funds should facilitate but needs a data sharing protocol</p>
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Situation 8	Intervention	Outcome
<p>A47: Single pensioner living in own 2 bed flat. Out of work and cumulative debts (13 k) facing repossession. Flat in negative equity as condition v poor - not reflected in EPC. Declared bankrupt 4 years previously. Intelligent ex teacher but state of flat suggests breakdown. Appliances not working, holes in bathroom wall, no light fittings.</p>	<p>EPC arranged. Bills assessed. Supported by Steps East</p>	<p>Referred for Winter Home Check. Advised could save 142/pa by switching. Pleased with service but little else we could do. Continue to ring.</p>

<p>A52: Family on WTC and DLA with severely disabled child. Struggling to heat rural home in off gas area (Icklesham) with only electric heating. Let down by British Gas ECO funded Warm Home scheme. Assessed twice for HHCRO</p>	<p>Arranged EPC and referral to EDF Trust and free biomass boiler scheme</p>	<p>Not able to get free biomass boiler as heat demand of property only 12500 kwh (22,000 min required) – supported since 2012 but this family unlucky with eligibility and ECO scheme. Continuously let down</p>
<p>A48: Single pensioner living in 2 bed rented basement flat on pension credits and DLA. Boiler old and in need of repair/replacement. Gets chest pains and angina when boiler not working.</p>	<p>EPC arranged. Switched tariff (Gas and Elec) to save £ 250 pa. Supported by Steps East. Referred for WHC</p>	<p>Referred to winter home check. Energy checklist sent. Contacted landlord re EPC and boiler. Client said she had sourced funding for her own boiler. Following up to find out if new boiler installed</p>

Case Studies 11-16 (vulnerable adults, 30-60, insecurely housed or in debt)

Some case studies who are impoverished and have chaotic lives are often recovering from a period of rough sleeping or sofa surfing.

Situation 11	Intervention	Outcome
<p>A43: 57 yr. old on JSA who suffers from Asthma, arthritis and has physical difficulties. The door of his rented flat does not fit and the windows are in bad condition. There is condensation, mould and a build-up of water when it rains. He is applying for PIP. He is using a PPM for both gas and electricity and says he is spending £20 every two weeks on each meter. Bailiffs have removed a lot of his possessions. Using food banks. Debt to water company. Claims he did not qualify for CAB support</p>	<p>We applied for debt relief and enabled him to get a new cooker and fridge freezer. This was unsuccessful in 2015 but successful in 2016.</p>	<p>He was pleased but sold them immediately we learnt afterwards. Illustrates life on the edge. He cannot get the WHD or Winter Fuel Payments so needs PPM vouchers Discussions with the charity establish that he is trying to "survive" like many insecurely housed service users with chaotic lives.</p>

<p>A 44: Service user in his 30's, living in a private rented bedsit. He has no other income and a debt to HMRC for overpaid working tax credit. All tenants in the property buy £10 electricity vouchers from their landlord. He struggles to stay warm and has conditions (depression, asthma, under active thyroid that leave him vulnerable to cold.</p>	<p>Applied to EDF Trust for modern efficient electric heater, new electric cooker, new fridge freezer and a heavy curtain in his bedsit/studio flat to stay warm. Applied to the WHC</p>	<p>Getting his bank details for the EDF Trust referral and we will check his meter. He does not know how much electricity he uses. Being contacted about a WHC but did not respond to the first contact. He supports others at the day centre and is highly valued by the charity for his volunteering</p>
<p>A31: Single 44 yr. woman living in rented accommodation for first time (rehabilitated). Sole income ESA and applying for PIP. Has been supported by her family through her addiction and enjoying the challenge of having her own flat to furnish.</p>	<p>1 bed flat, electric only Key meter with EDF costs £30 every 2 wks. Had pneumonia in 2014, keeps home warm to avoid recurrence, bills very high. Paying £26/mth for water. Immersion heater is v expensive, £4 to have a bath.</p>	<p>EDF Trust referral. Needs help with energy bills. Referred to East Sussex benefits advice line, CAB and HARC in St Leonards, given list of income maximisation contact numbers for Hastings. Referred for free ESCC Winter Home Check service. Successful in getting a cooker and Fridge/Freezer</p>

Situation 14	Intervention	Outcome
<p>A19: Single overseas artist in private rented flat with multiple single glazed windows. Was using 14500 kwh of gas so thought electric heating would be cheaper but now using 10,500 kwh electricity pa? Low, variable income but well known in her field and having international exhibitions. Struggling to afford hard to heat property, debt to EDF. Debt to overseas bank. Income as an artist was £ 7978 pa. Applying for WTC but process hard.</p>	<p>Not billed by EDF for 2 years so faced 1 yr. total of £1106. Unable to pay. Helped put her on payment plan. She found dealing with the energy company on the phone very difficult.</p>	<p>Applied to EDF trust for debt relief but unsuccessful. Contacted EDF on her behalf and had her put on affordable plan. Not eligible for WHC</p>
<p>A15: 39 yr. old single woman on ESA and PIP, has a fractured coxis and claims she can never work again. She suffers from anxiety and depression and urgently needs help with an EDF debt of up to £1000 – she is currently on a payment plan but also has other debts she is dealing with separately (Water etc.). Her flat is</p>	<p>We referred her to Osborne Energy (WHC) who visited within the last 3 months and checked flat, but she was waiting for their return to implement measures. Advised her to go back to a local support provider after the last support worker disappeared on her. Gave her number for</p>	<p>Awaiting result of referrals and WHC.</p>

<p>above a car exhaust centre and very cold and damp and she suffers from Asthma. Her disability means she finds climbing the two large flights of stairs very difficult, especially taking washing to the launderette and she has housing issue needs.</p>	<p>Money Advice to help with application for £1000 debt relief. Also applied to EDF Trust via CAB Thanet for new washing machine and debt relief.</p>	
<p>A9: Hastings mother and daughter with mental and physical illnesses and disabilities made worse by cold and damp. Could not afford to heat their 2 bed park home when it was freezing... £10,000 debt to Santander (repayment at £10/week). Joint annual income £ 11 k (PIP/ ESA/ Carers allowance) Her medical condition requires a dehumidifier that is constantly on. Electricity is by private wire, heat LPG. She is paying for the Park Home and paying £ 4000 per year for ground rent</p>	<p>Tried to refer to WHD and get the Npower Health Through Warmth funding for insulation (costing £ 6000). Npower unable to help as a park home counts as a holiday let. One company (Insulated Homes) able to offer a grant of £ 500. This is a desperate situation that many face when they have taken loans for park homes and are not entitled to housing benefit or grants.</p>	<p>Uncertain. Have tried to contact client and left messages but there is little that she can expect in the way of grant funded interventions in her circumstances. This is something we wish to address. Vulnerable tenants in HMOs paying landlords for electricity without any record of usage face similar issues.</p>
<p>A3: Couple who live solely on joint income support and PIP. They have no savings and struggle to</p>	<p>Referral for debt relief to EDF Trust. Referral to WHC. Council property to be reported as</p>	<p>Given emergency heating. Eligible for loft insulation and replacement boiler.</p>

<p>pay their electric heating bill (the gas boiler is condemned). His condition (High blood pressure + Crone's disease) means that he needs to stay clean and warm. The extractor fan in the flat is broken. The block is a "council supported private letting scheme" but the couple are struggling to cope financially. She would benefit from a new washing machine to be able to keep their clothes clean and support his condition. She also has a permanently damaged spine (receiving PIP) and he is blind in one eye.</p>	<p>inadequate. Currently supporting them with their budget for CAB. She has 6 children in care and a debt to a storage warehouse with 250 cubic feet of her possessions including children's items she would like to return. This would involve finding a grant of £ 500.</p>	<p>She is anxious about her possessions. Warwick Edinburgh wellbeing score 33 (UK average 52)</p>
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Case Studies 17-20: rural fuel poor in East Sussex and Brighton case studies

Situation 18	Intervention	Outcome
<p>Single working mother in Wealden with young (disabled) children renting off-gas period rural property (oil heating, damp, cold). High usage. In debt to Energy supplier, problems with meter</p>	<p>Local oil group gave 1 year supply for free. BESN Energy champion wrote to Scottish Power Fund who wrote off £ 940 debt. Switched Tariff to save £ 300.</p> <p>Received Winter Home Check who fitted energy saving measures.</p>	<p>Positive but indicative of amount of support needed. This client should also receive the WHD.</p> <p>Supplier with indebted vulnerable customer like this should not have them on standard tariff. Need to resolve meter issues when electricity consumption registers this high (7500 kwh). Key need for rural RHI and energy efficiency investment</p>

Situation 19	Intervention	Outcome
Single mother of three renting 4-bed draughty, hard to heat home in Brighton. High bills	BESN Champion helped her switch tariff and access WHD to save £ 800/year. Also installed energy saving measures	Positive result but this client one of 1000's in council properties that have had no energy efficiency improvements since they were constructed in the 1960's. Switching tariff not enough, home energy improvements urgently needed

Situation 20	Intervention	Outcome
Brighton widow in her 70's became indebted to energy supplier (£ 900)	BESN Champion completed 3 month analysis of bills to find day and night usage had been erroneously switched. This saved £ 700. Supplier did not accept error until 6 month meter log was supplied.	Positive result but many vulnerable consumers are in this situation with concerns about meters and errors. (some concerns incorrect) Very time consuming support exercise

Fuel poverty workshop

A "Community Solutions to Fuel Poverty" workshop was organised on 13 May 2016 where the case studies and results of the research from this and other CLF projects were summarised for the Secretary of State for Energy and Climate Change (Rt Hon Amber Rudd MP). This report and the policy recommendations nominated and prioritised by a wide range of academic, private sector, public sector and voluntary organisations at the workshop will be presented in writing to DECC, Ofgem and the Secretary of State. The discussion and the recommendations are timely as they follow publication of the CMA report and the NIC consultation and precede the publication of the Bonfield report and the detail surrounding the ECO3 scheme that replaces ECO in 2017 with its alleged focus on targeting fuel poor homes.

Big Happy Energy Day

ESC organised a focal point public energy event "The Hastings Big Happy Energy Day" and invited over twenty other health and debt advice organisations from the private, voluntary and public sector to attend. This event was hosted by ESC on 17 February 2016 and was attended by 85 people. Its core purpose was;

- To link energy advice and wellbeing enhancement under one roof and by inviting multiple organisations enable them to network and see the value in collaboration.
- To demonstrate to the public how many different local organisations were able to support them with debt relief applications, energy and water saving advice, housing, welfare and benefits advice, home, health and wellbeing improvements as well as home safety checks and much else besides.

Final Conclusions

Through this project we have identified two different categories of community energy champion interventions that are effective. Broadly these divide into energy bill interventions, including help to access grants or other schemes, relieve debts or correct errors. These interventions are often time consuming and involve champions dealing with energy or water supply companies on behalf of vulnerable clients.

The second category is the identification of energy inefficient and unhealthy homes and housing conditions. This latter category and range of interventions is fundamental to any strategy aimed at tackling fuel poverty systemically. In this project we did not directly engage in home retrofits with the exception of commissioning some EPCs and engaging heating engineers to do some urgent repairs to heating systems but we did refer obvious D, E and F rated homes and their eligible occupants to other schemes such as the Winter Home Check or Npower Health through Warmth (London Warm Zone) scheme.

As a result of this project we have committed to establish a Retrofit Works scheme in Hastings that supports effective retrofit solutions. This is a co-operative scheme developed by Parity Projects that enables referral agencies and local contractors to undertake lower cost retrofit solutions that are managed by local partners

Energy bill interventions

The case studies show a wide range of positive interventions by Energy Champions that can show measurable benefits for clients. These range from applications for replacement white goods to more dramatic interventions that prompt comments like “I felt like I got my life back “from

an 83 year old billed by two electricity suppliers for years and refunded £ 2185 after getting help.

Vulnerable clients with mental health issues and suffering from anxiety can be significantly helped by small and easy to achieve interventions such as getting the Warm Home Discount or saving £ 200 a year after being helped to switch to a cheaper tariff.

Some home improvement interventions, such as essential repairs to boilers that are not working can be achieved quickly and have positive outcomes. In the case of **A54** – a pensioner with mental health disabilities who was convinced her boiler was not working – when a plumber established that the prepayment gas meter had £ 128 of credit but the gas was switched off as a safety precaution (there was no fault in the boiler) the client was “over the moon” that she could wash, having had no heating or hot water for several months.

Conclusions

1. The energy market continues to penalise the vulnerable.*
2. Some easy interventions are possible but can be very time consuming. These are unlikely to be undertaken by commissioned private sector companies as they can involve multiple hours. This could be done by community and voluntary sector energy champions but an advice service needs to be structured and sustainable (with champions well trained and committed and well supported if they are volunteers)

*The energy market remains problematic. The fact that there are over 40 suppliers and multiple price comparison sites is claimed to be evidence that there is a competitive market but this is far from true. Margins to suppliers from retailing electricity are relatively low. According to Guy Thompson of MY UTILITY GENIUS, a cheaper tariff from First Utility would generate a profit of £ 75 per annum per customer. For this reason the Big 6 persist with a business model

predicated around promoting the Standard Variable tariff (where the profit margin is £ 200 - £ 300 pa) and ensuring customers eventually return to it by default.

This implies systemic risk (more fines) with suppliers' call centres making unsupportable claims about "their best tariffs" or sending statements that claim a customer is already "on our cheapest comparable tariff" when the standard tariff has no comparators. The CMA review calculates that £ 1.7 billion is overpaid by energy customers and recommends that there should be transitional tariffs introduced for the 4 million PPM users.

Vulnerable energy customers are less able to secure fair prices from a complex market or resolve errors in their favour.

Housing interventions

1. The key systemic issue is the energy inefficiency and poor quality of the housing stock. This is a fundamental infrastructure problem but is not perceived as such by Government or the markets. Affordable retrofit loans have yet to be provided by banks or energy suppliers (or a combination of both)
2. The case studies show that housing problems (inefficient heating, poor insulation, condensation, damp and mould) can have far reaching consequences for their occupants. Not only do they compound the issue of unaffordable warmth and trap households in fuel poverty but the health and wellbeing consequences – the direct physical and emotional effects of living in a cold home or tolerating 90% humidity – can be catastrophic for a family and result in high stress, family break ups, depression, illness and poor attendance at school (as evidenced by our family case study).
3. The scandal of fuel poverty rates in the UK and the relatively straightforward solution (an urgent retrofit for poor performing

houses) should be a priority, particularly in the light of the Paris COP 21 commitment. It remains puzzling that for this Government fuel poverty solutions remain uncoupled from climate change, energy and housing solutions when they are essentially the same.

4. Private sector rental legislation is next to useless. Tenants are very often too scared to say anything and landlord exemptions are too many, ensuring that fuel poverty in the private sector is very difficult to eliminate.
5. Reducing mental stress produces big benefits and has a significant saving for the NHS – estimated at £ 1 650 per client in reduced health and social care costs (CAB study). A reasonably practical timeline is perhaps up to 3 years. In this project we found clear cases where mental stress and anxiety around energy bills was reduced by saving residents money through switching schemes, registering them for the WHD or providing referrals to free replacement boiler schemes co-funded by the NEA.
6. The EPC rating system needs an overhaul and should include a “healthy home” measure.
7. The phenomenon of ‘unintended consequences’, where perfectly well-meaning policy initiatives by Government or other institutions and companies lead to silly results. Dr Brenda Boardman cited the example of a modern combi boiler being recommended as a replacement for an old inefficient unit that has broken down. The improvement is calculated not from a direct replacement of a less efficient boiler with a modern unit, but with peak electric heaters substituting the combi boiler. This is based on the assumption that the broken down boiler would most likely be replaced by direct electric heaters rather than any other form of heat
8. A coherent fuel poverty strategy with all the agencies working together is essential. This should target all housing sectors and employ an area based retrofit model rather than pepper-potting. Without street by street neighbourhood engagement many fuel

poor households remain hidden. This is the model that the CAN project aims to develop in NE Hastings.* *

** Recent work (by Walker R, McKenzie P, Liddell C and Morris C (2012, 2014)) has shown that just as there are poverty clusters in certain geographic areas, this is equally true of energy poverty. Through area based assessments, clusters of 125 homes can be ranked to identify areas in East Sussex with the most acute energy poverty. According to Dr Boardman, linking with Healthcare professionals to identify fuel poor geographic areas would be an effective way to target interventions

Policy Recommendations

- In partnership with Peter Smith, Policy Director National Energy Action
- 1. The CMA recommended a key way to address the level of detriment in the energy market is a transitional price control for the 4 million households who are on prepayment meters, who face limited competition from suppliers and whose ability to switch and find better deals is far more limited than for credit and direct debit customers. We would go further and request a review of the marketing strategies of energy suppliers supporting the single variable tariffs
- 2. Address exclusion from the energy market – particularly for vulnerable residents reliant on lengthy support - by supporting the Big Energy Saving Network scheme. East Sussex energy champions were particularly successful and resulted in the Queen's award to ESC for "services to the community of Sussex". However the BESN in the SE was never fully integrated into regional schemes or selected for match funding by LAs. The £ 4000 grant per champion with a challenging target of reaching 100 consumers and training 40 frontline staff (earning a £ 1000 bonus) is not enough for one

organisation and BESN needs more support and match funding from other local funders. It may survive future cuts and the end of DECC but its success is dependent on local champions achieving their targets

3. **Improving conditions in the Private Rented Sector** - From April 2016, domestic landlords in England and Wales are not able to unreasonably refuse requests from their tenants for consent to energy efficiency improvements, where financial support is available from national or local schemes. From April 2018, all private rented properties (domestic and non-domestic) will also need to be brought up to a minimum energy efficiency standard rating of EPC rating "E". Taken together with the existing powers under the Housing Health and Safety Rating System (HHSRS), introduced in the 2004 Housing Act (which is already regulating minimum standards in housing), there is the potential for an enhanced approach which could improve the physical and psychological health of millions of UK households in the private rented sector. We would go further and suggest that the target to get the 300,000 fuel poor homes from F and G rated homes to C by 2035 (via E in 2021) be reviewed. Fuel Poor homes straight to C by 2021. Increased responsibility on owners (not tenants) and penalties for noncompliance. Particular attention should go to regulating the HMO and Park Home (holiday chalet) sector which is where many difficult to help fuel poor households are hidden and difficult to help as they cannot access grants (see case studies).
4. **Improving the Warm Home Discount Scheme** - Following effective engagement by the Department of Energy and Climate Change (DECC), NEA, the Children Society and a range of other well-known charities the Comprehensive Spending Review (CSR) committed that the Warm Home Discount scheme will be extended to 2020-2021. However the Broader Group criteria remain complex and the scheme is used by suppliers to reduce debtors

rather than address fuel poverty. Energy UK, who run the Home Heat Helpline and only cover the Big 6 is no longer fit for purpose. There needs to be a national Home Heat Helpline supporting the WHD and Priority Service Register.

5. **Ensuring the successor to ECO is fit for purpose** - The UK Government is committed to ensuring there is a home energy efficiency policy to supersede the current phase of the Energy Company Obligation (ECO) which is due to end in 2017. The Secretary of State, Ministers and the Department of Energy and Climate Change (DECC) have also publicly stated the intention for the supplier obligation post 2018 to be dedicated to helping households in fuel poverty. At the Hastings Fuel Poverty workshop there was universal support for Local Authorities to be funded to deliver ECO2/3 with local partners. This would support the Retrofit Works model in Hastings. The 20% Flexible eligibility element of ECO 3 is an opportunity for Districts and Boroughs and social housing providers to link with local energy advice practitioners to identify fuel poor homes under the flexible eligibility criteria- the CAN project in NE Hastings is helpful in that it has established a working partnership between ESC, HBC and Amicus to retrofit a neighbourhood.
6. **Reformed and refocused RHI scheme to address rural fuel poverty.** The Renewable Heat Incentive (RHI) budget is to increase from £430 million in 2015/16 to £1.15 billion in 2020/21 To date the scheme has failed to support fuel poor off gas households who cannot afford the upfront costs of new heating systems. Recommendation for a new round of Central Heating Fund grants, low cost home improvement loans (LAs or Parity Trust and Credit Unions) or Local Authority retrofit funds and ECO2/3 funds to support the RHI scheme and deliver renewable heating systems for rural households that need the most help. Retrofit Works a good example of a local solution.

7. **Finding the hard to reach.** . The recent Cabinet Office consultation into Better use of data in government could result in the introduction of a new primary power to extend data-sharing with suppliers to further automate the WHD which is likely to be wrapped into a new Data-sharing Bill later this year. The UK Government must also seize the opportunity to share data for the purposes of enhancing services provided or supported locally by public sector bodies such as local authorities or GP practices. This should not exclude voluntary sector organisations.

Healthy home recommendations:

1. Review of EPC criteria relating to old and inefficient boilers (high score) and the continued inclusion of Green Deal/ECO measures and costings in the EPC report
2. Health checks for houses that have mould and humidity issues (data loggers are not expensive!) and a proposal for a Parliamentary group to consider a “healthy home” campaign (with a checklist of essential *healthy home* criteria that should be applied in relation to health risks for young children or vulnerable adults.)
3. Review of the 2018 legislation relating to landlords and the requirement for a minimum “E” rated EPC – unless there is a mandatory inclusion of *healthy home* certification that is additional

To date many of our effective interventions (replacement boilers) are dependent on informal contacts and data sharing with other agencies. The community energy champion's effort will be far more effective if well integrated into an organisational structure with a data sharing protocol with points of access to the health service such as

medical centre receptions and pharmacies. These would be an effective filter for fuel poverty problems to be identified and assistance offered. The strong partnership between ESC, Citizens Advice 1066, Seaview and RVS in Hastings which currently collaborates to deliver local face –to- face front line advice needs to be recognised as an asset by the NHS and supported by local commissioners.

Total Project Costs (including the Cheshire Lehmann fund research, Big Energy Saving Network scheme, role in Fuel poverty reduction programme in East Sussex, NEA events budget and this research and report)

Summary – Total Funding received (covering 1 year) - £ 32000

Total costs to deliver projects – £ 38,300

Contributions as % of funding received

- ESCC 51%
- CLF 10.9%
- BESN 16%
- ESEP report 19%
- NEA 3.8%
- Deficit - £6300 (funded by Energise Sussex Coast)
Non audited contribution – volunteer hours (Directors, various individuals = multiple hours)
Balance funded by ESC

The views and opinions expressed in this report are those of the individual author/Energise Sussex Coast and do not necessarily reflect the views of the East Sussex Energy Partnership, East Sussex County Council, its affiliates, or its employees.