

NEW ENERGY CULTURE, CITIZEN INVOLVEMENT AND ENERGY POVERTY

TOPIC REPORT — GLOUCESTER, 30th SEPTEMBER 2017

**BUILD2LC Project
Boosting Low Carbon
Innovative Building
Rehabilitation in
European Regions**

The topic report is a communication action for the general public to show the main conclusions and results of the events being held with stakeholders in relation with BUILD2LC topics.

More info: interregeurope.eu/build2lc



**Gloucestershire Science
and Technology Park**

Lithuania: Complete renovation
of apartment buildings
– System Dominum

Gloucestershire: Energy
efficiency refurbishment in
a multi-dwelling residential
building in Sofia, Bulgaria

Podkarpackie: ACHIEVE – Actions
in low income Households to
Improve Energy efficiency through
Visits and Energy diagnosis

Podkarpackie: ENSVET –
Energy Advices for Citizens

Jämtland Härjedalen: Warm &
Well – Energy Efficiency Advice
and Installation Scheme

Jämtland Härjedalen:
Eco Fund, Slovenian
Environmental Public Fund

Jämtland Härjedalen:
Your Green Future

Seminar Agenda attached

**Participant regional
stakeholder** fiches

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FOREWORD



Dr Harriet Thomson
Project Manager. European Energy Poverty Observatory (Manchester University)

The concepts of ‘fuel poverty’ and ‘energy poverty’ are not new, having been discussed by European Union policymakers since at least 2001. Despite this, policy responses have been fragmented and often inadequate, due mainly to the European Commission’s opposition to defining and measuring the issue. Since 2014, however, we have seen a fundamental shift in the Commission’s attitude to energy poverty, prompting changes to how the issue is viewed at the national level.

The Commission has recently funded a new flagship European Energy Poverty Observatory (EPOV), led by Dr Harriet Thomson and Professor Stefan Bouzarovski, along with a broader pan-European consortium of partners and associates. Efforts are now focussed on incorporating new energy poverty requirements within European energy policy, as reflected by the recent Energy Union and Clean Energy policy proposals. The EPOV project is led by the University of Manchester, and aims to bring about transformational change in the availability of information about energy poverty in Europe, along with improved networking and knowledge transfer.

International events, such as the Build2LC seminar on ‘New energy culture, citizen involvement and energy poverty’, are an essential piece in the puzzle of addressing energy poverty, acting as a catalyst for the sharing of good practices, exploring common challenges, and developing new collaborations. I look forward to continued collaboration with the Build2LC team, and their future project outputs.

¹ [Link to Web and Twitter](#)



Mr Joaquín Villar
Lead Partner, Andalusian Energy Agency

One of the key elements in promoting the sustainable construction sector in Europe is the awareness of society (not only citizenship, but also the business sector) in the need to develop actions aimed at improving the use of resources and energy efficiency in its facilities and buildings. Citizens and neighbourhoods are the main actors in the action of change towards the rehabilitation, conservation and energetic improvement of buildings and cities.

In terms of business, the immediate benefits associated with this process are the reduction in energy use, which translates into positive effects for efficiency by releasing resources that can be used for other economic activities, reduce the investments related to energy supply, reduce production costs and, consequently, improve competitiveness. To do this, it is necessary to implement specific actions for each of the productive sectors, aimed at achieving a change of culture towards energy efficiency in companies, and to promote a specific fund offer to finance these investments with a longer return period, to meet the energy and emission targets set in the EU.

With regard to the residential buildings, taking into account the need to adapt Directive 2012/27/EU on energy efficiency, and considering the final energy consumption of buildings, as well as the aging of an important percentage of the buildings in Europe, it is necessary to act on its comfort conditions, with criteria of energy efficiency.

Likewise, the housing and rehabilitation policy must respond to the needs that derive from the population sector with fewer resources and at risk of social exclusion. Promoting social inclusion and combating inequalities and poverty that affect these communities necessarily involves betting on the physical, social, economic and environmental regeneration of their residence environment.

Therefore, placing the citizen at the centre of the demand, paying special attention to the vulnerable groups, becomes one of the essential objectives of the BUILD2LC project in which we will share cases of success with the other regions participating in the project to be implemented in our own region.



Mr Mike Brain
CEO, Severn Wye Energy Agency

Severn Wye Energy Agency is delighted to be part of the Build2LC project: its multi-faceted approach brings local stakeholders together to build efficient and effective partnerships across sectors. In Gloucestershire, we are fortunate to have the support of the Clinical Commissioning Group which has enabled us to successfully link domestic retrofit, energy efficiency advice, with health.

Collaboration between public bodies has allowed the Warm & Well programme to grow from strength to strength. Alongside many other actions, Build2LC in the UK will support further development of referral mechanisms and awareness raising measures.

This will not only increase the uptake of domestic retrofit and stimulate economic growth but will increase the engagement of citizens, particularly those with health conditions, and wider stakeholders in energy efficiency.

Severn Wye Energy Agency were pleased to host the inter-regional “New Energy Culture, Citizen Involvement And Energy Poverty” seminar in Gloucester and are looking forward to sharing experiences with partners during bi-lateral meetings.

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INTRODUCTION TO THE TOPIC NEW ENERGY CULTURE, CITIZEN INVOLVEMENT AND ENERGY POVERTY

The main objective of the BUILD2LC project is to increase the energy rehabilitation of buildings enhancing the implementation and change of policies. The project is focused on four different topics:

- New financial instruments
- Professionalization of the construction sector
- Activation of demand and combating energy poverty
- Innovation

BUILD2LC addresses the topic *activation of demand and combating energy poverty* focusing on: the development of policies, strategies and mechanisms to reduce energy poverty, engage citizens in energy efficiency behaviours and retrofit; and activate demand in the sector.

Across the seven regions involved in BUILD2LC project, the focus is almost exclusively on improving energy efficiency and reducing carbon emissions. However, some member states also have an emphasis on the links between energy poverty and health.



Developing a connection and balancing the priorities, across both social and environmental aspects can have a number of benefits. Some decision-makers deprioritise environmental concerns during times of austerity in the face of imminent social and economic concerns: if the social and economic benefits of retrofit, particularly for vulnerable citizens, can be clearly proven then sceptical decision and policy makers are more likely to engage, thus actions will also have direct environmental benefits.

It is now clear that fuel poverty is recognised within the EU and the establishment of the European Energy Poverty Observatory (EPOV) in 2017, supports the need for energy poverty to be tackled across member states. Although awareness has been raised at an EU commission level, there is inconsistency across member states in terms of recognising fuel poverty, accurately identifying vulnerable consumers, and implementing measures that will not only support carbon reduction targets but are clearly focused on improving the social and economic circumstances of citizens. With almost 11% (an estimated 54 million people in 2012) of the EU's population **unable to adequately heat their homes at an affordable cost**, it is important to share good practice with a view to improving the quality of life and economic circumstances of vulnerable citizens.

With clearer definitions and a common understanding of: energy poverty; vulnerable consumers; and the intrinsic links between health, housing, the economy, and the environment, national and regional governments can create comprehensive delivery mechanisms which can have multi-faceted positive outcomes. In order to achieve this, strong partnership working is essential, for example, working across municipalities to support a not-for-profit organisation to provide advice, support, and retrofit.

As the seminar reveals, research has shown that energy poverty has an effect on the health of citizens with significant detrimental effects on those with respiratory and cardio-vascular conditions: children and the elderly are also at greater risk and excess winter deaths can be significant. However, many are unaware of the specific situations in their own nations and the 'hidden' energy poor.

Alternatively, it can be a challenge to find reliable data at a national level and studies such as: **Rethinking the measurement of energy poverty in Europe: A critical analysis of indicators and data (Thomson et al, 2017)** critically assess current available statistical datasets and provide recommendations for development.

In order to present a reasoned case to health-related agencies that investing in energy efficiency domestic retrofit is economically and socially viable, evidence showing a negative impact of energy poverty on health will not suffice. This needs to be supported by data showing that retrofit can directly improve health conditions in order to secure investment. There is an emerging bank of evidence supporting this relationship including systematic reviews. William Baker, Citizen's Advice, seminar presentation summarises a range of studies to support partners and stakeholders in endeavours to connect, or build on relationships, with health agencies.

However much decision-makers, partners and stakeholders are convinced that energy retrofit would provide direct benefits to residents as well as wider benefits, perhaps the greatest challenge is engaging citizens and activating the market. This can be particularly challenging when mechanisms have failed in the past as 'trust', in both people and the mechanism, is one of the key elements to successful engagement. Conversely, where projects have developed into programmes and have been able to learn from previous experience, engagement is more successful. A good example of this is the multi-apartment block retrofit programme in Lithuania.

In all projects, the links between the other key aspects of Build2LC are intertwined with activating demand and engaging citizens, for example:

- Successful *financial mechanisms* need to be in place to stimulate demand. If these can be tailored to support vulnerable consumers, there should be a positive impact on energy poverty.
- The *construction workers and installers implementing retrofit must be skilled* and understand the nature and needs of the customer. If this is not the case then errors can be made, such as installing cavity wall insulation but not accounting for moisture concerns. This will ultimately cause more problems and reduce trust in the systems. Furthermore, if demand has been activated, there needs to be a ready pool of skilled and trained workers to deliver, otherwise the project cannot succeed.

- All aspects of *innovation*, whether technological, financial, or the development of mechanisms, stimulate activity and engagement across sectors.

The new *Energy Culture, Citizen Involvement and Energy Poverty* seminar held in June 2017, explores all of these challenges. The seminar shares experiences, data, lessons learned, and good practice examples, to inform the practice of partners and stakeholders in their own nations.

3 INTERRE- GIONAL SEMINAR IN GLOUCES- TER, UK

The final BUILD2LC Interregional Seminar titled '*New Energy Culture, Citizen Involvement and Energy Poverty*' was held in Gloucester on 13th – 14th June 2017 in accordance with the agenda shown in *Appendix 8.1*. The Seminar attracted 64 delegates and speakers including Build2LC partners and their stakeholders.

This section summarises the key outcomes of the seminar.



— SUMMARY OF SESSION 1 welcome opening

Mike Brain, CEO, Severn Wye Energy Agency and **Joaquín Villar, Lead Partner, Andalusian Energy Agency** opened the seminar. They explained the value of the Build to Low Carbon project, as outlined in the Foreword and welcomed the delegates.

Mike Brain outlined the important role key stakeholders have to play in Build2LC in the UK, including Gloucestershire Clinical Commissioning Group who are match-funding the project and also Stroud District Council. Mr Brain also drew attention to the fact that the South-West of the UK has the second highest proportion of people in fuel poverty in England; therefore the work of Build to Low Carbon is vitally important in improving health outcomes.

Joaquín Villar summarised the Build to Low Carbon project and the four key themes for the purpose of delegates who were unfamiliar with the details of the project. Mr Villar introduced the theme of the next meeting in Sweden which focuses on innovation. The importance of sharing good practice and supporting partners who have to implement good practices was stressed to all in attendance.

Mr Villar also explained how the Build2LC project and the event were also important in terms of supporting the pilot project at European level on Sustainable Construction.

— SUMMARY OF SESSION 2 "Health and Energy Poverty in an EU context"



Dr Harriet Thomson

Dr Harriet Thomson, Project Manager, European Energy Poverty Observatory, gave the keynote speech titled: *The health and well-being impacts of energy poverty across 32 countries*.

Dr Thomson explained that energy poverty is multifaceted and that the terms 'fuel poverty' and 'energy poverty' are interchangeable. The history of energy poverty was outlined showing that 2003 was the first time that domestic customers were first really recognised.

It was only in 2009 that any legal requirement to tackle energy poverty was introduced: action really began in 2015.

In the UK, the definition of energy poverty has changed: countries such as, France and Slovakia also have definitions and other member states are developing legal definitions. There is no official definition across Europe as yet, although one has been proposed. This can pose a challenge, particularly as the relevant data is not always available. Therefore, other data needs to be used and it is tricky to benchmark using data that is inconsistent and collected at different times. The EU Survey on Income and Living Conditions (SILC) is quite commonly used. Three other common sources of data include:

- Household Budget Survey (HBS)
- European Quality of Life Survey (EQLS)
- Eurobarometer

Dr Thompson explained that her doctorate focused on measuring energy poverty across the EU. Three proxy indicators were used: the ability to afford to keep the home warm; whether the property had a leaking roof, damp, and/or rot in the home; and whether there were arrears on utility bills in the last 12 months.

The resulting data was used to create a ranked dataset showing which countries were most or least at risk. Areas shown to be at most risk included: Bulgaria, Cyprus, Latvia, Romania, Portugal, and Slovenia. However the reasons areas were at risk varied considerably. For example, in Southern Europe there has been challenging macroeconomic circumstances and prolonged fiscal austerity, or a high need for cooling. Fiscal austerity is also an issue in Central and Eastern Europe in countries such as Bulgaria: this has had a big impact on housing stocks.

The EVALUATE project looks at the drivers causing urban energy poverty in four countries, including Poland. A wide range of data was used at a range of levels; initial findings showed that cooling is a serious issue. Some households are moving away from traditional fuels and using wood or even old books as a coping mechanism. The 'vulnerable' people may also vary and include short term residents; highly educated households in expensive housing; or working age families. Current measures to tackle energy poverty often focus on elderly, but more efforts should be made to tackle these additional groups. More information about the EVALUATE project and methodologies can be found at: urban-energy.org

Dr Thompson continued, explaining that there are a range of health impacts resulting from energy poverty including increased likelihood of heart disease and strokes, and poorer well-being due to stress and social isolation. Recent research based on self-reported health issues shows that there is a big difference in self-reported health issues depending on levels of energy poverty, especially in Slovenia, the Netherlands, and Sweden.

A similar pattern was found for mental health issues: researchers need to use a broader dataset to find out more.

Examples of issues in countries such as Slovenia and Sweden were provided. A photograph exhibition to demonstrate problems was created for a conference in Brussels and examples from Sweden were shown to delegates. Photographs highlighted that many people have emergency kits in anticipation of the frequent power cuts - 32 in one month for one village. It was stressed that it is not always the people you expect in fuel poverty.

Dr Thompson introduced the new European Energy Poverty Observatory (EPOV) and its key objectives, including improving transparency and disseminating information, and organising outreach work. Delegates were invited to join the mailing list: sign up on [here](#). Also follow EPOV on [Twitter](#).

— SUMMARY OF SESSION 3 "The impact of energy poverty on health and citizen involvement in the UK"



Mr Barry Wyatt

Barry Wyatt, Strategic Head (Development Services), Stroud District Council delivered a presentation titled: *Causes of energy poverty and the impact of policy on citizen involvement.*

Mr Wyatt set Gloucestershire, UK, in context, explaining that it is made up of six district councils. The county experiences slightly higher population growth than the national average, particularly in the aged 65+ group.

There is also a great range of housing types. 10.6% of households in the UK are in energy poverty and this has been rising. Although Cotswold district has the highest percentage of homes in energy poverty (14.5%), Cheltenham district has the highest number within the county at 6013.

The causes of energy poverty were presented: data shows that homes in rural areas which are solid wall construction and off gas have the highest levels of energy poverty. Higher energy costs are also a key contributor in the UK; this can be due to the use of prepayment meters or being in debt to energy suppliers. The continuing rise in housing costs increases pressure on low income households. Also, if households have low numbers of income generators, such as single parent families, rates of energy poverty are higher. Changes to benefit schemes can indirectly cause energy poverty, for instance, the introduction of under-occupancy charges or reforms to disability benefits.

Mr Wyatt explained the impact of national policy on citizen involvement. Changes in building regulations including, Passivhaus and EPCs, increases uptake.

Local authorities also have the opportunity to serve notices if a house is not up to standard which again should increase stakeholder and resident involvement. Mr Wyatt proposed that there should be more focus on improving existing stock; much of the current policy focuses on new build in the UK.

There are a range of other national policies, including the Energy Company Obligation (ECO). The first phase of ECO engaged particularly well in Wales and Scotland where there was more local funding to support greater engagement. However, there were some issues in terms of the quality of installations across the UK and this is something that is being addressed. The more recent, ECO2 and ECOt2 have greater focus on identifying those in energy poverty rather than just carbon saving. There is also an opportunity within ECOt2 for local authorities to establish their own criteria for selecting appropriate households. This can help to engage local stakeholders and, as the measure is more targeted and appropriate, citizens will engage more readily as there is likely to be greater trust.

The Green Deal mechanism was very poor and there are many lessons learnt. Where there have been mechanisms that have not gone well, these lessons should be considered when establishing new policy, otherwise engagement will be low. In the case of Green Deal, 'trust' was lost and the financial set-up meant that engagement was low.

Mr Wyatt explained that making the link between cost, health and housing is really important. These are the three legs of the stool and mechanisms should consider all three during mechanism development and determining methods of engagement.

More locally, there have been a range of schemes which have worked well. The WISE (Well Insulated Sustainable Energy) homes grants were excellent but the money ran out. Other schemes struggled because of budget pressures, rising interest rates, or people being sceptical if something is 'free'. However, Warm and Well has worked really well, making over £30 million of improvements. Warm & Well meets all the legs of the stool; it works well because it is a trusted, independent brand, uses trusted installers and excellent partnerships.

Mr Wyatt offered key pieces of advice when establishing policy and mechanisms as well as engaging citizens. In terms of reducing the causes: a well-thought out and simple solution for funders and energy suppliers helps engagement of both stakeholder and citizens; successes should be celebrated by opening up homes to the wider community; and good sign posting is crucial. Clearly, filtering financial assistance for physical improvements is important, especially to those at most risk.

To maximise impact, Mr Wyatt suggested that stakeholders should be prepared for short term support programmes. Also, 'knowledge is power' and 'capacity is King': knowing where the need is, and having the capacity to engage with potential client groups, is crucial. Finally, by focusing on the link between cost, health and housing, not only allows policy makers and organisations to develop mechanisms that can have impact, but allows decision-makers to adopt a different approach to citizens and stakeholders depending on what is considered most important or influential to the person.



Ms Mary Morgan

Mary Morgan, Lead Commissioner for Older People, NHS Gloucestershire Clinical Commissioning Group and Gloucestershire County Council, presents: *The impact of energy poverty on health and social care in the UK*.

Mrs Morgan suggested that, in health, we have ignored the fact that the environment people live in is important. If we ignore this, then we do so at our peril as there is a significant cost to people and the health service. We also need to consider that there are varying levels of multiple deprivation and tackling deprivation is just as important as putting money into hospitals.

Within Gloucestershire, the Cotswold district is seen as a rich and affluent area, but there is quite a lot of rural poverty and these people will have significant health concerns; the NHS has to be efficient and look to prevent, as well as react. Social isolation and frailty is a key concern, particularly in the Cotswold district, and it is important to engage with local communities and work in partnership: it is no one group's responsibility.

The National Institute for Health and Care Excellence (NICE) shows that there is a clear link between temperature and deaths. Although we usually consider Excess Winter Deaths, it is becoming increasingly evident that heatwaves are also becoming a concern as well as the cold during winter months. Data also shows that costs to the National Health Service (NHS) can be reduced with investment in homes with Category 1 hazards².

Mrs Morgan stressed the importance of having up-to-date data, both quantitative and qualitative, not only to demonstrate the problem but also to show the outcomes, including on health. This should be considered before any mechanism is implemented.

Gloucestershire has a higher proportion of Excess Winter Deaths than the UK average. Poor housing causes health issues, including poor mental health and respiratory issues. The aim, particularly for the elderly, is to keep people living at home for longer. The NHS has become highly specialised but that does not work when there are multiple issues: we need to look at things more holistically. Mrs Morgan also stressed that there will be an increase in the number of people with dementia and their needs will need to be met: it is important to give people what they want and need and not impose actions on people.

About 20 years ago health and social care were split and work is happening to readdress this by making more community connections, hence, the voluntary sector, integrated teams, housing, and positive risk taking, are important. Housing has not had the focus it needs to at a local level. The NHS like to 'make people dependent' but there is a move away from this now and helping people to be safer and healthier at home rather than in a care home is a greater priority. We are working hard to change the culture including the use of campaigns such as: 'My name is Pat. I am more than a condition'.

The link to '[Mrs Andrew's Story – What went wrong?](#)' shows the impact of admitting someone to hospital when it is not needed. Another film called '[Risking Happiness](#)' is another way to engage professionals in the importance of letting individuals make decisions about their own needs. These are both effective ways to engage stakeholders.

² If a hazard is a serious and immediate risk to a person's health and safety, this is known as a Category 1 hazard.

The Better Care Fund (BCF) finances integrated services and has 6 key aims, for example, reducing the number of people going into care homes or reducing the number of people being readmitted to hospital within 91 days. The link between poor housing and health outcomes is a focus of the Gloucestershire BCF plan over the next two years. There is a partnership between the local authorities, county councils, and health, to develop a Joint Housing Action Plan. This includes supporting the Warm and Well Programme and providing Housing Information and Advice as well as Strategic Planning and Commissioning; the non-injurious falls pick up service is a good example of partnership working with the Fire Service.

In terms of Warm and Well, the Clinical Commissioning Group is increasing financial support and the focus is now on improving data collection to directly demonstrate the positive impacts on health. There are also going to be greater links with Citizens Advice in order to increase referrals to the Warm and Well programme and make sure that people with respiratory issues are targeted.



Mr William Baker

William Baker, Head of Fuel Poverty, Citizens Advice, delivered a presentation titled: *Evidence: Providing the evidence that retrofit can have positive impacts on health*.

Mr Baker introduced Citizens Advice which offers free, impartial advice through over 330 offices across the UK. He continued, explaining that there is now plenty of evidence demonstrating the impact of poor energy efficiency on health. Mr Baker recommends reading the [Marmot Review](#) as a good starting point. Although there is evidence to show the impact energy poverty on health, there is less evidence to show that making improvements improves health.

However, Mr Baker explained that if you are aiming to prove the link between retrofit and health, then systematic reviews are available. [The Cochrane Review \(2013\)](#) is an internationally recognised review and is important. This Thomson H *et al.* review did show that there was a positive impact of retrofit, particularly for those with respiratory problems. There were also benefits in terms of useable space and mental health. [Milner & Wilkinson \(2016\)](#), again showed a positive impact and very particularly for children with asthma.

[Maidment CD et al. \(2013\)](#) was a metaanalysis. This research showed that there was a small but significant impact on improving health, especially for people with existing illness and children.

More locally, the [‘Warm Homes Oldham’ evaluation \(2016\)](#) is a very important study by Sheffield Hallam University. The project concluded that retrofit had a positive impact on health for 60% of people with physical health problems. A monetary value was also found using the Quality Adjusted Life Years with savings of £400,000-£793,000 following £250,000 investment.

The evaluation of the Welsh Government's Warm Homes NEST Scheme involved matching data with health records and a controlled assessment. The project also measured health in the winter before and after installation. The results showed clear statistical evidence of improvement but also showed the importance of planning good data collection methods before projects begin.

The former Department of Energy and Climate Change (DECC) commissioned University College London and London School of Tropical Medicine (2014) to create the **Health Impacts of Domestic Energy Efficiency Measures (HIDEEM) model** using Quality Adjusted Life Years (QALY) and Net Present Value (NPV). The government now use this method to assess impacts of programmes on health. For example, the health benefits from the Energy Company Obligation (ECO) are valued at £125 million and those for the new Private Rental Sector Regulations will be £400 million.

Mr Baker outlined the **Citizens Advice Winter Resilience Project** and the planned evaluation processes. The project aims to provide a single point of contact for health and housing referrals for people living in cold homes; they also provide a tailored service. The project is quite local but has thought carefully, in advance, about how to evaluate the project. There are two methods of evaluation, one internal method and one external; co-ordinated by the Centre for Sustainable Energy (CSE).

A wide range of information is being collected for the Winter Resilience Project and Citizens Advice is keen to use validated tools for evaluation including the ONS well-being survey: the ONS well-being survey is less intrusive than other tools. EQ-5D-5L shows a physical health measure and is also being used.

Initial project results show that those accessing the service show a high number of visits to doctors, high anxiety and poor mental health before support is put in place. For more information about the project, Mr Baker can be contacted at: william.baker@citizensadvice.org.uk



— SUMMARY OF SESSION 4 "How to successfully engage citizens"



Mr Gvidas Dargužas

Gvidas Dargužas, CEO, VIPA delivered a presentation titled: *Engaging citizens and lessons learnt in Lithuania*.

Mr Dargužas introduced the Lithuanian context where emissions from households and transport combine to create the largest share of energy use; these sectors have the potential to achieve savings of 50%.

Household emissions are high because about 76% of the population lives in multi-apartment blocks which were built in the Soviet era: this equate to approximately 35,000 buildings.

There was little attention to energy efficiency and the buildings are now old and are in poor condition: satisfaction with living conditions is also low.

Lithuania introduced a multi-apartment block retrofit programme in 2004 which introduced government grants for:

- Windows to be sealed or double glazed
- External and roof insulation
- Replacement doors
- Improved heating distribution

This was an expensive programme with low demand because citizens needed to take a loan; this was feared by citizens and some households were not eligible because their incomes were too low. As a result, this programme ended 2009.

However, in 2013 the programme was replaced with a subsidised loan at a fixed interest rate of 3% for 20 years with grace periods. There was no initial contribution or guarantees required. An investment plan was developed and measures were installed.

Although an improvement on the 2004 programme, the 2013 programme was not completely successful; the municipalities who decided to participate were directly involved in the implementation so the project did not extend far enough. Also the buildings selected were the worst performing, and the appointed administrators borrowed on behalf of the apartment owners, so the loan became directly associated with the apartment not the owner.

Further changes were made: the 'incentive' for citizens to participate was given in the form of a 'stick' - if citizens did not engage then the usual statutory compensations on heating would be withdrawn which would represent up to 50% of the heating cost.

A number of lessons were learnt from the process. These include:

- A need for legal assurance.
- Although the Renovation Programme is quite successful among apartment owners, the state budget resources allocated to the program are limited.

- It is a 'carrot and stick' game: potential cuts to benefits were enforced if low income citizens did not engage.
- The establishment of a strong central competence (HESA) centre was helpful, as the renovation process can be very complex, requiring various tools and management.
- Working closely with municipalities and involving them in the housing renovation programs, including project selection and managing of municipal building renovation programs by professional administrators, is fundamental.

Mr Dargužas provided project examples illustrating the measures used and savings achieved. In Lithuania they now plan to organise quarterly renovation programmes which include the wider aspects of the municipality, such as street lighting.



Ms Slavica Robic

Slavica Robic, Programme Director, Society for Sustainable Development Design (DOOR), presented on: *Engaging citizens in Energy Poverty in Croatia*.

DOOR has undertaken focused work to engage citizens and has helped to change policy in Croatia. Ms Robic explained that decision makers often grasp the concepts but they do not always have the evidence or a real understanding of the citizen's experiences.

When people say that decision makers are not in touch with reality, it is often because they don't have access to the right information or an ability to 'see' the real situation: DOOR aim to present this information and real life experiences to decision makers.

To engage citizens, DOOR needed to collect evidence; volunteers were used to help collect the data. The first step to engaging citizens and stakeholders was to present the evidence collected. This included using the press, round tables, conferences, and so forth. As a result, there are more policies: they are not necessarily perfect but it is a start.

One challenge was getting people to be filmed but strong relationships (e.g. the daughter was a volunteer) helped to get one citizen in energy poverty to speak. Ms Robic showed two videos³ to demonstrate how the projects worked and how volunteers were used.

³ Links to Video 1 and Video 2.

Ms Robic stressed the importance of writing professional and well-pitched press releases and creating high quality videos containing examples to influence policymakers.

Ms Robic demonstrated the extent of energy poverty in Croatia. For example, those in energy poverty are using more than the national average amount of energy, despite the low income. This is due to factors including: high draughts, poor insulation, inefficient appliances and high mould levels. Bizarrely, happiness does not seem to be affected but physical health is. Examples of the reality of the situation for individuals were provided. Interestingly issues with administrative problems were raised; these can cause indirect issues to citizens. Ms Robic concluded by emphasising that engaging policy makers is not just about getting money, it's about education and raising awareness.



Ms Hannah Gorf

Hannah Gorf, Implementation Support Manager, Gloucestershire Clinical Commissioning Group, introduced *Social Prescribing* to delegates.

Ms Gorf began by explaining that health is not just about having a lack of disease or infirmity but about being socially, physically and mentally well. Therefore, it is important to move towards more preventative work rather than being reactionary.

Social Prescribing came about as although general practitioners (GPs)⁴ could cover psychological and physical care, they could not support social care. In Gloucestershire, there are over 2500 voluntary and community groups which we are lucky to have.

By linking with these organisations, social prescribing can help tackle the issues raised in the Marmot Review and support the focus on preventative care and a more holistic approach.

Social Prescribing involves GPs referring patients with potential social care issues to Social Prescribing Co-ordinators who will then refer patients to support agencies or programmes such as Warm and Well. A good example of this would be a patient presenting with respiratory problems which are exacerbated by living in a damp home. A referral to Warm & Well could reduce visits to the doctor and improve the health of the patient.

Referrals through Social Prescribing Co-ordinators can be made to community based services, including local authorities and voluntary and community groups. The Social Prescribing relationship is really important in gaining the trust of patients so they access grants and services.

⁴ General Practitioners (GPs) are 'local doctors' in the UK.

A wide range of issues are faced within Gloucestershire and many of these problems interlink. It is hard for GPs to get to the bottom of a problem in 10 minutes and it is important to put the priorities and needs of the patient first. Social Prescribing Co-ordinators work consistently with the same GPs and know the areas really well, including the names of agencies and email addresses of specific contacts. The Social Prescribing Co-ordinators can also spend longer with the patient and visit it in their home conduct home visits.

Ms Gorf provided case study examples linking energy use and the choice residents make between 'heating or eating'. The review of Social Prescribing conducted by the University of the West of England showed a clear financial saving to the health service as a result of Social Prescribing: it was shown to be most effective if it was focused carefully on the specific location as relationships are essential for success.



Ms Frances Crick

Frances Crick, Implementation Energy Reduction and Sustainability Officer, Gloucestershire Cheltenham Borough Homes, delivered a presentation entitled: *Energy efficiency and fuel poverty in our properties*.

Cheltenham Borough Homes (CBH) is an arm's-length management organisations (ALMO) managing Cheltenham Borough Council's housing stock. As well as providing social housing, CBH want to engage citizens in strategies that can support residents in their homes and lives. CBH has developed an Environmental Sustainability Strategy to improve energy efficiency to combat rising energy bills and energy poverty.

It is in CBH's best interest to support tenants so that they can pay their rent, hence developing strategies, such as this, not only support residents and the environment but help the organisation to receive payments from tenants.

A programme of solar PV installations was launched in 2013 and impacted 780 individual properties between 2013 and 2016. As a result, over 920 tenanted properties benefitted from between €115 and €230 savings per annum on their electricity costs. This programme was considered 'an easy win' but it would not work for all, especially if tenants can buy their home. Another programme implemented air source heat pumps in 8 out of 10 households on one street in Cheltenham, again making savings for residents. However, sometimes it is hard to engage residents, for example after bereavement or if people think it would damage the appearance of their homes. As a result, it is important to consider the best installations for each area; Ms Crick suggested that air source heat pumps are good for rural properties which are off grid.

Other examples of strategies include installing LED lighting in sheltered housing. Although there are fewer financial savings, improving the lighting levels improves the quality of life for these residents who often have visibility problems or dementia.

CBH are now focusing on poor performing homes according to their EPC rating. The organisation is currently assessing all stock and making sure that there is accurate and sufficient data to help efficiently targeting the right people, particularly when fewer government incentives are available.

In terms of engaging with people, CBH offer individual support and try to get people off prepayment meter. Offices are based in the areas of highest need and the organisation works hard to build relationships with tenants: when tenants do engage, good savings are made.

CBH also look at their own offices so they practise what they preach. As well as providing housing and energy advice, CBH also offer benefits and financial advice to help the overall situation for tenants and improve their income overall. This wrap around support makes it easier for tenants to engage and engenders trust.



The session closed at 13:00 for lunch and networking.

— SUMMARY OF SESSION 5 workshops: strategies to manage fuel poverty and engage citizens

The afternoon session focussed on sharing good practice and promoting discussion. Delegates were given the opportunity to attend two, of three, workshops as shown below:

- **Workshop 1: Warm & Well**

A programme for providing advice, support and retrofit to domestic residents and properties.

- **Workshop 2: Link to Energy**

Establishment, training and co-ordination of an energy and installers network.

- **Workshop 3: Target 2050**

A project in Stroud District to reduce carbon emissions across domestic properties, businesses and community buildings. The project explores managing different types of buildings, providing support for those in fuel poverty, and engaging installers.

The following section provides a summary of each workshop.

Workshop 1: Warm & Well

This workshop was led by Brain Canning and Sarah Dittmann, *Severn Wye Energy Agency*.

Mr Canning and Ms Dittmann provided a background to the Warm & Well programme and how the advice line operates. They explained that Warm & Well started in 2001 as an insulation grant scheme. The 2017 Warm & Well programme is managed by Severn Wye Energy Agency on behalf of the seven local authorities in South Gloucestershire and Gloucestershire, and Gloucestershire County Council. Warm & Well offers energy efficiency advice to householders and also administers grant funding. Severn Wye has delivered on variety of schemes in Gloucestershire and South Gloucestershire since 2001. Through these schemes, over 65,000 measures have been installed in over 41,000 properties. Over £24m has been spent on energy efficiency measures in Gloucestershire and South Gloucestershire.

Local authorities have contributed £8.5m in grant funding with the majority of funding coming from fuel suppliers through either CERT or ECO, which contributed £10.44m. Through the installation of measures there has been considerable savings for clients. The total spend of £24m has achieved a total of £5m annual savings, and a total saving over the lifetime of the measures of £188.9m. Furthermore, carbon savings have been made, with 21,155.1 tonnes of CO₂ saved annually from measures installed and 796,675 tonnes of CO₂ saved over the lifetime of the measures.



The workshop leaders explained how the advice line worked and demonstrated the [Warm and Well website](#). The relationship to the *Link to Energy* installers network (workshop 2) was also outlined.

The delegates were asked to complete the following tasks:

- In your groups, using your expertise, please pick out three mechanisms, from the ten provided, that you think would be the key priorities in the setting up and delivering a similar programme to *Warm & Well*.
- Once you've chosen three, please choose one and discuss the opportunities or barriers faced in order to put in place in your region/country.

The mechanisms provided were:

- National Government Support
- Local Government Support
- Funding the service
- Funding energy efficiency measures – financial instruments
- Accessing reliable installers
- Promoting the scheme
- Developing delivery partnerships
- Working with utilities/energy suppliers
- Targeting the right customer groups / demographics
- Recruiting trained staff

The table summarises the outcomes of discussions from different groups.

<i>Priority mechanisms</i>	<i>Comments</i>	<i>Barriers</i>
Reliable installers Local government support	Local/national government support is fundamental to success. Targeting is important for smaller projects but is less of an issue for more ambitious projects as all/most homes will be improved. It can be hard to get projects off the ground if there is a total absence of a service.	Drivers must be identified otherwise the project cannot go ahead. It is important to have a good understanding of existing housing stock. This can become quickly outdated so it's important to have a strategy to have accurate and dynamic information.
Funding the service	The 10 options blend in together, therefore, 10 became 3: funding service; promoting the scheme and targeting the right consumers groups. The priority was funding as if this is lacking, then the service would not happen.	Political will – short term government support versus long term goals was discussed as this is always difficult to manage. There is also a need a cross party consensus that energy poverty is an issue that we all agree on not partisan.
Funding of energy efficiency measures	Opportunities identified included: implementing legal obligations for suppliers; conducting partial renovations; the opportunity to use Government funding; impacts of new building standards; Opportunities for ESCO.	Barriers included: bureaucracy; difficult customer journeys, limited understanding of energy efficiency measures.
No specific option identified	In some countries, the mechanisms could work regionally but not nationally.	Problems with working commissions: Warm and Well fills the gaps but would need to be done very differently in some areas.
Similar scheme to <i>Warm & Well</i> in Slovenia	In Slovenia, there is no preferential treatment; however money becomes issue to promote the scheme. There is an energy efficiency network in Slovenia. Local government agencies could implement this on a local scale but lots of red tape for local installer network.	Bureaucracy for installers.

Workshop 2: Link to Energy

This workshop was led by Neil Towler and Rachel Brain, *Severn Wye Energy Agency*.

Mr Towler began with an overview of the Link to Energy database which allows members of the public to locate and contact installers and suppliers for energy efficiency products and services. The networks include installers for all energy efficient measures.

The network has been in operation since 2007 and has approximately 70 members. Around €1.15 million worth of work has been conducted via the use of the network and this has primarily come through the central heating fund work.

The key features of the network are:

- Local to the customer (via the use of the customer's postcode on the webpage).
- Accredited installers only (e.g. gas safe).
- Endorsed by local authorities.
- Installers get access to local grant funding.
- Money is re-invested in the local economy.
- There is no membership fee but a small commission goes to Severn Wye on successful referrals.

Severn Wye is able to evaluate the cost and type of energy efficiency installations taking place and identify new technologies and identify any skills gap.



The network used to include a larger number of installers but experience has shown that a smaller, high quality network is preferred over a larger number of installers.

Mr Towler demonstrated how the [Link to Energy](#) website operated before responding to the following questions:

Q. WHERE DID INITIAL FUNDING COME FROM?

The project was initially sourced through the Target 2050 local authority funding from Stroud District Council.

Q. HOW WOULD PEOPLE IN FUEL POVERTY GET TO KNOW ABOUT WHAT GRANTS THEY COULD GET AND FIND AN INSTALLER?

The majority of customers using the Link to Energy website come through the Warm & Well programme.

Q. HOW DO YOU MANAGE THE CUSTOMER/INSTALLER RELATIONSHIP?

Severn Wye connects the customer and the installer but is not responsible for the work. The contract is between customer and installer.

Q. HOW DOES THE LINK TO ENERGY DATABASE CONNECT UP TO THE WARM & WELL DATABASE?

This is ad hoc at the moment. Severn Wye has a new data system so this is something that the team will work on in the next year.

Q. WHAT ABOUT QUALITY?

Companies who do not complete work to a good standard can be removed from the list if there are complaints against them. Severn Wye is planning to develop greater quality assurance for installers as part of the Build2LC action plan.

Ms Brain explained that the aim of the website is to be clear and simple for the key target customer – those in fuel poverty. The network keeps installers up to date, providing the opportunity for information exchange; it keeps installers in touch with fuel poverty issues. The website and network are closely aligned to the professional services of the Warm & Well advice team and further developments to the network and website will follow.

Workshop 3: Target 2050

This workshop was led by Maria Hickman, Stroud District Council.



Stroud District Council have quite a history of working on energy efficiency measures. This began in 2001 with the WISE homes project and the council have been committed to improving energy performance and reducing energy poverty within the area.

Stroud District Council is unusual as it has its own social housing with 5000 homes. A number of measures have been implemented within these properties, including renewable measures and efficiency measures.

Project S2S was a project which installed ground source heat pumps in social housing and pumps were offered cheaply to the private sector. Project S2S stimulated the Target 2050 project which worked on domestic, businesses, and community projects.

Target 2050 began in 2007 and included €552,124 of local funding and €552,124 of central government funding. The aim was to have a positive impact on a social indicators, economic circumstances and housing.

The feasibility study run in 2007 and Severn Wye were appointed to take the project forward via a tender in 2008. The project ran over 3 years.

The features of Target 2050 included a target to reduce consumption by 60-80%. Households applied to become a case study home. The case studies were selected based on the type of occupant and housing type: it was important to ensure there was a range.

Ms Hickman outlined the results of the homes, community and business themes of the project. Highlights included:

- 102 homes installed one or more insulation, heating or microgeneration measures.
- 53 exemplar homes were established as case studies.
- An open homes event was established.
- 120 businesses signed up to Target 2050.
- €109,940 of savings was made by businesses in the first year.
- 35 measures were installed in community buildings saving 28 tonnes of CO₂ annually.
- Community engagement increased.

More finance was won during the course of the project to increase the number of exemplar homes. One of the most positive outcomes was the open homes event which was developed via a community group, Transition Towns, who still run the work and have branched out to cover rainwater harvesting and food. Within the business sector, aides were appointed within businesses to train other employees, expanding the number of people involved.

Ms Hickman shared the main learnings from the project. Most importantly, it is important to realise that people do not want to, and will not, do a whole house renovation.

The following questions were raised:

Q. WERE THERE PROJECT TARGETS?

Yes, there were short term carbon targets.

Q. WHAT IS THE DIFFERENCE BETWEEN AN ENERGY AUDIT AND AN EPC?

The audit is far more detailed than an EPC.

Q. WHY WERE MUNICIPAL BUILDINGS EXCLUDED?

The project only had funding for domestic buildings so public buildings were excluded. People were told about loan options but they wanted grants. However, a loan scheme was introduced as part of Countdown to Low Carbon homes, but banks did not want to get involved at the time when it was in a difficult time financially. The Green Investment Bank is re-emerging after the failure of Green Deal.

The only obligation in any UK business is the ECO. The only obligation for local authorities is LA Flex, so local authorities can target priority individuals and tap into funding.

Q. WHAT WILL HAPPEN WITH THE CHANGES TO REGULATIONS REGARDING RENTING PROPERTIES WITH AND EPC F OR G RATING? (NOTE: IN THE UK, PROPERTIES WILL NOT BE ALLOWED TO BE LET FROM APRIL 2018 IF THEY HAVE AN EPC RATING OF F OR G).

Because there is a shortage of homes in Stroud it is crucial the council work with landlords rather than having an adversarial approach. The support available is being promoted to landlords and one delegate mentioned that there are a number of low interest loans to help to make improvements.

Q. HAVE YOU DONE GROUND AND AIR SOURCE HEAT PUMPS?

Yes, we did both. Most of the work for T2050 came from organic learning from previous projects. There was a lot of hand holding to help the householders to use the equipment and this involved multiple visits.

— SUMMARY OF SESSION 6 application to local areas

The final session of the day was attended by the project partners and visiting stakeholders. The aim of the session was to share case study examples and consider how these could be applied within Build2LC partner countries.



Ms Inmaculada Guerrero Alés

Inmaculada Guerrero Alés, Technical Staff, Andalusian Federation of Municipalities and Provinces (FAMP), delivered a presentation titled: *Combating energy poverty in Andalusia.*

Ms Guerrero Alés explained the role of FAMP and stressed the importance of creating networks. Andalusia has a population similar to that of Portugal. In Andalusia, energy poverty is recognised as an issue. There are two ways to tackle the problem: preventative action or reactive action.

The sharp rise in the cost of electricity or gas is a significant cause of energy poverty in the area. The rise is far more than in other countries and is amongst the highest in the EU. Other causes of energy poverty include a lack of consciousness and knowledge as well as inefficient building stock.

Some of the resulting issues in Andalusia include an inability to pay bills; a high number of excess winter deaths; and an inability to keep homes cool in summer (30%) as well as warm in winter (11.1%).

Only 43% of housing stock is EPC rated A-C with 45% of housing classified at an E rating: this is a concern.

In Spain, the 'Bono Social' was implemented to offer financial support to vulnerable households by reducing bills by 25%. Residents can apply if they meet specific criteria such as, having more than three children, or all adults being unemployed. There are issues with the Bono Social as vulnerable consumers are not well-defined and it can include second homes. Also, the measures does not account for varying levels of earnings. The discount is also clearly not sufficient enough for the most vulnerable households.

Agreements have also been made with two energy companies, Endesa and Iberdrola, to support vulnerable consumers. If a vulnerable consumer is in arrears paying their bills or their supply is about to be cut, the resident can approach the municipal social services. The municipal social services will write a report about the customer and situation and inform the energy company about the issue, putting a stop to severing the energy supply. The municipality will then pay the arrears to the company. The scheme is wide reaching with 100 municipalities involved.

FAMP plays key role in supporting this mechanism, including raising awareness. The organisation supports the government in creating an action plan and also providing advice as well as raising the awareness of energy poverty to the energy companies.

FAMP also support and facilitate collaborative activity. For example, FAMP work with CLANER to promote renewable energy sources and energy efficiency measures within municipalities. Furthermore, the organisation has Continuing Training Plans for the public sector to ensure the issue is prominent in people's minds and that knowledge is secure.

Ms Guerrero Alés finished by stressing that energy poverty brings about inequality as well as poverty.



Ms Anneli Kamb

Anneli Kamb, Energy and Climate Advisor, Region Jämtland Härjedalen, delivered a presentation titled: *Energy wise housing co-operatives, Sweden.*

Housing co-operatives in Sweden have tenant ownership and the association is owned by the members. 23% of all housing within the country is within housing co-operatives. The Energy wise project operated across two regions within Sweden and the aim was to reduce energy use through knowledge and energy reviews. This involved the use of energy and climate advisors to help to reduce energy use by adopting the ethos 'measuring is knowing'.

The project ran for 15 months, beginning in January 2014 and was funded by the Swedish Energy Agency.

The goal was to engage with at least 20 co-operatives and create an action plan including at least one profitable action.

Energy wise involved energy audits, checklists, and action plan creation, over a period of time. There was sharing between housing co-operatives at events and this proved very positive. The energy advisor visits were highly successful and helped residents to see their building differently as the process adopted a hands on approach. The visits provided residents with an in depth understanding. Membership meetings took place within existing co-operative meetings (e.g. AGM) or during an evening meal which provoked a lot of discussion. Surveys were conducted to understand attitudes and take forward suggestions from residents.

One challenge was the time it took for each stage of the project, including housing co-operative recruitment. In total, almost 1500 apartments were included across 27 co-operatives.

Some of the key measures implemented were: loft insulation; adjustments to heating systems; and hot water saving installations.



Ms Katarina Kafadar

Katarina Kafadar, Eco Fund Councillor, Eco Fund, delivered a presentation titled: *Eco Fund, Slovenian environmental public fund and energy poverty measures.*

Eco fund is a public fund which is 100% state owned and is focused on the domestic sector. Eco Fund employs 40 people to meet the specific fund objectives.

Eco Fund offers grants, soft loans, energy advice, and awareness raising activities. There are 65 independent advisors spread across the country and they offer a range of advice.

A number of grants are available, including JP 41SUB-OB15 which focuses on domestic homeowners: they do not have to be in energy poverty. The grant is likely to be modified to include tenants. Another example is AERO, which is a free energy and water package: AERO also covers electricity. Examples of support include reflective heat strips for radiators or seals for windows and doors.

AERO targets those in energy poverty and was initiated via the social work centre where the household applies using a form. A letter is sent to arrange a visit and then a visit is conducted and an audit completed.

The results included €11,829 of savings from water and energy across 154 homes. However, data collection could be improved as the reported figures are more of an estimate.

Further actions in 2017 include raising awareness of support mechanisms through links with the Red Cross. The target audience also needs to be broadened and more funding needs to be sourced to turn the mechanism from a project into a programme. There are also plans to replace inefficient appliances and develop softer measures surrounding education. Ms Kafadar explained that there is a need for well-planned measures so that results can be better evaluated locally and nationally.

Ms Kafadar provided comprehensive advice about establishing structural support mechanisms. Examples of advice offered included:

- Ensure there is a measurable definition of energy poverty at a national level.
- Improve statistical data collection and monitoring of relevant indicators on energy poverty.
- Provide up to 100% financing for energy poor households.

- Improve existing programmes that address energy poverty (to improve informing the target group and offer free help on completing the application forms).
- Replace inefficient appliances and appliances (freezers, refrigerators, electric boilers)
- Provide soft measures in the form of energy advice, awareness and education.
- Raise the awareness of energy poverty amongst social actors.
- The key is cooperation among relevant stakeholders and the public institutions.
- Programmes and measures have to be long-term and continuous in order to have a greater impact, enable full evaluation, and develop and embed improvements.
- Ensure there are EU and national funds to finance measures.
- Potential funding could come from the energy suppliers law-obligated schemes for providing energy savings.

The session concluded with **small group discussions** to share the learnings from the seminar. The key points raised were:

- 1. Energy poverty is more widespread than anticipated.** For example, Swedish partners had not realised the extent of energy poverty in Sweden and its impact on health until hearing Harriet Thomson's presentation. Whilst Sweden has a social system citizens can access if they cannot pay for their home enabling residents to receive a grant for rent or to pay their mortgage, there is clearly more to discuss with regard to support for energy poverty. The Swedish partners suggested having a pilot to explore this option, providing a grant for bills and also for measures. The Eco Fund presentation, Slovenia, was an interesting proposition which could also be explored.
- 2. National definitions for energy poverty are needed to cater for different circumstances.** In Croatia, citizens can be poor and own the house so that can be a problem. If Croatia were to use the UK definition, then a large percentage (about 50% could be fuel poor). Also if the same

definition was used for food then many people would be in poverty from this aspect too. Polish delegates noted differences between Eastern and Western Europe. In Eastern Europe, the majority of household income is spent on food and bills; there is little disposable income. Therefore measures and definitions must be appropriate, if not by country then by region. In many regions, there is more of an environmental focus, alongside the awareness of supporting people in energy poverty.

- 3. Providing evidence before and after retrofit is important.** Delegates were pleased to see evidence of this with blocks of flats and other buildings before retrofit took place. It is helpful to clearly see the evidence of improvement.
- 4. Switching from soft measures to deep retrofit is a challenge.** Funds need to be available to support deep domestic retrofit. Some delegates commented on the reluctance of some residents to agree to installations, for example one resident refused the installation of an air source heat pump. It was suggested that using installa-

tions in public buildings can help to raise awareness for the community. Creating show homes and case study homes such as the Open Homes event for Target 2050 also help.

- 5. The use of volunteers has potential.** Some delegates liked the idea of using volunteers, as they have done in Croatia. However, there was uncertainty about how this practically works. For example, are volunteers paid? Operating volunteer schemes through an NGO may be more successful and residents are more likely to trust non-governmental workers. It was noted that for some of programmes, there are unpaid volunteers who are supported by a paid position within a voluntary sector organisation.

Consistency is a challenge with volunteers. However, in some regions of Sweden there is the understanding that the government will support volunteers. It was apparent that the circumstance differed significantly between countries and regions. It was noted that there is an emphasis on volunteers in the UK at the moment due to financial challenges but an investment is still required, it is not free.

4

SITE VISIT

During the interregional seminar in Gloucester, visitors from Build2LC partners attended a Site Visit to the new **Gloucestershire Science and Technology Park**, Berkeley Green.



George Ridd, Site Director at SGS Berkeley Green, provided a comprehensive explanation of the development of the site and the background and purpose of the project. He also provided a tour of the facility showing GREEN, the UTC, and the growth of business activity on site. Mr Ridd explained how the site, opening in September 2017, is of particular relevance to the Build2LC project as the site comprises of:

- **SGS Berkeley Green University Technical College (UTC)** - An educational facility for 14-18 year olds which meets the requirements of the national curriculum but there will be an additional focus on developing student's skills in one of five specialisms: engineering; advanced manufacturing; digital technologies; cyber security; or applied science (sport).
- **GREEN** – A €5.5 million skills centre which will provide full or part-time vocational courses in advanced engineering and digital technologies for post-16 learners including apprenticeships, adult re-training, professional accreditations, and degree level learning. Business courses are also available to support employers, such as, NVQ in Supply Chain Management or Level 3 Award in Leadership and Management.
- **Business Units** – Businesses such as **WE-Link** and **Schneider** will also have units on site. This not only provides a hub for shared practice, but the businesses will also be closely linked to the educational work at GREEN and the UTC. Businesses will advise on course content, provide apprenticeship opportunities, and showcase innovative practice to learners.



The park has been developed in response to a skills shortage in the region: hence the site is specifically catering for this demand. Construction skills are also in short supply: these are already taught at other SGS facility but the scale can be increased with the movement of some courses to the Berkeley Green site.

The development of SGS Berkeley Green was an EU Structural Investment Fund priority under Thematic Objective 4 in the Gloucestershire EU Structural Investment Fund Strategy 2014-2020. Over €33 million of funding has been secured for the development of the site with over €5 million coming from structural funds. As the site has been identified as a significant need for the county, the project has been well-supported by the Local Enterprise Partnership, local politicians and employers.



The project is also of interest due to the history of the site. The area surrounding the new facility is nuclear power facility which is currently being decommissioned. The GREEN facility is located within the former research laboratories used by the power station. After extensive renovation, GREEN is ready for the first cohort of students; at least one floor of the facility will also be used by businesses who will work within the same building as the post-16 learners. The UTC has been built as an extension to the GREEN building and is joined by an atrium.

Dave Evans, Schneider, outlined how Schneider were tackling the rapid rate of growth in the demand for energy alongside the need to adopt sustainable solutions. He introduced Schneider's innovative battery storage work and explained how collaboration with Berkeley Green will be of benefit to both the organisation and the learners.

5

BENCH-MARKING FICHES

Benchmarking Fiches are provided by BUILD2LC partners as a consequence of the learning and exchange of common experiences. Based on the effective exchange of Good Practices (GP), partners were asked to identify which practice they are willing to adopt in their region.

A Benchmarking Fiche has been designed in the frame of the project to show the interest of the partner in adopting a specific Good Practice. Hence, partners are required to complete questions about main needs in their region (related to the topic) that the good practice will address, issues that could be improved in the region by adopting the good practice, problems that could arise when adopting or once adopted the good practice or policy instruments in place that could implement the good practice.

The good practices requested by the partners on this *New Energy Culture, Citizen Involvement and Energy Poverty* topic were:

- **Warm & Well** – Energy Efficiency Advice and Installation Scheme.
- **Complete renovation of apartment buildings** – System Dominum.
- **Energy efficiency refurbishment** in a multi-dwelling residential building in Sofia, Bulgaria.
- **ACHIEVE** – Actions in low income Households to Improve Energy efficiency through Visits and Energy diagnosis Link to Energy.
- **ENSVET** - Energy Advices for Citizens.
- **Eco Fund**, Slovenian Environmental Public Fund.
- **Your Green Future.**

— BENCHMARKING FICHES FOR 'ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY'

Hence we present the compilation of Benchmarking Fiches showing the interest of partners to embody the already identified Good Practices for the topic 'Activation of demand and combating energy poverty'.

	<i>Warm & Well</i> SWEA	<i>System Dominum</i> LEAG	<i>Refurb. @Sofia</i> OTHER	<i>ACHIEVE</i> SWEA	<i>ENSVET</i> LEAG	<i>Eco Fund</i> LEAG	<i>Your Green Future</i> SWEA
ANDALUSIA	*						
LITHUANIA		*					
GLOUCESTERSHIRE			*				
PODKARPACKIE				*	*		
CROATIA							
JÄMTLAND	*					*	*
SLOVENIA							

BENCHMARKING FICHE REGION: ANDALUSIA



TOPIC: ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY

Good practice to be adopted

Warm & Well – Energy Efficiency Advice and Installation Scheme

AEA is particularly interested in:

- *Advice line working scheme of Warm&Well.*
- *Exploring the synergies of both offering free and independent advice from a fully public energy agency and counting on a network of +8.000 collaborating companies used to manage the sustainable energy grants.*
- *To know in-deep the finance agreement between the NHS and SWEA and the basis what is founded for.*

Main needs to respond to

Energy poverty and low energy standard building are hot issues in Andalusia.

Although winter can be serious in some zones, the main problem is the hot weather. Temperatures reach +40°C easily during summer and even late spring, which caused worrying scenes in the schools during 2017.

Typically it can be difficult to engage all citizens by talking energy efficiency or money alone. Therefore alternative angles are needed to achieve the desired engagement and energy efficiency.

Nowadays Andalusia has not regional energy and climate advisors. However, we rely on very well trained public workers who could deliver advice.

Main objective to transfer the good practice to your region

By communicating onsite energy efficiency issues we seek to engage families to reduce energy poverty and increase health.

Factors that might hamper the transfer

Cultural differences between English and Andalusian approached to get to population.

Policy instrument

Regional Sustainable Construction Programme.

Regional Energy Strategy 2020.

Existing financing funds

Working budget in the AEA.

Relevant stakeholders

- Regional energy and climate advisors.
- Regional healthcare.
- Vulnerable population.
- Public services (schools, hospitals, etc.).

Main beneficiaries

- General public.
- Regional energy and climate advisors.
- Public services beneficiaries.

Further information

We will further contact Severn Wye Energy Agency to get details about and arrange a distance bi-lateral meeting.

BENCHMARKING FICHE REGION: LITHUANIA



TOPIC: ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY

Good practice to be adopted

Lithuania: Complete renovation of apartment buildings - System Dominum

Lithuania may use some part of experience of 'Complete renovation of apartment buildings - System Dominum'.

Main needs to respond to

In last programming period of 2007-2013 multi-apartment buildings were started to be renovated using financial instruments and this program was continued in 2014-2020 period. Despite the success of the program raised new challenges which requires to seek for alternative measures and solutions. The GP's indicated above may lead to new solutions of financing building renovation program.

Main objective to transfer the good practice to your region

As Lithuania is looking for new solutions and decisions, VIPA decided to explore Slovenian GP "Complete renovation of apartment buildings - System Dominum", which may provide for the ideas on the renovations model, which will more rely on the private sector funding.

Factors that might hamper the transfer

The reluctance of the politicians to change model.

Reluctance of the multi apartment owners to apply major changes to the buildings.

Challenges raised by the differences in legal systems of the countries.

Requirements associated with the cities development plans

Policy instrument

Currently there are no local policy instruments which might help to transfer such good practice to Lithuanian buildings sector. Although for the implementation of rehabilitation of multi-apartment buildings the Government of the Republic of Lithuania has approved multi-apartment buildings renovation (modernization) Programme.

Existing financing funds

Currently approved multi-apartment building renovation system is relying on the funding from ESI funds and budget sources, as well as private participation, but the challenges associated with the programs raises questions about sustainability of the program. The applied model could increase the attractiveness of the renovation model as it could.

Relevant stakeholders

- Ministry of environment – responsible for municipalities public buildings renovation.
- BETA – technical assistance facility targeting multi-apartment buildings, owned by ministry of environment.
- Technical and financial consultants – willing to provide technical advises and help to prepare technical and financial documentation.

Main beneficiaries

- Multi-apartment owners.
- Government (minimized pressure on the budget, increase in result associated with energy savings and reduction of CO₂ emissions).

Further information

Lithuania needs more information about experience in adopting such good practice. Bilateral meeting might be the best option of sharing such experience.

Contact details to obtain further information on the adoption of the good practice:

Justinas Bucys
justinas.bucys@vipa.lt

Public Investment Development Agency (VIPA)
(Public Organisation)

vipa.lt

BENCHMARKING FICHE REGION: GLOUCESTERSHIRE



TOPIC: ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY

Good practice to be adopted

Energy efficiency refurbishment in a multi-dwelling residential building in Sofia, Bulgaria

Main needs to respond to

The BUILD2LC action plan will involve the retrofit of domestic properties, some of which will be in multi-apartment blocks (often run by registered social landlords) or in individual properties which have been let by social or private landlords. These renovations are likely to occur in high need areas hence engagement of citizens, funding and high quality installations are required.

Main objective to transfer the good practice to your region

We have identified 16 potential actions to pursue. This good practice could support a number of these actions, most notably:

Action 4: Pilot for Growth – A partnership project will be developed to focus on Oakely, Cheltenham and Matson, Gloucester.

How could the GP support this action? This action focuses efforts on specific areas within the region. Once this

pilot has taken place, it is anticipated that the project will role out to other areas. The pilot will involve supporting private and social landlords within these areas to retrofit individual premises and also multi-apartment blocks. This GP could provide a methodology to support financing, citizen engagement and quality. Lessons could also be learnt about maintenance plans used within the project and training packages.

Action 7: Develop a 0% loan to support landlords for: a) EPC E, F and G rated properties; b) to support landlords within Matson, Gloucester and Oakely, Cheltenham.

How could the GP support this action? It would be useful to learn about the financial mechanisms which have developed from the project and see if something similar can be replicated. It would also be helpful to establish whether specific criteria should accompany any loan.

Action 8: Provide/source grant funding to support landlords to install energy efficient measures

within Matson, Gloucester and Oakely, Cheltenham
How could the GP support this action? The GP could help to establish the nature of support and stipulations linked to any support. An understanding of evaluation methods would also support this action.

Action 10: Create a formal partnership structure to support all RSLs and private landlords in the area and increase communication with energy suppliers, public bodies and agencies to provide equal access to opportunities to support residents
How could the GP support this action? The GP could be used as a case study to advise the partnership.

Action 14: Review procurement processes with the aim of: a) improving standards through contracting; b) not excluding smaller, local businesses
How could the GP support this action? It would be interesting to learn how the procurement process worked for this project and the lessons learned.

Factors that might hamper the transfer

Finance to retrofit the properties or inability to secure a loan with sufficiently low interest.

Ability to engage landlords and citizens.

Applicability to the Gloucestershire context.

Policy instrument

Some Registered Social Landlords (RSLs) already have finances available for refurbishment. Some financial support is available (see below) but the action plan will support greater roll out.

Existing financing funds

Some Registered Social Landlords (RSLs) already have finances available for refurbishment. We also have some finance available via the Energy Company Obligation (ECO) and finance from the Clinical Commissioning Group. However, this is based on the residents meeting specific criteria. More funds may need to be secured either via a loan or grant to top up funding.

Relevant stakeholders

- **Residents** – residents will be directly impacted and involved.

- **Gloucestershire Clinical Commissioning Group** – potential for financial support.
- **Severn Wye** – potential lead and facilitator.
- **Registered Social Landlords** – RSLs properties are likely to be involved, especially in the identified areas.
- **National Landlords Association** – landlords within the target areas may be involved.
- **Local Authorities and County Council** – potential financial support and some social housing is provided through Stroud District Council.
- **Installers** – conducting the works.

Main beneficiaries

Residents – Improved comfort, reduced energy costs.

Landlords – Higher quality buildings (adds value), meets legislative requirements, tenants are more able to pay rent if energy costs are reduced.

Health service – If buildings contain individuals with health issues, these could be improved due to the retrofit and result in reduced costs to the health service.

BENCHMARKING FICHE REGION: PODKARPACIE



TOPIC: ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY

Good practice to be adopted

Podkarpackie: ACHIEVE – Actions in low income Households to Improve Energy efficiency through Visits and Energy diagnosis

Main needs to respond to

Training and development of new energy advisors.

Job creation for people out of work.

Needs of free energy advice for citizens - individual, independent energy consulting and information education and awareness activities for the promotion of energy efficiency measures and renewable energy sources for citizens in the local environment.

Needs of free tips and interviews assist in the selection, design and implementation of investment measures of energy efficiency and use of renewable energy sources in residential buildings.

Giving advices to the citizens, final customers of energy in the residential sector and offering free and commercially independent advices connected with training services.

Needs of free helping in planning and implementation environmentally friendly investments in the region, helping in identification available sources of funding, organizing training and information and education activities to help prepare, verify and implement low carbon economy plans.

Needs of training of municipal energy auditors.

Needs of different forms of support tailored to specific needs of different groups: the form of informational meetings, consultations in the office and outside of the office, answers by email inquiries, phone counselling, training and information and promotion activities, individual counselling as well as conferences or webinars.

Main objective to transfer the good practice to your region

Support in the planning and implementation of environmentally friendly investments in the region.

Increasing the quality of life and green jobs.

Environmental benefits such as reducing pollutant emissions, improving air quality and reducing the use of non-renewable natural resources.

Increasing energy awareness of citizens, energy savings and reduction of greenhouse gas emissions and RES through providing local and regional information exchange and good practices on the implementation of Directive 2010/31 / EU, 2012/27 / EC and 2009/28 / EC and Directive 2008/50 / EC.

Facilitating the implementation of certain measures and programs related to energy policy.

Systematically combating pollution of the environment, energy poverty and dependency on energy imports.

Preparation of well-qualified independent energy advisors.

Promotion of low carbon economy.

Generating of new jobs in the economy - increasing the number of municipal energy auditors.

Facilitating access to EU and national funds for increasing energy efficiency and using of RES.

Citizens - lower energy costs, energy efficient investments can become a potential source of revenue.

Business: lower energy consumption, positive image, increased competitiveness.

Factors that might hamper the transfer

Problems with financing various activities for the comprehensive implementation of the model of "ACHIEVE".

Problems with financing energy auditors.

Problems with the interest of auditor services.

Problems with access to car to drive to clients.

Policy instrument

Infrastructure and Environment Operational Program for the years 2014-2020 within the Priority Axis "Reduction of emissivity of the economy".

Existing financing funds

Regional Operational Program of the Podkarpackie Region for the years 2014-2020.

Infrastructure and Environment Operational Program for the years 2014-2020 within the Priority Axis "Reduction of emissivity of the economy".

Relevant stakeholders

- Marshall Office of Podkarpackie Region
- Podkarpackie Energy Agency

Main beneficiaries

- Public institutions.
- Students.
- Unemployed people.
- Universities.
- Civil society.
- Owners of buildings.

Further information

Too little information at this moment.

BENCHMARKING FICHE REGION: PODKARPACIE



TOPIC: ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY

Good practice to be adopted

ENSJET – Energy Advices for Citizens

Main needs to respond to

Needs of free energy advice for citizens - individual, independent energy consulting and information education and awareness activities for the promotion of energy efficiency measures and renewable energy sources for citizens in the local environment

Needs of free tips and interviews assist in the selection, design and implementation of investment measures of energy efficiency and use of renewable energy sources in residential buildings.

Giving advices to the citizens, final customers of energy in the residential sector and offering free and commercially independent advices connected with training services in the field of RES and RUE.

Needs of free helping in planning and implementation environmentally friendly investments in the region, helping in identification available sources of funding, organizing training and information and education activities to help prepare, verify and implement low carbon economy plans.

Needs of training of municipal energy auditors.

Needs of different forms of support tailored to specific needs of different groups: the form of informational meetings, consultations in the office and outside of the office, answers by email inquiries, phone counseling, training and information and promotion activities, individual counseling as well as conferences or webinars.

Main objective to transfer the good practice to your region

Environmental benefits such as reducing pollutant emissions, improving air quality and reducing the use of non-renewable natural resources.

Increasing energy awareness of citizens, energy savings and reduction of greenhouse gas emissions and RES through providing local and regional information exchange and good practices on the implementation of Directive 2010/31 / EU, 2012/27 / EC and 2009/28 / EC and Directive 2008/50 / EC.

Facilitating the implementation of certain measures and programs related to energy policy.

Systematically combating pollution of the environment, energy poverty and dependency on energy imports.

Preparation of well-qualified independent energy advisors.

Promotion of low carbon economy.

Generating of new jobs in the economy - increasing the number of municipal energy auditors.

Facilitating access to EU and national funds for increasing energy efficiency and using of RES.

Citizens - lower energy costs, energy efficient investments can become a potential source of revenue.

Business: lower energy consumption, positive image, increased competitiveness.

Support in the planning and implementation of environmentally friendly investments in the region.

Increasing the quality of life and green jobs.

Factors that might hamper the transfer

Problems with financing various activities for the comprehensive implementation of the model of Energy Advices for Citizens.

Problems with financing by municipalities municipal energy auditors.

Cooperation with interested local communities/municipalities/NGOs – lack of agreement or lack of willingness to participate in the project.

Shortage of qualified independent energy advisors.

Policy instrument

Infrastructure and Environment Operational Program for the years 2014-2020 within the Priority Axis “Reduction of emissivity of the economy”.

Existing financing funds

Regional Operational Program of the Podkarpackie Region for the years 2014-2020.

Infrastructure and Environment Operational Program for the years 2014-2020 within the Priority Axis “Reduction of emissivity of the economy”.

Relevant stakeholders

- National Fund for Environmental Protection and Water Management
- Regional Fund for Environmental Protection and Water Management in Rzeszow
- Marshall Office of Podkarpackie Region
- Podkarpackie Energy Agency

Main beneficiaries

- Public institutions.
- Entrepreneurs planning to increase energy efficiency or the use of renewable energy sources in their facilities, especially those representing small and medium-sized enterprises.
- Community and housing co-operatives.
- Universities.
- Civil society.

Further information

Too little information at this moment.

BENCHMARKING FICHE REGION: JÄMTLAND HÄRJEDALEN



TOPIC: ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY

Good practice to be adopted

Warm & Well – Energy Efficiency Advice and Installation Scheme

We are particularly interested in the database and CRM-system used by the energy advisors, and the way to communicate energy efficiency through health benefits.

Main needs to respond to

Typically it can be difficult to engage all citizens by talking energy efficiency or money alone. Therefore alternative angles are needed to achieve the desired engagement and energy efficiency.

Regional energy and climate advisors have hundreds of contacts with people and companies seeking energy advice and do not currently have a proper CRM-system. This makes it difficult to keep track of multiple contacts and how things develop over time.

Main objective to transfer the good practice to your region

Typically it is technology interested middle aged men who engage in the activities we arrange and who contact the energy and climate advisors. Only educating middle aged men on energy and climate issues does not contribute to creating an equal society. By communicating energy efficiency through health benefits we seek to engage other target groups, especially women and younger people.

By adopting a CRM-system we seek to make our advice more efficient and thus be able to provide better advice and to more people.

Factors that might hamper the transfer

Our organisation also manages medical records, and does therefore have very strict security requirements. Finding a CRM-system that follows all the requirements and also provides the services we need may be challenging.

Energy poverty is not a big political issue in RJH, therefore we do not have the political or financial support to make specific efforts in energy poverty.

Policy instrument

National grant for energy and climate advisors.

Existing financing funds

National grant for energy and climate advisors

Relevant stakeholders

- Regional energy and climate advisors
- Regional development manager for energy and climate advisors
- Regional IT strategist
- Regional healthcare

Main beneficiaries

- General public
- Regional energy and climate advisors

Further information

If we are to procure a new CRM-system, it would be helpful to see the procurement documents for the system used in Gloucester. Specifically, what does the system contain in form of data collection and how does it work with the new General Data Protection Regulation?

Collaborations with the healthcare and social welfare systems or other relevant actors?

Communication material and strategies to engage citizens?

BENCHMARKING FICHE REGION: JÄMTLAND HÄRJEDALEN

TOPIC: ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY

Good practice to be adopted

Eco Fund, Slovenian Environmental Public Fund

From which: AERO, assistance for energy deprived households. AERO is funded by ECO FUND.

Main needs to respond to

Reduce energy consumption among households by offering a free energy and water efficiency package.

The municipal Energy and Climate advisors are committed to carry out one campaign project each year that results in measurable energy reduction. Usually it can be difficult to report effects of the energy and climate advice because it can take a long time between advice and implemented action. This kind of projects is necessary to motivate continued government funding for the energy and climate advisors. AERO would fit well as such a project.

The municipal Energy and Climate advisors need new to find new ways of reaching out to their target group. Cooperating with Social work centres or similar organisations can be a good way of doing this and at the same time reach out whom those who need help the most.

Main objective to transfer the good practice to your region

By developing an and applying learning tools for building managers and users, the entire energy efficiency potential can be utilized.

Factors that might hamper the transfer

The guide that has already been developed in Zagreb cannot be directly transferred to our nordic conditions:

- If it requires a lot of resources to develop guides and tools that are customized for nordic conditions.
- If it's hard to develop a single guide that can be used in different types of buildings.

Policy instrument

As of now there is no policy in place.

Existing financing funds

As of now there are no existing funds for implementation of this practice.

Relevant stakeholders

- Swedish energy agency.
- Municipal energy and climate advisors.
- Social work centers.
- Charitable organisations.

Main beneficiaries

Private households.

Further information

We want more detailed information on the project, for example the scope of the guides, implementation plan, resources needed.

At a later time we may need a bilateral meeting to work out the specifics.

BENCHMARKING FICHE REGION: JÄMTLAND HÄRJEDALEN



TOPIC: ACTIVATION OF DEMAND AND COMBATING ENERGY POVERTY

Good practice to be adopted

Jämtland Härjedalen: Your Green Future

Main needs to respond to

There is simultaneously a need for energy rehabilitation of existing building stock, and a great need for new dwellings due to the increased population and increased tourism. At the same time the housing and construction companies in the region typically have difficulties finding and keeping qualified staff. Hence there is a need for more young people to choose career within these fields. Also, energy related careers are likely to be even more demanded in the future.

There are many different efforts to inspire young people in the different aspects of sustainability. But there is not something specifically aimed at inspiring young people to choose energy related careers, which will be needed. The GP of “Young Energy People” is also being discussed as a GP for transfer, and YGF could be a good complement to Young energy people. It does however depend a bit on how the transfer of that GP develops.

Main objective to transfer the good practice to your region

Please detail what you want to improve or to achieve in your region by adopting the best practice. Identify what changes you want to make in your region

The main objective is to inspire young people to choose green and energy related careers.

Factors that might hamper the transfer

Our region is very sparsely populated, many upper secondary schools are 150-200km away from Östersund (which is the only city in the region). So there may be some difficulties getting the schools and students interested to travel such distances.

Policy instrument

None.

Existing financing funds

Operational programme for investments for jobs and growth, NUTS SE32.

Relevant stakeholders

- Regional energy and climate advisors
- Regional development manager for energy and climate advisors
- Local businesses
- Upper secondary schools

Main beneficiaries

- Upper secondary school students
- Local businesses

Further information

If we were to implement this GP we would like it to have a very interactive nature, to really integrate the students with the local businesses. How did you design the workshops?

Contact details to obtain further information on the adoption of the best practice:

Anneli Kamb
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Region Jämtland Härjedalen
(Regional development agency)

regionjh.se

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CONCLUSIONS

The seminar provided a wide range of valuable points for partners to inform practice within their own nations; there is already evidence of activity in Croatia at a national level as a direct result of the seminar.

— ENERGY POVERTY AND HEALTH

The importance of having a *definition and common understanding* of what constitutes energy poverty at least at a national level, if not a European level, became clearly apparent throughout the seminar. Not only was this conveyed by Harriet Thomson, EPOV, but the presentations from different partners showed that policy and decision makers really need to have a shared understanding in order to formulate a cohesive plan to combat energy poverty: its absence can result in a disjointed, ad hoc approach. Although energy poverty was legally recognised in 2009, only five member states currently have a definition. It is encouraging to hear that since the seminar, Croatia will be forming a working group in order to create a definition and establish national policy regarding energy poverty.

Together with defining energy poverty, *determining what constitutes a vulnerable consumer* is also an important starting point in order to direct services and support appropriately. However, discussions amongst delegates showed that very different proportions of the population within each nation would be classified as energy poor depending on the definitions adopted. It is therefore important that a range of definitions are carefully considered, and modelled, based on the characteristics of the population before making final choices. At a European level, the differences in interpretations about what constitutes consumer vulnerability between nations need to be understood within collaborative projects so that partners have a collective understanding before pursuing activities. The Horizon 2020 ASSIST project, which began in 2017, is an example of where a common understanding of energy poverty and vulnerability is being sought in the early stages of the project. The work undertaken by EPOV will make strides towards this ambition. Projects such as SErENADE, Intelligent Energy –Europe, and INSIGHT_E, Seventh Framework Programme have also conducted work in a similar vein.

The *patterns of energy poverty* were also of interest to delegates. Although the patterns of energy poverty were not unexpected, the outcomes of the EVALUATE project were of particular interest. Notably, the fact that the inability to cool properties is a significant issue in some areas and that some households are moving away from traditional fuels and using wood, or even old books, as a coping mechanism to warm homes. It also showed that ‘vulnerable’ people can include highly educated individuals in expensive households, or working age families. Therefore, there needs to be a shift away from focusing more exclusively on the elderly. Excess Winter Deaths were a commonly identified as a key concern; however, the rates of deaths during the high temperature peaks cannot be ignored.

Delegates were particularly surprised when Dr Thomson presented the *prevalence of poor health in the energy population compared to non-energy poor populations*. The outcomes showed that Slovenia, the Netherlands, and Sweden had the greatest prevalence of poor health in energy poor populations. This demonstrates that member states should consider the link between energy poverty and health when decision-making: it should not be assumed that countries with high levels of equality and income do not have impacts from energy poverty.

William Baker showed that there is an evidence base to prove the impact of energy poverty on health. *Evidence does exist to show the relationship between health and energy poverty; an emerging bank of evidence shows the impact of retrofit on health*. For those making a case to decision makers, systematic reviews are a useful place to start. The outcomes often show that retrofit has the greatest impact on people with health issues (Maidment CD *et al*, 2013), particularly those with respiratory or mental health issues (Thomson *et al*, 2013) or children with asthma (Milner J & Wilkinson P, 2016). Positive impacts of retrofit on children were also statistically significant (Maidment CD *et al*, 2013). These data, alongside other studies referred to by Mr Baker, should be used to support retrofit proposals and in discussion with policy makers.

Delegates were interested in the *existing relationship between the health sector and domestic energy retrofit in Gloucestershire, UK*. The Clinical Commissioning Group (CCG) in Gloucestershire is committed to supporting people to stay healthy and live in their homes longer. The aim is to reduce pressure on the health service and reduces the number of elderly people being moved into care homes. Gloucestershire CCG provides financial support to the Warm & Well programme and have match-funded to Build2LC project in the UK. This is also pioneering work in the UK as currently only 6 CCGs across the country formerly identify 'housing' as a key focus on their sustainability and transformation plans. If pursuing a relationship with the health sector, it is important to ensure that data collected regarding retrofit and householders before and after installations suitably matches the requirements of the health body.

— ENGAGING CITIZENS & ACTIVATION OF DEMAND

The increase and focus on developing retrofit initiatives is encouraging, however the seminar emphasised that it is not purely about providing retrofit, but ensuring the right people engage.

Vulnerable citizens are particularly hard to engage for a variety of reasons including shame or embarrassment, lack of trust, or inaccessibility. A *focused point of contact* is crucial for residents and ideally this should be via a network that already exists where trusting relationships have already been created. There should be *direct liaison from independent support personnel* in order to ensure good understanding, higher engagement, and higher quality outcomes. Even more challenging is being able to use examples of the positive impact of retrofit to vulnerable citizens as case studies, particularly: projects should account for this in the planning stages and use innovative ways to disseminate examples of success. Engaging citizens who have a *clear point of contact*, such as a large social landlord or a co-operative, are easier to access than private housing which are not in multi-apartment blocks. Project plans should consider how to engage these citizens.

Using existing and trusted networks to market opportunities to both businesses and residents is important: well-known, respected, and non-governmental avenues appeared to be most successful.

Establishing *comprehensive referral mechanisms* from local doctors, social services, fire and police services and voluntary agencies can stimulate activity, target vulnerable individuals, and improve health outcomes. An example of this is 'social prescribing' in the UK.

Long term programmes, rather than projects, are more effective as these allow for detailed planning and a formative evaluation process to be developed. This not only allows the initiative to become embedded, often leading to increased uptake, but ongoing evaluation leads to improvement in processes and products which improves quality, outcomes, and can stimulate further engagement.

Engaging citizens in the practical work being undertaken before, during, and after the installation, improves understanding and also trust in the process. A brief explanation of what has been completed and a one-off introduction to controls is less effective than longer term support. Where possible, projects should plan a *follow-up programme* of training and support for retrofit activities.

Few residents will sign up for a full-retrofit. Planning a *stepped-process* for residents to implement one or two measures at a time will have a far greater uptake, particularly if measures can be installed alongside existing renovation or remedial work.

Financial incentives need to be well thought through and provide a better alternative to other loan schemes. They should also account for the other incentives on offer, such as supplements for energy bills, and ensure that there is *a balance between the 'carrot and stick'*. Lithuanian partners clearly demonstrated the impact of modifications to financial incentives on retrofit uptake.

With regard to stakeholders, the importance of *providing stakeholders with a clear and well-presented overview* of the situation, facts, and potential outcomes, is vital. Often stakeholders are keen to engage but are unsure of the details and do not have time to conduct independent research; they need to have the reality of individual's circumstances brought to their attention. Therefore, well-thought out documentation and professionally presented marketing materials, including videos showing the reality of the situation for citizens, should be developed for this purpose.

Processes, procedures and associated documents should be simple, efficient and effective: procurement procedures and loan application forms are examples. Inefficiencies lead to disengagement, errors and excessive time for all parties. It is worth fine-tuning, evaluating and modifying all elements of the process throughout a project. Lithuanian partners provide good practice examples in this area.

The seminar provided some significant measures which can be taken for some partners and also a wide array of adjustments or considerations which should be made during planning, engagement, implementation, and follow up stages of projects and programme implementation. Whatever the plans, one of the most important values to keep at the heart of any project is that work is 'done with' rather than 'done to' vulnerable citizens.

Partners are grateful to all stakeholder and speakers who attended the event.

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APPEN- DICES

— GLOUCESTERSHIRE, UK CONSORTIUM AGENDA

All the Seminar presentations are available at the BUILD2LC project website using the following link:

- [BUILD2LC](#)

A brief summary of the seminar and site visit can be found on the Severn Wye Energy Agency website using the following link:

- [SEVERN WYE ENERGY AGENCY](#)

New Energy Culture, Citizen Involvement and Energy Poverty

*INTERREGIONAL THEMATIC SEMINAR AT GLOUCESTER, UK
13-14 JUNE 2017*

SEMINAR AGENDA

DAY 1 – TUESDAY 13 JUNE 2017

Venue: Gloucester Guildhall, 23 Eastgate Street, Gloucester, GL1 1NS.

REGISTRATION AND WELCOME

08:45 – 09:15 Registration (refreshments available)

09:15 – 09:30 Welcome and introduction to the UK decision making structure in the region. *Mike Brain, CEO, Severn Wye Energy Agency and Joaquín Villar, Lead Partner, Andalusian Energy Agency.*

SESSION 1. HEALTH AND ENERGY POVERTY IN AN EU CONTEXT

09:30 – 10:00 The health and well-being impacts of energy poverty across 32 countries. *Dr Harriet Thomson, Project Manager, European Energy Poverty Observatory.*

SESSION 2. THE IMPACT OF ENERGY POVERTY ON HEALTH AND CITIZEN INVOLVEMENT IN THE UK

10:00 – 10:30 Causes of energy poverty and the impact of policy on citizen involvement. *Barry Wyatt, Strategic Head (Development Services), Stroud District Council.*

10:30 – 11:00 The impact of energy poverty on health and social care. *Mary Morgan, Lead Commissioner for Older People, NHS Gloucestershire Clinical Commissioning Group and Gloucestershire County Council.*

11:00 – 11:30 Break

11:30 – 12:00 Evidence: Providing the evidence that retrofit can have positive impacts on health. *William Baker, Head of Fuel Poverty, Citizens Advice.*

SESSION 3. HOW TO SUCCESSFULLY ENGAGE CITIZENS

12:00 – 12:15 Engaging citizens and lessons learnt in Lithuania. *Gvidas Dargužas, VIPA.*

12:15 – 12:30 Engaging citizens in Energy Poverty in Croatia. *Slavica Robic, DOOR.*

12.30 – 12.45 Social Prescribing (UK). *Hannah Gorf, Gloucestershire Clinical Commissioning Group.*

12:45 – 13:00 Cheltenham Borough Homes: energy efficiency and fuel poverty in our properties. *Frances Crick, Cheltenham Borough Homes.*

13:00 – 14:00 Lunch. Delegates go straight to workshops after lunch.

SESSION 4. STRATEGIES TO MANAGE FUEL POVERTY AND ENGAGE CITIZENS – WORKSHOPS

The workshops provide an opportunity for smaller groups to find out more about project and allow time for discussion between partners. Delegates should select two workshops from the options below in advance.

Workshop 1: Warm & Well – A programme for providing advice, support and retrofit to domestic properties. *Brian Canning and Sarah Dittman, Severn Wye Energy Agency.*

Workshop 2: Link2Energy – Establishment, training and co-ordination of an energy and installers network. *Neil Towler and Mike Brain, Severn Wye Energy Agency.*

Workshop 3: Target 2050 – A project in Stroud District to reduce carbon emissions across domestic properties, businesses and community buildings. The project explores managing different types of buildings, support for those in fuel poverty and engaging installers. *Maria Hickman and Barry Wyatt, Severn Wye Energy Agency.*

14:00 – 14:30 Workshop rotation 1

14:30 – 15:00 Workshop rotation 2

15:00 Close for stakeholders and coffee break for partners

SESSION 5. APPLICATION TO LOCAL AREAS

15:30 – 16:15 Making an impact on a local scale-case studies

Three 15 minute presentations summarising how those in fuel poverty have been targeted on a local scale. Potentially include a representative from:

- Combating energy poverty in Andalusia. *Ms Inmaculada Guerrero, Andalusian Federation of Municipalities and Provinces.*
- Energy wise housing cooperative, Sweden. *Anneli Kamb, RJH.*
- Combating energy poverty in Slovenia. *Mrs Katari-na Kafadar, Eco Fund.*

16:15 – 16:45 Small group discussions
Engaging citizens in policy and programmes. What works and what doesn't?

16:45 Close

17:15 City Tour of Gloucester – meeting outside the front of Gloucester Guildhall

18:45 Bus departs for dinner at Red Hart Inn, Longhope from Southgate Street following the tour.



DAY 2 – 14 JUNE 2017

Partnership Meeting & Study Visits

SITE VISIT TO BERKELEY GREEN & UTC

09:15 – 10:00 Travelling by coach to Berkeley GREEN and UTC

10:00 – 11:15 Site visit – Berkeley GREEN and UTC

Berkeley GREEN and UTC is a new training and educational establishment situated on the site of a former nuclear facility. The project aims to provide an avenue for professionalising the construction industry for adults and young people. It also works in partnership with a range of private and public organisations.

The trip will include a tour and a talk about: The history of the site; reasons for creation, courses & enrichment opportunities offered and expected outcomes; partnerships; building design and sustainability.

11:15 – 11:30 Coffee break

INNOVATIVE WAYS TO MANAGE HOUSING AND ENERGY ISSUES

11:30 – 12:00 Schneider: Innovative ways to manage housing and energy issues. *Dave Evans, Schneider.*

12:15 – 13:00 Travelling by coach back to Gloucester

13:00 – 14:00 Lunch at Gloucester Guildhall

PARTNERSHIP MEETING

14:00 – 16:00 Partnership meeting for partners only

16:00 Close

19:00 Dinner at Bill's, Gloucester Quays

— STAKEHOLDER FICHES

The following profiles for the visiting international stakeholders to the Seminar summarise the organisations attending, alongside the experience, expertise and areas of interest of the representatives.

ANDALUSIAN FEDERATION OF MUNICIPALITIES AND PROVINCES. FAMP

Andalucía, España



Inma Guerrero Alés

Federación Andaluza de
Municipios y Provincias

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Brief description

FAMP was born in March 1985, and nowadays has 776 affiliated local bodies. Among its statutory purposes is the defense of local autonomy and the representation of local entities before different administrative bodies, local development and values inherent to the region of Andalucía. To this end, it provides services of interest for local bodies, such as technical advice and other activities to foster cooperation and collaboration among local entities. FAMP has a Committee for Natural Environment, and a working Group ascribed to it, with wide experience in generation processes and methodological tools for the establishment of actions and processes related to environmental matters.

Purposes and objectives

I work in the Programs department, which is also in charge of Networks and Equal Policies. I am responsible for the coordination of transnational actions within the different projects implemented by FAMP. At the moment we are implementing several projects linked to energy efficiency in public buildings.

Knowledge, expertise, products, services

Among the different working networks and committees within the federation, RECSA (Andalusian Network of Sustainable Cities) aims at contributing to the sustainable development of Andalucía and its towns and cities, through the environmental sustainability and the integration of natural environment in the Local Administration's policies.

Up to now, there're more than 300 municipalities ascribed to RECSA. Within this network, we work in a collaborative way with the local governments as well as with other organizations – public and private – trying to make our municipalities more attractive, comfortable and healthy places to live day by day, close to the needs of citizens and a source of opportunities for the integration and exercise of citizenship's rights.

To this end, RECSA aims at objectives such as cooperating with the administration so as to help reinforcing the transversal character of environmental policies in Andalucía, contributing to the creation of sustainable municipalities and their mutual enrichment through the network, or making possible a more participative society, increasing their commitment with the conservation of natural resources, the improvement of natural environment and the search for new solutions for environmental sustainability.

Areas of interest in interregional European collaboration

How to develop governance processes to be applied to different fields related to municipal competences.

Issues related to energy saving and efficiency in municipalities. How to work for the institutionalization of GPP.

MINISTRY OF INFRASTRUCTURE, ENERGY DIRECTORATE

Ljubljana, Slovenia



Vojko Hvala

Senior advisor at Ministry of Infrastructure, Energy Directorate

Contact

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Brief description

The Energy Directorate performs tasks relating to the efficient use of energy and to the provision of renewable sources of energy, energy supply, sources of energy and mining.

Purposes and objectives

Its key activities include:

- preparation and implementation of national energy policy (energy generation and processing, production, distribution and supply, efficient use and renewable sources of energy for heating and transport);
- ensuring rational economic management of raw mineral resources and conferring mining rights for exploration and exploitation of raw mineral resources;

- implementing measures to achieve energy and climate objectives while ensuring a reliable energy supply at competitive prices, in particular through encouraging the use of renewable energy sources and measures for higher energy efficiency;
- cooperation within bilateral and multilateral regional energy frameworks aimed at providing a stimulating environment for cooperation at national, regional and entrepreneurial levels;
- management of the energy sector database information system for the needs of the sectoral ministry and elaboration of economic analyses for the energy sector;
- drawing up legislative and other acts for the energy and mining sectors.

Knowledge, expertise, products, services

I work in the field of European cohesion policy measures to subsidize energy renovation of public buildings in Slovenia. The work deals with how on sustained and effective way reduce carbon dioxide emissions and energy use. With my work, contribute to joint efforts for a better and cleaner air.

Areas of interest in interregional European collaboration

- Sustainable use of energy.
- Energy poverty.
- European cohesion policy.

ECO FUND. SLOVENIAN ENVIRONMENTAL PUBLIC FUND

Ljubljana, Slovenia



Katarina Kafadar
Eco fund's councilor

Contact

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Brief description

Slovenian Environmental Public Fund is a public fund, specialized in providing financial incentives to households, private companies and municipalities for different environmental investments.

Purposes and objectives

Environmental objective of Eco Fund:

part of Slovenia's responsibilities under EU regulation will be fulfilled through the effects of environmental investments subsidized by Eco Fund (currently, the most important goal is reduced energy use of 262 GWh/year.

Eco Fund's key financial mechanisms for fulfilling that objective are:

- soft loans with favourable interest rates (since 1994);

- non-repayable subsidies (grants) (since 2008);
- financing and coordination of Energy Advisory Network free for households;
- financing of awareness-raising activities in the field of environmental protection (conferences, meetings, publications, projects of NGOs, etc.).

Knowledge, expertise, products, services

I am a "make it happen" person. I like to organise and work in a group of people covering different areas of work. I am creative and like to refine any work currently being carried out. The challenge I like to address is how with limited available resources find a path to the target. I am in favor of sustainable living, where concern for the environment and

respectful, dignified treatment of all living beings, healthy diet, maintaining the natural environment and sustainable farming is essential for the continuation of humanity.

Areas of interest in interregional European collaboration

- Energy poverty.
- Energy counseling.
- Renewable energy sources.
- Efficient use of energy.

MINISTRY OF ENVIRONMENT AND ENERGY. MZOE

Republic of Croatia, Zagreb



Zeljko Krevzelj
Expert advisor

Contact

Ministry of Environment
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Brief description

Ministry of Environment and Energy is a governmental institution for environment and energy.

Purposes and objectives

The focus of the work carried out by the Ministry of Environment and Energy is to create conditions for sustainable development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Knowledge, expertise, products, services

The scope of work of the Ministry includes task related to protection and conservation of the environment and nature in line with the sustainable development policy of the Republic of Croatia, as well as tasks related to water management and administrative and other tasks from the field of energy.

Areas of interest in interregional European collaboration

The Ministry of Environment and Energy cooperates with other countries on environmental protection issues by concluding and implementing bilateral agreements and at the same time through regular exchange of information, that is, holding of bilateral interstate meetings with the aim of realizing the most efficient possible implementation of environmental protection. The Republic of Croatia is a party to a great number of multilateral international agreements and participates in the work of international organizations and initiatives focused on protection of the environment and sustainable development.

MINISTRY OF FINANCE OF THE REPUBLIC OF LITHUANIA

Vilnius, Lithuania



Loreta Maskalioviene

Ministry of Finance
Vice-Minister

Contact

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Knowledge, expertise, products, services

The Ministry of Finance of the Republic of Lithuania is an executive body, the mission of which is to formulate and implement an effective policy of public finance in order to ensure the country's macroeconomic stability and economic development. The strategic objectives of the Ministry include the formulation of fiscal policy which promotes trust in macroeconomic stability, and ensures effective and economical management, and use of public funds and European Union assistance.

It also ensures development of the financial sector, and smooth implementation of other financial measures. The Minister of Finance represents Lithuania in the Economic and Financial Affairs Council of the EU (ECOFIN) and major international and regional institutions.

At present the Ministry has 14 departments and 8 independent divisions and a staff of 444 employees. Five special attachés delegated by the Ministry of Finance work at the permanent representative office of the Republic of Lithuania in the European Union (Brussels).

Areas of interest in interregional European collaboration

- To develop policies for new financial instruments in Energy efficiency field etc.
- Transition to a low-carbon economy
- Enable smart governance using bottom up and top down initiatives.

SOCIETY FOR SUSTAINABLE DEVELOPMENT DESIGN, DOOR

Zagreb, Croatia



Slavica Robic
Program Director

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Brief description

DOOR is a civil society organization of experts devoted to the promotion of sustainable energy development, founded in 2003. Our staff and members are individuals dedicated to sustainable energy, environment and sustainable development. We work in two main strategic areas Energy and Environment and Energy and Society. Our work is dedicated to climate change adaptation and mitigation, protection of the environment and alleviating energy poverty.

Purposes and objectives

Our mission is the promotion of sustainable development principles in all segments of society, at the local, regional and national level, primarily in the field of energy.

Our values are: expertise, environmental acceptability, civic participation, social responsibility, social engagement, economic stability and measurable usefulness.

Knowledge, expertise, products, services

We have successfully implemented more than 75 projects with goals ranging from climate change mitigation, encouraging citizens' participation in sustainable energy policy-making, improving education about renewable energy sources and alleviating energy poverty.

Within our projects we organized more than hundred workshops, round tables, trainings, conferences and other public events attended by several thousand participants, we published a dozen manuals, organized a number of study trips and established continuous cooperation with numerous organizations from Croatia and abroad. We also offer wide range of services: organizing and moderating

events, developing local sustainable energy development strategies and action plans, drafting regulations and other legal acts, facilitating citizens' inclusion in public policy processes, providing education on sustainable energy and consulting on renewable energy sources and energy efficiency etc.

Areas of interest in interregional European collaboration

We cooperate with numerous Croatian and foreign organizations active in environment protection, education, social services, rural development, renewable energy sources, energy efficiency. We work with associations, local and national authorities, schools, universities, institutes, agencies.

We are interested in collaboration and partnerships with different actors dedicated to tackling climate change and energy poverty and promotion of sustainable development.



More info: www.interregeurope.eu/build2lc



Andalusian Energy Agency
MINISTRY OF EMPLOYMENT, BUSINESS AND TRADE



VIŠIŲJŲ INVESTICIJŲ PLĒTROS AGENTŪRA



asiantaeth ynni
SevernWye
energy agency



RARR
RZESZOWSKA AGENCJA
ROZWOJU REGIONALNEGO



REGIONALNA ENERGETSKA AGENCIJA
NORTH-WEST CROATIA
SJEVEROZAPADNE HRVATSKE
REGIONAL ENERGY AGENCY



REGION
JÄMTLAND
HÄRJEDALEN



European Union
European Regional
Development Fund



BUILD2LC
Interreg Europe



Lokalna energetska
agencija Gorenjske