



Atlas of Energy Poverty Initiatives in Europe

State-by-State **Review**



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ecoserveis

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About the publisher

Ecoserveis is a non-profit consultancy specialised on energy management issues. We work on the relations between energy and society identifying their energy needs, providing solutions and building bridges between society and technology, research and innovation in order to promote a fair and sustainable energy model. It was created in 1992 to approach the scientific-technological field to society.

We train, offer solutions and give advice to professionals, administrations, companies and entities in the fields of renewable energy, energy efficiency, energy rights, sustainable mobility, IoT, climate change and environmental protection.

Our team carries out community enhancement actions and projects to mobilize social groups and spread the advantages of the efficient use of energy and to promote renewable energy.

Social Focus

Ecoserveis pioneers the work against energy poverty in Spain, targeting vulnerable groups such as infants and the elderly. We have developed our own methodology for low-cost energy efficiency audits in vulnerable households; an approach currently used by many Spanish public authorities to tackle energy poverty. We are also experts in the implementation of employability plans, with the aim of improving employability via capacity building on sustainable energy knowledge and skills.

Our organisation promotes professional training and behavioural change in the energy efficiency field, with a wide range of educational activities covering renewable energies, energy efficiency and sustainability, available to professionals of different sectors, as well as to any member of the public who wants to make a positive impact within these fields.

Technical Focus

Ecoserveis carries out technical studies to promote energy efficiency, the use of renewable energies, including photovoltaic, solar thermal, geothermal, and wind turbines, and has developed several strategic plans for public bodies. We perform energy audits for companies and households, and we train energy managers within a variety of sectors. We also research and design innovative financial models to fund sustainable energy, adapted to different target groups.

Infrastructure Focus

Ecoserveis promotes the refurbishment of buildings, to make them more energy efficient and sustainable. We do this via training of public staff working within local municipalities and public building agencies. We promote the existing financial instruments to assess and prioritise the best measures according to the available public budget and/or the payback time expected.

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Introduction

Energy poverty is a complex multi-dimensional challenge which stems from structural deficiencies, such as building materials and low education levels, to short-term-induced vulnerabilities such as rising energy prices or decreasing wages. In order to solve this issue, the combined efforts of multiple stakeholders (supranational, national, municipal, civil society, and the involvement of vulnerable groups) is required, coupled with diverse expertise from the health, housing, energy, social and environmental sectors. Researchers need to work hand in hand with practitioners and decision-makers to present viable solutions to energy poverty.

There are numerous stakeholders and deployed projects across Europe to tackle energy poverty. To gain an insight into the multitude of bodies and projects, and to ascertain accurate data and best practices which can be effectively transferred, Ecoserveis has carried out a review of the current situation throughout the countries of the EU. Our team sought examples and experiences during 2016, from which active agents who tackle energy poverty can both learn and expand upon. The aim of this atlas is to compile, evaluate and publish a meaningful compilation of case studies on the best practices used against energy poverty in Europe, to facilitate practical exchange and implementation across regions.

This document comprises 65 best practices addressing energy poverty across Europe. This review was compiled at the end of 2016, and depicts the situation in the field and the initiatives deployed in the different European Union countries at this time. Ecoserveis aims to facilitate the process of exchanging of information on practices, knowledge and know-how. The energy poverty problems in these different countries have similar aspects, despite the fact that they occur in different contexts; lessons can be learned from each project, to tackle energy poverty on a larger scale.

A map of European good practices against energy poverty

A map has been implemented to provide a visual representation of the complex information gathered for this report. It includes brief summaries of energy sustainability practices, in addition to filters which are applicable to categories such as intervention type, the geographical level of the practice in question, and the characteristics or type of the leading stakeholders. The map is available on the Ecoserveis website: <https://www.ecoserveis.net/atlas-of-energy-poverty-initiatives-in-europe-state-by-state-review/>



This guide can be used by:

- Policy-makers: the best practices in this guide are aimed at inspiring replication in other contexts. There are a number of public-driven initiatives that could be adapted to other countries or regions.
- Researchers: the guide can help orientate studies where energy poverty is relevant.
- Public staff: the guide identifies innovative methodologies for tackling energy poverty, including budget provisions and lessons learned in regards to practices undertaken in countries with similar climatic or socio-economic conditions.
- Activists or civil sector organisations: the guide can inspire research and practice which provides positive effects for vulnerable groups.
- Energy companies: this guide provides numerous examples of energy suppliers' engagement with energy poverty.

How to use this publication

This work seeks to act as a compilation of practices for and from energy poverty stakeholders. It may be used as reference material for both past and present experiences in the field. The report seeks to facilitate an exchange of best practice, promoting knowledge sharing across multiple countries within the European Union. Similar obstacles regarding the alleviation of energy poverty problems are shared by different countries, but in different contexts; this report enables scholars, practitioners, the public sector, civil society, and the private sector, to learn from the successes and mistakes of other projects, and ultimately work towards alleviating energy poverty within their own contexts.

Filters

The *geographical scales* of the practices described are at **Pan-European, national, regional, municipal and district levels.**

Stakeholders / actors:

- Governments or governmental agencies
- Municipalities and City Councils
- Non-Governmental Organisations (NGOs) or NGO networks
- Grassroots organisations
- Private companies

5 Categories of interventions to counter energy poverty:

- Information and engagement (empowerment)
- Transparency and information-sharing between stakeholders
- Consumer protection measures
- Financial support
- Household energy efficiency

Methodology

Prospective research and literature review: the first phase was based on prospective research and a review of the current literature. The objective was to collect case studies on initiatives tackling energy poverty in different countries. Best practices were selected according to the established criteria: innovation, impact, target groups, stakeholders involved, and geographical scope. Relevant information on each case study was structured to present the objectives, beneficiaries, geographical scope, impact indicators, budget, results, energy/GHG/financial savings, novelty, transferability, lessons learned, and evolution.

Interviews: once the case studies were identified, interviews were performed with the people involved in order to check and validate the information. Some materials were only available in some countries' languages, and direct contact with the local stakeholders was essential to access detailed information.

Selection of case studies: a second selection of cases was made in order to meet the above mentioned criteria. It must be acknowledged that this guide has been unable to present all the best practices available, due to the limited number of experts able to respond to our enquiries. Furthermore, some European countries are not represented in the study because of the limitations in finding verifiable information. To counteract their lack of presence, multiple practices from several pioneering countries (such as France and the United Kingdom) are featured here by reason of their extensive experience in tackling energy poverty.

The lessons learned for each project have been taken from materials that were distributed freely on the websites of the relevant organisations, featured in other pertinent publications, or were experiences shared by representatives of the organisations involved.

Concluding remarks






Energy poverty policy is still an emerging field, with great potential of enhancing the quality of life of millions of Europeans suffering from energy deprivation. Various stakeholders from complementary fields need to cooperate, learn from one another, and create new strategies to tackle the problem.

This guide highlights inspirational collaborations between civil organisations from environmental, social and engineering fields, local municipalities and their social assistance or housing departments, and advocacy groups. This study has confirmed the findings of the Vulnerable Consumer's Working Group (2011); a holistic approach combining short-term measures (energy benefits-payments) and long-term measures (energy efficiency), together with adequate consumer protections and avoiding disconnections from the grid is necessary for successfully alleviating energy poverty. Synergies between stakeholders from several fields of action (namely energy, housing, consumer protection, health, and welfare) offer interesting possibilities to tackle energy poverty in vulnerable households.

The atlas indicates that energy efficiency measures linked to household improvements are the most widely used policy tools. These measures are primarily allocated to multi-family buildings, but there are also support mechanisms available for single-family homes.

Note to the reader: There are two things a reader should note when using the guide: (1) main project information was gathered in 2016; (2) Not all the projects have information regarding each project field; in these cases it is indicated with N/A.

Project Types

-  Household energy efficiency
-  Financial support
-  Transparency and information sharing
-  Information and engagement
-  Consumer protection

Scale of transferability used

- [1]** The practice cannot be physically transferred due to the need for specific conditions
- [2]** The practice can be transferred but at significant cost
- [3]** The practice can be physically implemented with minimal cost



Energy Efficiency measures in low-income households as part of energy efficiency obligation system for energy suppliers



Type of intervention:



Geographical scope:

National level practice [Austria]

Leading stakeholder:

Government

Leading organisation

Federal Ministry of Science, Research and Economy

Transferability [3]

The practice can be physically implemented with minimal cost

This policy can be easily replicated if the political determination exists

Implementation timeframe

2014 until 2022

GHG reductions

N/A

Financial savings

N/A

Short description

As part of the Austrian Energy Efficiency Obligation Scheme, which was implemented in accordance with Article 7 of the Energy Efficiency Directive, energy suppliers are obliged to initiate and prove energy efficiency measures equivalent to at least 0.6% of their total energy supply to end consumers in Austria in the preceding year.

Also, at least 40% of the required efficiency measures have to be implemented at the household level. For energy suppliers active in the mobility sector, however, the ‘40% household’ requirement may also be fulfilled by proving energy efficiency measures in the mobility or public transportation sector.

Aims and objectives

The objective is to achieve final energy savings between 2015 and 2020 that amount to 159 Petajoule (PJ) in total.

Target group / beneficiaries

Two main target groups:

- 1) Approximately 4500 retail energy sales companies (this therefore covers energy providers). Almost all energy suppliers selling more than 25 GWh/a
- 2) Energy consumers. All public and private companies can get an energy savings account, and can transfer their energy savings to obligated parties through civil contracts (no trading/market)

Outcomes

The Energy Efficiency Act was enforced in 2014 and will last until 2020. Whilst outcomes should be published annually (as a number or % of energy savings) there is no public data available regarding the savings for the first years of the program.

Energy savings

Energy savings are credited for the 1st year of the action. The benefit of the energy savings goes always first to the final customer. The obligated parties must document their role (advice and/or financial incentive) and provide an attestation form signed by the final customer that transfers the energy savings to the obligated party. The obligated parties can register energy savings with the relevant evidence (invoices, description of their role, etc.) on an online database along with the implementation of their projects/programs.

The detailed documentation of the savings is kept for random controls by the Monitoring Body. The obligated parties must report their total achievements for the previous year to the Monitoring Body by February 14th, every year.

Initial budget

Does not apply.

Unique factors / Additional value

A condition has been set to ensure a minimum share (40%) of energy savings in households, to avoid strategies focused only on large projects in industry or commercial buildings.

Energy Efficiency measures in low-income households as part of energy efficiency obligation system for energy suppliers



Constraints / Lessons learned

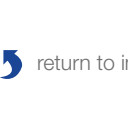
There were crucial delays for the initial implementation of the energy saving obligations. The monitoring agency (Coordination and Information) was officially announced on 30th April 2015, while the document on methodology was published on 30th November 2015. In 2015 a Market for Energy Efficiency Measures had still not been established. This market is currently evolving, and several platforms are now trading using energy savings.

Evolution / Future Prospects

There appears to be no further discussion with respect to increasing the 40% requirement for households or for additional measures for low income households (at least not prior to initial evaluation results).

More information

Energy Saving Policies and Energy Efficiency Obligation Scheme (section 3)
https://energypedia.info/images/9/98/ENSPOL_Report_on_Existing_and_Planned_EEOs_in_the_EU_-_Part_II_-_Description_of_Planned_Schemes.pdf





Type of intervention:



Geographical scope:

National level practice
[Belgium]

Leading stakeholder:

NGO/local government

Leading organisation

Social Heating Fund (NGO) in collaboration with Municipal CPAS organisations (Public Centre for Social Welfare)

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

From 1st September to April 30th 2015

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

The Fonds Social Chauffage (Heating-Oil Social Fund) provided low-income and heavily indebted households with grants to help them pay their heating bills (heating oil, kerosene, and propane gas (not stored in tanks). It was a collaborative project between the public authorities, the CPAS (Public Centre for Social Welfare, from French Centres Publics d'Action Sociale) and companies within the oil sector. The amount of the support depended on the price charged for the fuel. The higher the price, the greater the intervention.

Target group / beneficiaries

- 1) Low-income and heavily indebted households - beneficiaries of increased health care insurance. The annual amount of gross household income does not exceed €18,363.39, plus €3,399.56 per dependent. Dependent refers to a family member who has net annual incomes of less than €3,140 (excluding family allowances and child support)
- 2) People with limited incomes: persons with an annual gross taxable income less than or equal to €18,363.39, plus €3,399.56 per dependent
- 3) Indebted persons who benefitted from debt mediation. This category includes people who meet the following two conditions: people who benefit from debt mediation or a collective debt settlement, and people who are financially unable to pay their heating bill

Outcomes

Number of beneficiaries:

- In 2013: 121,649 beneficiaries
- In 2015: 96,488 beneficiaries

Economic Outcomes:

- For fuels delivered in large quantities, the allowance varied between 14 cents and 20 cents per litre
- The Fund provided a maximum of 1,500 litres per heating period and per family

Budget / Funding

The fund is financed through levies on the energy price-per-consumption unit.

- In 2013 the budget was €23,763,968.05
- In 2015 the budget was €17,943,500.14

Unique factors / Additional value

It was a collaborative project between the public authorities, the CPAS and companies on the oil sector.

Constraints / Lessons learned

N/A

Evolution / Future Prospects

Since 2009, a Special Heating Grant has been providing eligible consumers with a lump-sum discount on their heating bills that is worth €105 a year. The measure applies to heating in general, irrespective of whether it comes from electricity, natural gas or heating oil. To be eligible, households must not already benefit from either the *Fonds Social Mazout* or the Rate Reduction for Natural Gas.

More information

Project page in French:
<http://www.fondschauffage.be/>

Short description / Aims and objectives

The mission of the 'Energy Tutor' is to provide practical advice and planning for the behavioural and physical measures required to reduce energy costs in vulnerable households. As such, these actions are related to both user behaviour (not covering radiators, etc) and building equipment (insulation of doors and windows, and reflective material behind radiators).

Target group / beneficiaries

Vulnerable households in Wallonia. An energy tutor from the advisors from the CPAS (Public Centre for Social Welfare from French Centres Publics d'Action Sociale) visits the households and provides advice on how to be energy efficient.

Outcomes

Nearly 5,300 households benefit from the support of 41 CPAS with 45 specialised social workers involved in the project every year.

Budget / Funding

€450,000 in 2012.

Unique factors / Additional value

The energy tutor makes contact and then personally inspects the household. In addition, the tutor offers help to household to purchase economic light bulbs or small insulators, among other energy-saving products.

Constraints / Lessons learned

Energy users are mainly interested in the economic savings, not the energy saving effects.

Evolution / Future Prospects

N/A

More information

Walloon Government project page in French:
<http://antoine.wallonie.be/les-tuteurs-nergie>

Article in French:
https://www.rtb.be/info/societe/detail_factures-d-energie-impayables-des-tuteurs-pour-aider-les-plus-de-munis?id=7882962

Type of intervention:



Geographical scope:

Regional level practice
[41 cities in Wallonia, Belgium]

Leading stakeholder:

Government

Leading organisation

The Walloon Government

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

Annual, ongoing since 2008

Energy savings

Varies per household

GHG reductions

N/A

Financial savings

Between 100 to 400 euros a year





Energy advising and home visits by volunteers



Warming Homes with Knowledge project



Type of intervention:



Geographical scope:

Municipal level practice [Bulgaria, Plovdiv]

Leading stakeholder: NGO

Leading organisation

The Energy Agency of Plovdiv and the Schneider Electric Foundation

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

Several months in 2016 and 2017

Energy savings

The project aims at reducing the energy use by an average of 10%

GHG reductions

CO₂ emissions should be reduced by an average of 200kg per year

Financial savings

Energy advisors distributed an energy-saving pack worth €30 per household, leading to savings of €65 per year. Similar or higher savings could be expected

Short description / Aims and objectives

Fighting energy poverty is one of the 3 main areas of action in the Schneider Electric Foundation, together with training in the energy field and improving awareness of sustainable development. Together with the Energy Agency of Plovdiv, the Foundation implements a small project in Bulgaria which:

- 1) Enables 50 vulnerable households in the city of Plovdiv to reduce their energy and water consumption.
- 2) Aims at changing consumption habits in order to improve the public energy culture, and to build an understanding of how much energy certain devices use and how much electricity or water is spent.

This was accomplished by training 10 volunteers from Schneider and 10 more from the Red Cross, on how to recognise and tackle energy poverty issues. In a month they implemented 60 visits to households, offering personalised advice, packages of energy-saving devices, and a guidebook on general energy saving measures.

Target group / beneficiaries

60 vulnerable households, mainly single mothers and elderly people

Outcomes

Planned outcomes:

- 60 households aware of different energy efficiency measures
- 60 hours of energy audits and energy advising
- 300 LED bulbs installed
- 120 tap aerators installed
- 60 power switches installed
- 20 efficient shower heads installed

Budget / Funding

Budget / Funding €5,000 from the Schneider Electric Foundation

Unique factors / Additional value

Cooperation between two energy advisors; company staff as well as members of the Bulgarian Red Cross.

Constraints / Lessons learned

N/A

Evolution / Future Prospects

The volunteers acquired new skills and knowledge, engaged on the frontline and solved problems; all with the aim of benefitting the public. It is expected that these volunteers will continue as "energy ambassadors" after the end of the planned 60 home visits, and will share their learnings within their professional networks.

The Energy Agency of Plovdiv continues its active work against energy poverty. At the beginning of December 2016 it was one of the co-organisers of a discussion forum on energy poverty in Sofia.

More information

Schneider Electric Bulgaria in Bulgarian: <https://www.schneider-electric.bg/bg/>
The Energy Agency of Plovdiv: <http://www.eap-save.eu>

Short description / Aims and objectives

The Znanjem do toplog doma (Warming homes with knowledge) project has two objectives:

- Capacity Development for Civil Society Organisations (CSOs) in Sisak-Moslavina County for energy advising
- Establishing cooperation between CSOs and local authorities to tackle energy poverty

Target group / beneficiaries

Capacity Development for:

- 1) Civil Society Organisations (CSOs)
- 2) Local Authorities
- 3) Energy vulnerable and energy poor households

Outcomes

- DOOR implemented simple energy efficiency and energy saving measures in 80 households, and additionally provided energy-saving advice
- Local Civil Society Organisations were trained in their capability to provide energy advice
- Provision of energy advice was included in the local policy
- DOOR developed an informative brochure: http://www.door.hr/wp-content/uploads/2016/06/letak_toplidom_v3.pdf

Budget / Funding

€105,000

Unique factors / Additional value

Introduced energy advice as a social service. Trained social actors and Non-Governmental Organisations to provide energy advice to vulnerable groups.

Constraints / Lessons learned

The project gained the trust of local stakeholders and household members, motivated volunteers to undertake training on energy advice provision and surveying, and implemented a wide range of field visits.

Evolution / Future Prospects

Energy advice is now included as a social service, on a national level.

More information

Project page in Croatian: www.door.hr

Type of intervention:



Geographical scope:

Regional level practice [Sisak-Moslavina County, Croatia]

Leading stakeholder: NGO

Leading organisation

DOOR (Society for Sustainable Development Design)

Transferability [3]

The practice can be physically implemented with minimal cost

Applicable to any country/region

Implementation timeframe

February 2015 to April 2016

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A





Advocacy on tackling energy poverty through improved energy efficiency in social housing

CZECH REPUBLIC



ESTONIA

KredEx Renovation Scheme (II)



Type of intervention:



Geographical scope:

National level practice
[The Czech Republic]

Leading stakeholder:

NGO

Leading organisation

Chance for Buildings

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

Started in 2015, ongoing until 2018 (with strong possibility of renewal)

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

Chance for Buildings is an alliance of over 300 companies across the entire value chain of building construction and renovation in the Czech Republic. Its objective is to improve the energy efficiency of social housing, in order to reduce energy poverty in the Czech Republic in the long-term. It influences public authorities to promote energy efficiency measures in planned legislation on social housing.

Legislation in Czech Republic allows private organisations to exploit the generous state subsidies for accommodating people in need, and consequently they often provide poor-quality accommodation. Statistics shows that up to 60% of state expenses on social housing are directly used to cover energy bills. Therefore, the alliance requests placing a requirement on higher energy standards, with respect to newly-constructed social housing, as the state will continue to cover certain levels of energy expenses.

Social payments cover energy bills for the vulnerable population who live in social housing projects. However, Chance for Building advocates that a more strategic solution would be to reduce the energy bills.

Target group / beneficiaries

Two main groups:

- 1) Target groups to influence and pressure: local officials and policy-makers
- 2) Beneficiaries: low-income families in social housing

Outcomes

The expected outcome is to influence on the public authorities to:

- Help them promote energy efficiency measures in Czech legislation
- Push them to construct more efficient buildings

Budget / Funding

N/A

Unique factors / Additional value

The project was one of the winners in the ‘Social Innovation to Tackle Energy poverty’ program, which was organised by the ASHOKA Foundation and Schneider Electric. It was awarded with professional support in order to improve their strategies.

Constraints / Lessons learned

N/A

Evolution / Future Prospects

The long-term vision of the project is to be able to form an alliance that is an equal partner with decision-makers, to work with them in partnership to shape the environment, and monitor and evaluate the changes.

More information

Chance for Buildings webpage:
<https://sanceprobudovy.cz/english-summary/>

Short description / Aims and objectives

Since 2009 KredEx manages the revolving fund, the first of its kind to use EU Structural Funds to provide low-interest loans to housing associations and municipalities.

This funding mechanism provides the housing sector with an opportunity to reuse funds going into the scheme to further renovate the building stock. The stakeholders in the project are:

- KredEx coordinating the operational aspects of the fund
- The Ministry of Economic Affairs and Communications steering project progress
- Commercial banks taking on lenders’ risks through checking borrower eligibility, repaying the loan to the bank and checking compliance
- Housing associations organising apartment owners, managing the project proposal, reporting to banks and collecting loan repayments
- Apartment owners making a collective agreement to undertake the block renovation

In 2010, KredEx also launched a grant scheme that allowed eligible apartment buildings to receive up to 35% of their renovation costs, as an addition to the revolving loan programme. The grant was staged in accordance with energy-saving levels and used to cover the self-financing requirements of the loans.

Target group / beneficiaries

- 1) Multi-family buildings (with various income levels) with more than 3 flats
- 2) Individual houses

Outcomes

- The grant scheme renovated 553 buildings, affecting the lives of 48,300 inhabitants and producing an expected average energy saving of 40% (between 2010 - 2013)
- The state has provided additional grants of 50% for energy audits, energy-saving building designs and technical expertise costs since 2003
- Reconstruction grants for small residential buildings enabled up to 30% of the total cost of reconstruction to be covered, with the maximum grant amount being €15,000 (since 2016)

Budget / Funding

The revolving fund has a total capital of €72M, and is financed by the European Regional Development Fund (€17M of ERDF equity), the Council of Europe Development Bank (€28.8M loan from CEB), the Estonian Government (a €16M loan) and KredEx (€10.1M investment).

Under the state budget strategy for 2017 to 2020, the plan is to fund grants in order to increase the energy efficiency of small residential buildings during this period at a total cost of €6.91M.

Average interest rates in 2012 were between 3.5% and 4%, fixed for 10 years. Loans are paid back through the energy savings.

The minimum loan is €6,400 per apartment. At least 15% of the total awarded loan must be co-financed by the final recipients. The KredEx grant can be combined with the loan. The grant rate depends on the expected energy savings:

- 15% grant if saving is 20-30%, achieving Energy Label E and energy consumption < 250 kWh/m²a
- 25% grant if saving is 40%, achieving Energy Label D and energy consumption < 200 kWh/m²a
- 35% grant if saving is 50%, achieving Energy Label C and energy consumption < 150 kWh/m²a

Type of intervention:



Geographical scope:

National level practice
[Estonia]

Leading stakeholder:

Government

Leading organisation

KredEx Foundation, under the jurisdiction of the Ministry of Economic Affairs and Communications

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

The revolving fund has been operational since 2009. The grant scheme was introduced in 2010. The Estonian Credit and Guarantee Fund has been providing support for improving the energy performance of the housing stock since 2001

Energy savings

Around 40% achieved energy savings

GHG reductions

N/A

Financial savings

N/A





Unique factors / Additional value

The revolving fund contributes to the financial sustainability of the scheme and provides leverage for mobilising funds for energy efficiency.

Constraints / Lessons learned

The grant scheme was launched a year after the loan scheme, in order to motivate owners to take on longer-term loans. The new combined grant and loan scheme provides larger support than the initial renovation grants of 10%; allowing the participation of residents in smaller buildings and of buildings with higher numbers of low-income residents.

In order to minimise administrative costs, loans are administered by the banks, because this is a more efficient and effective solution than if KredEx were to take over this task.

Evolution / Future Prospects

The new period of Structural Funds 2014-2020 is providing an opportunity to use this funding source to develop similar energy-efficient renovation projects in other European countries. The lessons learned and the good practices implemented in the KredEx project can be used to support these countries in their implementation of similar programmes.

More information

Best practice examples of voluntary and mandatory initiatives across Europe:
http://bpie.eu/wp-content/uploads/2015/12/BPIE_Renovation_in_practice_2015.pdf

Financing EE in housing in Estonia:
http://www.buildup.eu/sites/default/files/content/mirja_adler_2011_11_29.ppt

Short article:
<http://www.kredex.ee/en/kredex/news/kredex-to-start-issuing-grants-for-the-reconstruction-of-small-residential-buildings/>

Short description / Aims and objectives

Low income households could apply for a discretionary energy subsidy for energy efficiency improvements or renewable energy heating systems.

- Detached houses: the subsidy covered a maximum of 25% of the renovation costs
- Multi-family home-owners: obtained a maximum of 15% of gross investment and specifically targeted investment limits on energy related repairs
- Single households: could apply for tax credits for domestic costs and energy subsidies. The tax authorities granted a tax credit for domestic costs that involved work-based domestic costs, such as kitchen renovation and home-aid, in addition to energy-related repairs for work done on private residential houses/apartments
- Support was provided for energy audits and energy analysis projects

The maximum monthly gross income accepted for 1 person was €1,410 and up to €2,355 for a 2-member family. This significantly limited the number of applications. Wealth or assets were not taken as restrictions, only income. Families with several children were also entitled to this support.

Energy-related repairs included the Ground Source Heat Pumps (GSHP), air-to-water heat pumps, pellet or other biomass-heating boilers, hybrid systems using renewable energy, re-insulating or the adding of insulation, window replacements or repairs.

Target group / beneficiaries

- 1) Low-income households
- 2) People in single houses
- 3) Multi-family houses

Outcomes

- Maximum tax credit was €2,000 per person per year
- Families with 2 taxpayers were granted a credit of €3.800 (2x €2000 -2x€100), which was equal to invoiced work by as much as €8.888, which was usually more than enough for all the labour costs involved in energy repairs

Budget / Funding

From the budget of Ministry of the Environment ARA (Housing Finance and Development Centre of Finland).

Unique factors / Additional value

The energy subsidy covers energy efficiency improvements or renewable energy heating systems.

Constraints / Lessons learned

While subsidies were more than enough in most cases, when families chose to implement relatively large Ground Source Heat Pumps Systems (more than 20kW nominal peak power), combined drilling and installation costs were even higher, especially when plumbing for distribution systems was needed. In these cases it was financially beneficial to separate work into two calendar years. This was dependent upon energy savings lost during the lengthened period of repair.

Apartment owners had significantly less opportunities to get/obtain subsidies, as the tax credit system was not generally applicable to them. In addition, changing heat sources was limited only to connections to area/district heating which were scarcely available. The ethical nature of this limitation was also questioned, as area/district heating companies were privately owned.

More information

Energy Efficiency in Latvia, Finland and Estonia:
<http://bsf-latvija.lv/wp-content/uploads/2014/12/EnergyEfficiency.pdf>

Renewable energy, Government Subsidy and Feed-in Tariff, Finland 2013:
<http://www.balticenergy.se/wp-content/uploads/2013/05/SubsidyandFeedin.pdf>

Type of intervention:



Geographical scope:

National level practice [Finland]

Leading stakeholder:

Government

Leading organisation

Ministry of the Environment (Housing Finance and Development Centre of Finland [ARA])

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

2013

Energy savings

The expected energy saving by 2020 is 1.321 GWh annually (Berninger, 2014)

GHG reductions

N/A

Financial savings

N/A

Evolution / Future Prospects

N/A





Type of intervention:



Geographical scope:

Regional level practice
[France. Four regions:
l’Ardèche, l’Aveyron,
les Côtes d’Armor et
le Pas-de-Calais]

Leading stakeholder:
Government

Leading organisation

ASP
(Service Agency
and Payments)

Transferability [2]

The practice can be
transferred but at
significant cost

Implementation
timeframe

Ongoing. The first ener-
gy cheques were distri-
buted in late May 2016
in the four experimental
regions

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

The government organisation ASP (Service and Payments Agency), implemented an ‘Energy Cheque’ which was used by eligible households to pay for electricity, natural gas, or other energy sources (fuel oil, Liquefied Petroleum Gas, wood) from an energy supplier, or to finance energy renovation work for the household.

The amount of the cheque depended on the income of the family members of the households concerned, and varied from €48 to €227. The average amount was estimated at €150. The amount of the cheque needed to be refunded to the energy provider by automatic transfer after a few days.

Target group / beneficiaries

Households eligible for an energy cheque were identified by the tax authorities according to their referenced tax income. Between 150,000 and 200,000 households were involved in this experiment.

Outcomes

- The aid appeared to be more of a state aid than an aid to energy bills, since it was not associated with energy suppliers
- The check boosted the household budget but did not minimise the need to fight against energy poverty

Budget / Funding

- The amount of the energy cheque was from €48 to €227. The average amount was estimated at €150
- For the 150,000 - 200,000 beneficiaries the budget was between €22,500,000 and €30,000,000

Unique factors / Additional value

The energy cheque was used for paying the bills, or, if eligible for a loan, for carrying out ener-
gy-efficiency improvements in the household.

It can be used for several energy sources, which made a broader range of consumers eligible.

Constraints / Lessons learned

The Government issued an evaluation report (check the ‘more information’ section), stating the following lessons:

- There was insufficient communication with the general public
- There were significant needs in terms of information, advice and support for some beneficiaries
- A minimal impact on the household budget, linked to the insufficient amount of the check
- A risk for limited access to related rights and little impact on cuts and unpaid bills

Evolution / Future Prospects

After the trial in the 4 mentioned regions, the check will be implemented in 2018 around France.

More information

Project website in French:

<https://www.chèqueenergie.gouv.fr/>

Article about the energy check in French:

<https://www.edf.fr/collectivites/le-mag/territoires-energies/cheque-energie-l-experimentation-est-lancee>

Evaluation report:

<http://bit.ly/2huHVCv>

Short description / Aims and objectives

The *Habiter Mieux* program intended to offer thermal renewal energy for 300,000 houses that belonged to low-income owners or lessors by 2017.

The program sought to provide funding and support during all the project phases of the renova-
tion work, if a 25% minimum reduction in energy consumption was achieved.

The aim of the program was to provide added support to existing financial incentives for energy renovations and to specifically target low-income households.

Target group / beneficiaries

Around 300,000 households of owners, lessors and landlords with limited or very modest resour-
ces, who wanted to implement a retrofitting project in their home or building.

Outcomes

- A grant of between 35% and 50-60% of the total cost of the renewal energy equipment. The maximum amount was between €7,000 and €10,000, depending on a household’s given financial resources
- In addition, one could receive: (1) A government bonus amounting to between €1,600 and €2,000 and (2) other financial support from local city councils. Lessors obtained a tax deduction on their income from the property

Budget / Funding

The program ’s total budget of €1.45bn was co-funded by public funds (83%) and utilities (17%).

Unique factors / Additional value

The program specifically targeted low-income households.

Constraints / Lessons learned

N/A.

Evolution / Future Prospects

The project was [extended](#) for 2018 -2019.

More information

Project information:

<http://www.renovation-info-service.gouv.fr/le-program-habiter-mieux>

National Housing Agency website:

www.anah.fr/proprietaires/proprietaires-occupants/etre-mieux-chauffe/

Type of intervention:



Geographical scope:

National level practice
[France]

Leading stakeholder:
Government

Leading organisation

National Housing
Agency (ANAH, Agence
Nationale de l’Habitat)

Transferability [2]

The practice can be
transferred but at
significant cost

Implementation
timeframe

2010 to 2017

Energy savings

An average efficiency
gain of 38% was rea-
ched after renovations,
which is above the 25%
threshold that was set.

GHG reductions

N/A

Financial savings

N/A





Type of intervention:



Geographical scope:

National level practice
[France]

Leading stakeholder:

NGO

Leading organisation

Unis-cité association

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

Initiated in 2009, on-going

Energy savings

Indirect

GHG reductions

N/A

Financial savings

Indirect

Short description / Aims and objectives

The Médiaterre program enables young people performing their civil duties (national service) to help low-income families in depressed low-income French areas to: (1) learn and adopt ecological habits and (2) to help them reduce their energy bills and environmental footprint. The aim of the program is to help these families to adopt the so called ‘eco-citizens habits’ and additionally to reduce their energy costs.

Target group / beneficiaries

Two target groups:

- 1) Young people who are willing to perform this civil service
- 2) Beneficiaries: low-income families suffering from energy poverty

Outcomes

- Low-income households receive personalized eco-friendly advice on how to reduce their bills. The participant volunteers are offered a solidarity commitment of at least six month’s full time work, approximately 10 days of civic education, and a training program related to their chosen mission
- The program involves approximately 450 participants, who serve 1,500 households

Budget / Funding

The program is supported by Schneider Electric, whose employees participate as volunteers.

Unique factors / Additional value

The French National Volunteer Service includes young people between the ages of 18 to 25, and aims to promote values such as solidarity and community service. This project worked with young people in the National Volunteer Service to fight against energy poverty and climate change.

Constraints / Lessons learned

N/A.

Evolution / Future Prospects

On-going project that is repeated every year.

More information

Organisation’s website:
www.uniscite.fr

Short description / Aims and objectives

The Observatoire national de la précarité énergétique, ONPE (National Energy Poverty Observatory) is a tool to observe and analyse policies that counteract against energy poverty. Its main goal is to be a knowledge hub on energy poverty in France, with a focus on the housing and mobility sectors.

The Observatory takes into account the social, energetic, health-related and economic aspects of energy poverty. It constitutes a permanent monitoring and analysis tool that brings decision-making support resources to the services of the state and its agencies, in addition to local authorities, energy suppliers and all associations and professionals who work in the field of energy poverty. It brings to light common approaches and indicators of energy precariousness, and aims to better define and to evolve the tools of observation, analysis, evaluation and intervention. The Observatory respects the principles of neutrality, sustainability and statistical reliability.

Target group / beneficiaries

Citizens and households experiencing energy poverty and energy precariousness

Outcomes

The work done during the first period of the ONPE project (2012-2015) undertook several quantitative and qualitative studies on energy precariousness (précarité énergétique) including:

- 6 territorial investigations (Paris, Drôme, Gironde, Jura, Nord-Pas-de-Calais and Languedoc-Roussillon)
- The development of the modelling tool GéoVEHM (Vulnérabilité Énergétique Habitat et Mobilité)
- A study on policies to combat energy poverty in Europe
- Evaluation of methods on curative and preventive actions (Habiter Mieux and rate reductions)
- An Evaluation of the actions taken by energy providers in the fight against energy poverty

Budget / Funding

Using both public and private funds. A budget is provided by ADEME.

Unique factors / Additional value

The National Energy Observatory mobilized organisations who signed the first partnership agreement on combating energy precariousness.

Constraints / Lessons learned

N/A

Evolution / Future Prospects

June 14, 2016: Ségolène Royal, Minister of the Environment, Energy and the Sea, and Emmanuelle Cosse, Minister of Housing and Sustainable Habitat, gathered under the coordination of the ONPE, announced a new mobilisation of the public, private and third sector actors in the energy, housing and solidarity sectors.

More information

Project page in French:

<http://www.onpe.org/>

Relevant article for the project in French:

<http://www.ademe.fr/expertises/batiment/quoi-parle-t/precarite-energetique>

Type of intervention:



Geographical scope:

National level practice
[France]

Leading stakeholder:

Government

Leading organisation

ADEME

The French Environment and Energy Management Agency
L’Agence de l’Environnement et de la Maîtrise de l’Energie
Secretary

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

2011 – ongoing

Energy savings

Indirect
(Not quantified yet)

GHG reductions

Indirect
(Not quantified yet)

Financial savings

Indirect
(Not quantified yet)





Network of Energy Poverty Actors (RAPPEL)

FRANCE



GERMANY

Energy-savings-check for low-income households (I)



Type of intervention:



Geographical scope:

National level practice
[France]

Leading stakeholder:
NGO

Leading organisation

Le CLER - Réseau pour la transition énergétique, SOLIBRI association and others

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

By specific conditions here we mean that the creation of RAPPEL emerged as a specific political need and it tackled a specific need (energy poverty) in France. Thus, while other countries might or could have a similar initiative, it is not possible to replicate the RAPPEL model

Implementation timeframe

2007 – on-going

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

Heightened awareness regarding energy poverty issues in France resulted in the creation of a network of energy poverty actors, named 'RAPPEL' (Réseau des Acteurs de la Pauvreté et la Précarité Énergétique dans le Logement). RAPPEL has an informal and flexible structure, and brings together professionals and stakeholders mobilized against the precariousness of energy in France. The main goals are:

- Inform citizens and organisations about Energy Poverty
- Organise discussion groups to think about better ways to tackle energy poverty
- Influence decision-makers on energy matters

Target group / beneficiaries

Stakeholders working to tackle energy poverty and energy precariousness

Outcomes

From the goals:

- Inform citizens: the RAPPEL website allows visitors to learn about energy precariousness: its causes and its consequences, access to tools to help households in this situation, as well as participating in forums and other network tools.
- Organise discussion groups: (i.e.) the French roundtable group 'Grenelle de l'environnement' analysed the situation of energy poverty in France. The thoughts and ideas discussed on the roundtable resulted into an initial study (Plan Bâtiment Grenelle, 2009), which formed an estimate of the number of households suffering from energy poverty.
- Influence decision makers: (i.e.) According to the Plan Bâtiment Grenelle study, 3.4 million households suffered from energy poverty in 2006, which led to the inclusion of energy poverty in the 'Grenelle 2' Environmental Law in July 2010.

Budget / Funding

N/A.

Unique factors / Additional value

With the increase of energy prices from 2004, energy affordability on low-income households entered the political debate. The higher awareness of energy poverty issues in France resulted in the creation of 'RAPPEL'.

Constraints / Lessons learned

Since the last national survey on housing in 2006, France has not collected systematic data on energy poverty (as of 2018). Therefore, there is no precise data on the current extent of energy poverty. However, with the creation of the National Observatory on Energy poverty it is expected that more information will be produced on the French energy poverty situation.

Evolution / Future Prospects

The Grenelle 2 law also led to the creation of the National Energy Observatory, which mobilized the partners signatories of the first partnership agreement.

More information

Project website in French:

<http://www.precarite-energie.org/>

EU Energy poverty in France webpage:

<http://fuelpoverty.eu/2012/08/24/fuel-poverty-in-france/>

Short description / Aims and objectives

The Stromspar-Check Kommunal (Energy-savings-check for low-income households) project seeks to train people who will then provide: (1) energy and water saving assistance to low-income householders; (2) implement energy saving check programs in households; (3) analyse data and (4) take immediate measures. Householders take part on a voluntarily basis in approximately 150 sites.

During household visits, householders receive €70 on average towards the cost of energy and water saving equipment, in addition to helpful tips on changing their consumption behaviour. Furthermore, if they own a refrigerator that is over 10 years old and with a minimum savings potential of 200 kWh per year, they can receive a €150 voucher to purchase an A+++ refrigerator. Households then have to dispose of their old appliance in order to redeem the voucher.

The Stromspar-Check Kommunal project seeks close cooperation with municipalities in order to evaluate the chances of enhancing their political support and to establish new ways of at least partial financial funding and support for individual local projects.

Target group / beneficiaries

All low-income household members who receive subsidies such as unemployment benefits, social welfare or housing benefits may take part as long as they live close to one of the 150 sites.

Outcomes

Main outcomes are:

- Until 2016 approximately 3,000 long-term unemployed people had been trained. There were 1,300 actively trained professionals working in the sector
- Approximately 10 energy agencies and 100 social service providers are involved in the project, which also benefits from local/regional networks of employment agencies, municipalities, and job centres, which provide political and financial support to the project

Budget / Funding

The total national cost of the action is approximately €30m over a 3-year period. Funding comes from the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit). Additional support is provided by regional job centres/municipalities/employment agencies.

Unique factors / Additional value

In SSC Kommunal the partners aim to establish means to enhance local political and financial support. This is accomplished by the installation of small, easy to use equipment to reduce the heating demand of households (e.g. radiator keys, window film, draught stoppers, etc.), which at the same time improves the indoor climate for residents. Furthermore, many households will receive a more intensive consultation that focuses on changing their consumer behaviour. The documentation and analysis of this advice will lead to a better knowledge about the effects on changes in behaviour.

Finally, the training provided enhances employability in green jobs.

Financial savings

Three types of financial savings:

- Households receiving unemployment or social care benefits save €99 per year.
- Households receiving housing benefits save €151 per year (the latter have to pay for heating energy and water by themselves).
- Households that exchange their refrigerators can save a further €94 per year on average.

Type of intervention:



Geographical scope:

National level practice
[Germany, 150 locations]

Leading stakeholder:
NGO

Leading organisation

Deutscher Caritasverband, Bundesverband der Energie- und Klimaschutzagenturen Deutschlands, Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

2008 - 2019

Energy savings

240,000 energy saving checks

GHG reductions

427,000 tonnes of CO₂ (all households during the lifetime of savings per equipment use (7-10 years); 238 kg/household

In addition: 9.500 tones of CO₂ through the exchange of old refrigerators in 7,035 households (calculation per lifetime of a new refrigerator); 222 kg/household





Energy-savings-check for low-income households (II)

GERMANY

Constraints / Lessons learned

Difficulties in implementation arise from time to time at a local level, due to the lack of temporary budget resources.

A key success factor is the strong link between energy & environmental issues/policies and social issues/policies.

Evolution / Future Prospects

Cooperation with municipalities: partners will analyse options and difficulties regarding the continuation of local projects on a firmer municipal or local basis.

More information

Project website in German:
<http://www.stromspar-check.de/>

European Federation of Agencies and Regions for Energy and the Environment:
http://www.fedarene.org/wp-content/uploads/2013/10/054_Energy-Saving-Checks_Berlin.pdf



GREECE

Observatory of Energy Poverty



Short description / Aims and objectives

The observatory was developed in order to inform both citizens and decision-makers about the phenomenon of energy poverty in Greece. The main aims are:

- 1) Assessment of energy poverty levels in Greece through the estimation of representative indicators and the monitoring of fluctuation
- 2) Identification of the parameters that affect and intensify the phenomenon of energy poverty
- 3) Design and implementation of efficient policy measures for the alleviation of energy poverty

Target group / beneficiaries

Two groups:

- 1) The entire Greek population
- 2) Energy-poor citizens (specifically targeted)

Outcomes

- Estimation of representative indicators and monitoring of their fluctuation over the years.
- Identification of those parameters that affect and intensify the phenomenon of energy poverty. For instance:
 - » According to preliminary results, 1-2.7% of deaths recorded annually and 4-7% of cardiovascular diseases and respiratory infections treated in Greece could be attributed to energy poverty
- The design and implementation of efficient policy measures for the alleviation of energy poverty

Budget / Funding

Financed by the project 'National Information System for Measuring Energy Efficiency' according to the Directive 2006/32 requirements under the Operational Program Digital Convergence 2007-2013.

Unique factors / Additional value

The methodology to identify energy poverty, as developed by the Observatory of Energy Poverty, will be improved as part of the Greek Action plan against energy poverty.

Constraints / Lessons learned

The main challenges are:

- Extension of a methodology which integrates: (1) energy uses, such as cooling, and (2) parameters, such as household size and occupancy level
- Incorporation of additional parameters, such as the level of satisfaction regarding comfort levels

Evolution / Future Prospects

Not indicated.

More information

Project website in Greek
www.cres.gr

Type of intervention:



Geographical scope:

National level practice
[Greece]

Leading stakeholder:

NGO

Leading organisation

Centre for Renewable Sources and Savings (CRES)

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

The project is thought to be implemented in Greece, so the specifics are targeted for that country. The methodology can't be directly transferred to other countries, but could be used as a base model

Implementation timeframe

Ongoing

Energy savings

Indirect
(Not quantified yet)

GHG reductions

Indirect
(Not quantified yet)

Financial savings

Indirect
(Not quantified yet)





Community based biomass
briquette production in Bag village



From Shacks to Homes project



Type of intervention:



Geographical scope:

Municipal level practice
[Hungary, Bag village]

Leading stakeholder:

NGO



Leading organisation

The BAGasz Public Benefit Association, and the community of Bag (a Roma village)



Transferability [3]

The practice can be physically implemented with minimal cost

Implementation
timeframe

2013 – 2014

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

The Roma community in the Hungarian village of Bag produced their own eco heating source - biomass briquettes from feedstock, donated by a local cooperative, to tackle both access to energy and energy poverty.

The community suffered from several environmental and social injustices. They had no running water, adequate sewage or accessible and affordable heating options. This decentralized community-based bioenergy model was a cost effective, environmentally friendly solution for the community.

The project was inspired by a pilot project conducted by the Real Pearl Foundation from 2011 in Told village (HU).

Target group / beneficiaries

Roma community of approximately 700 people (from 500-600 living in a Roma colony), who spent between 25% and 60% of their income on energy.

Outcomes

The project started with 25 households (or 4 brigades of 22 people), who produced 1,600 briquettes, which were distributed amongst 15 families. This quantity was produced for one working month (due to unfavourable weather conditions).

Approximately 1000-1,200 briquettes were needed monthly by each household.

Approximately 900-1000 briquettes could be produced for 5 hours with an efficient pressing machine and effective team work.

In 2014, the community already possessed 2 pressing machines, a dryer and a paper-mashing machine.

Budget / Funding

BAGasz donated €319,50. The money was used for a pressing machine, travel costs and feedstock transportation. No house rental or payment was made on the feedstock. The NGO Habitat for Humanity financed a dryer.

Unique factors / Additional value

The main heating source had previously been wood fuel, followed by a renewable energy source; biomass briquettes. Their high-burning efficiency and complete combustion minimized both indoor air pollution and illegal logging in the area, and also prevented the burning of harmful materials (an alternative heating strategy).

Constraints / Lessons learned

Finding feedstock and paper was challenging at first. Financial costs rose significantly via payments for house rental and feedstock.

Community members worked together to produce their own energy source and become energy independent. The community felt demotivated after mustard seeds started to germinate.

Evolution / Future Prospects

The local municipality could become a partner and ensure supplies from nearby gardens of wheat, corn, and rape.

More information

Richard Racz Master's thesis, 2014, Central European University (CEU):
"The Opportunities and Threats to a Community-Based Decentralized Energy System: Biomass Briquette Production in Bag, Hungary"

Organisation's website:
<http://www.bagazs.org>

Short description / Aims and objectives

The association provides homeless families with the opportunity to move from self-built shacks to city-rented housing. The homeless families will move into previously derelict properties, which will be renovated by volunteers and the future tenants. On average, ten people will work per day on the renovation projects, with more over the weekends. The renovation process should take approximately 10 days.

The Social Housing Construction Association carries out the physical/technical aspects of the Project and the recruitment of volunteers from all social strata, whilst the 'City is for All' organisation leads negotiations and selects homeless beneficiaries.

Target group / beneficiaries

Homeless families, living in self-built shacks in a post-industrial reforested area called Terebes in the tenth district of Budapest (Kőbánya), which has no electricity or running water.

Outcomes

The main outcomes to date are:

- From 2012 to 2016, 14 households (33 people) have moved in safe rental housing. Ten flats have been renovated with the help of more than 100 volunteers
- In the new homes, pre-paid electric meters have been provided and pre-paid gas and wood-heating options have been made available. Buildings were also fitted with insulation, which improves their energy-performance

Budget / Funding

Funding was mostly sources from crowd funding campaigns, and via donations from companies and private donors. In-kind donations were also made in the form of construction materials or as donations for tenants. The average costs were 2,396€ per flat.

Since 2015 two part-time social workers have been employed to work for the benefit of the clients, their wages are 319€ per month. The first grant, which the association has received to date, provides the salary of one social worker for ten months, from September 2016.

Unique factors / Additional value

The context: the project developed as a solution to a crisis. One small part of an area with many self-built shacks (populated by homeless people) was targeted for demolition due to road developments. The people residing in the area had no alternative accommodation.

Bottom-up pressure: the negotiations were initiated with the City by activists from the 'City for All' group, which led to the formation of an association, and the swift renovation of the flats.

People in difficult living conditions were shown to be able to work hard to improve their lives. An educational element was also important. Tenants committed themselves to spending up to one third of their income on housing. Personal and financial support was provided.

Constraints / Lessons learned

N/A

Evolution / Future Prospects

N/A

More information

Blog which discusses the project (in Hungarian):
<http://avarosmindenkie.blog.hu>

Type of intervention:



Geographical scope:

Municipal level practice
[Budapest, Hungary]

Leading stakeholder:

NGO



Leading organisation

The 'From Streets to Homes!' Association in cooperation with the Social Reconstruction Camp Association and The City is for All (AVM: A Város Mindenkié)



Transferability [3]

The practice can be physically implemented with minimal cost

Implementation
timeframe

2012 - on-going

Energy savings

N/A

GHG reductions

N/A

Financial savings

Measures for homeless people are not foreseen in public budgets, and this project creates some savings to support them. Previously, the city paid for maintenance of the vacant flats, but now the tenants are paying it themselves (this is less than the amount for renovations, especially the insulation materials)





Social Housing Reconstruction project in Nagykanizsa



Type of intervention:



Geographical scope:

Municipal level practice [Hungary, Nagykanizsa town]

Leading stakeholder:

NGO

Leading organisation

Social Housing Reconstruction Camps Association, in cooperation with Habitat for Humanity (HfH) Hungary

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

2010 to 2014

Energy savings

N/A

GHG reductions

N/A

Financial savings

In 2010, arrears were reduced by around €10,000. Approximately €18 (the daily wage of an unskilled worker) was accordingly written-off from the residents' rent arrears in exchange for a day's work.

In 2012, rent arrears were reduced by approximately €4,200.

Short description / Aims and objectives

The project aimed to create the possibility for the tenants of municipality owned social housing (with rent in arrears) to renovate the buildings they live in, and to simultaneously reduce their debts to the municipality through the value of their work. The project was intended as an alternative to the municipality's debt management program.

The project consisted of the external renovation of selected buildings in Ligetváros, a large slum area in Nagykanizsa town. It was implemented through cooperation between locals with rent arrears and volunteers who were recruited by the association.

Target group / beneficiaries

The target group were unemployed households, living in municipal-owned social housing, who were struggling with rent-arrears and whose debts could be significantly reduced or entirely erased by participating in the project. As many local families as possible were encouraged to participate.

Outcomes

HfH construction supervisors coordinated the work of locals and volunteers and provided the necessary tools and machinery. The project also benefitted from the participation of international volunteers. Some specific outputs were:

- Two buildings (each consisting of 4 apartments) were renovated in April, and another 4 apartment buildings in August 2010
- 52 local residents and more than 100 volunteers participated
- HfH implemented basic financial training for Ligetváros dwellers
- 62 residents either reduced or totally paid their debts
- In 2012, 31 local residents from 19 buildings were able to reduce their debt and 38 volunteers were involved from all over the country. As a result of this work, energy performance in 33 homes was improved
- Rent arrears were reduced by approximately €4,200

Budget / Funding

Norway Grants funded the initial phase of the project in 2010 with €11,000. There were also private donations, in-kind corporate donations and additional construction works financed by the local government.

In 2012, €18,427 was received from the Open Society. Private donations were also collected especially for the insulation of additional houses (approximately €2,100). The local government's management company funded a higher share of the project's later phase.

Unique factors / Additional value

With respect to the municipality, this activity is definitely worth the investment, because evicting people is as much of a financial quandary as it is a social one. Hosting people in emergency social-provider institutions almost always costs significantly more than providing financial support for appropriate housing.

Social Housing Reconstruction project in Nagykanizsa



Constraints / Lessons learned

The project served the indebted residents by helping them escape from a debt spiral. The underprivileged participants were ready to make an effort for themselves, so they gained a higher appreciation from the people in the neighbourhood (Ligetváros is one of the most segregated areas of Nagykanizsa, with a high Roma population).

The organisers realised that their participation in this project had a pro-social activist potential besides their academic affiliations, and that their creativity and impetus could set an example to both young people in social activism and to academics working in this field.

Evolution / Future Prospects

At the beginning of the project, the College for Advanced Studies in Social Theory was the legal entity which organized and financed the project. They found indispensable co-organizers in other specialized colleges; i.e. law student members from the István Bibó College, who drafted the legal foundations for the concept, and architecture students from the Bercsényi Architecture School, who planned the implementation and calculated the quantity of materials to be used.

After the successful renovations in 2010, the organisers were determined to continue the progress of the project, and founded their own association. This culminated in the continuation of the project in 2014, which constituted two apartment blocks in Kispest, Budapest, for renovation. This phase was funded by Norway Grants.

More information

Project presentation:

<http://www.slideshare.net/943112233/kinga-muller-social-housing-reconstruction-camp>



Warmth of Home program



Better Energy Warmer Homes (BEWH)



Type of intervention:

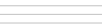


Geographical scope:

Municipal level practice
[Hungary]

Leading stakeholder:

NGO



Leading organisation

Ministry of National
Development (MND)



Transferability [2]

The practice can be
transferred but at
significant cost

Implementation
timeframe

The different sub-programs
were launched between
2009 and 2014

Only the Energy-efficient
Renovation of Apartment
Buildings program is cu-
rrently operational

Energy savings

More than 138,000,000
kWh per year

GHG reductions

More than 38,000,000
kg CO₂ savings per year

Financial savings

N/A

Short description / Aims and objectives

Under the ‘Otthon Melege’ (Warmth of Home) program, eligible households received financing to replace energy inefficient household appliances (up to a limit of 50% of the purchase price of a new appliance). The appliances that could be replaced were: laundry machines, refrigerators, heating systems, windows and doors.

As a result, energy efficiency improved in 75,000 households. The program is facilitating ener-
gy efficiency investments in flats, apartment blocks, etc. To qualify for financing under this
program, any newly-acquired device is required to be 10% more energy-efficient than the
applicant’s existing appliance.

Target group / beneficiaries

The equipment’s replacement is subsidized for:

- 1) low-income households
- 2) the unemployed
- 3) the elderly

Outcomes

More than 75,000 households have participated in the different sub-schemes.

Budget / Funding

Budget detailed by type of project:

- **Green Investment System (GIS):** a total budget of almost €54.000.000
- **Household Machine Replacement Sub-program** (refrigerators): approximately €2,500,000, with 25,821 participants
- **Window and Door Replacement:** approximately €3,500,000, with 2,821 participants
- **Heating System Refurbishment** (Boiler Replacement): approximately €4,000,000, with 782 participants
- **Complex Energy-efficient Reconstruction of Apartment Houses** approximately €38,000,000, with 491 participants
- **Household Machine Replacement Sub-program** (washing machines): approximately €6,000,000, with 44,248 participants

Unique factors / Additional value

N/A

Constraints / Lessons learned

N/A

Evolution / Future Prospects

N/A

More information

Project page in Hungarian:
<https://csaladihaz2016.nfsi.hu/>

Short description / Aims and objectives

The scheme funds energy efficiency improvements in both elderly and vulnerable people’s hou-
ses, making their homes more comfortable, healthier and more cost effective to run. It provides
standard energy efficiency measures at no cost to the household, such as:

- Attic insulation
- Draught proofing
- Lagging jackets
- Low energy light bulbs
- Cavity wall insulation
- Energy advice

Target group / beneficiaries

Targeted beneficiaries are elderly and the vulnerable homeowners, in buildings constructed befo-
re 2006, and who receive one of the following benefit schemes:

- Fuel Allowance as part of the National Fuel Scheme
- Job Seekers Allowance for over six months and with children under 7 years of age
- Family Income Supplement
- In receipt of the ‘One Parent Family Payment’

Outcomes

By September 2016, the scheme had already upgraded 125,000 energy-poor homes, with an
overall spending of more than €160,000,000 in Exchequer funds.

Unique factors / Additional value _ N/A

Constraints / Lessons learned

Given (1) the limited resources allocated to the scheme and (2) the number of homeowners eli-
gible for support; the measures available under the scheme must reflect a balance between (1)
the delivery costs and (2) the number of homes that can be supported under the scheme. In that
sense, the more costly the delivery to an individual home, the less householders can benefit from
the scheme each year.

To enhance its impact, a future challenge could be to support comprehensive home renovation
of the dwellings and to broaden the beneficiaries.

Evolution / Future Prospects

The Better Energy Homes scheme was launched in 2009. This scheme applies to households
that do not meet the necessary eligibility criteria for Better Energy Warmer Homes project. The
scheme provides financial assistance for energy efficiency improvements in households, to inclu-
de the following works:

- Roof insulation
- Wall Insulation
- Installation of high efficiency gas/oil fired boilers, with an upgrade to the heating controls
- Installation of solar panels
- Completion of a BER

However, these improvements are not cost-free. Grants provided depended upon the type of
improvement required.

More information

Better Energy Warmer Homes Scheme Website:
http://www.seai.ie/Grants/Warmer_Homes_Scheme/

Type of intervention:

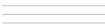


Geographical scope:

National level practice
[Ireland]

Leading stakeholder:

Government



Leading organisation

Sustainable Energy
Authority of Ireland (SEAI)



Transferability [2]

The practice can be
transferred but at
significant cost

Implementation
timeframe

Ongoing since 2000

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Budget / Funding

N/A





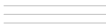
Type of intervention:



Geographical scope:

National level practice
[Italy]

Leading stakeholder:
NGO



Leading organisation

Cittadinanzattiva



Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

2016

Energy savings

Not direct energy savings. Indirect savings not quantified yet

GHG reductions

Not direct GHG reductions. Indirect savings not quantified yet

Financial savings

Not direct financial savings. Indirect savings not quantified yet

Short description / Aims and objectives

From 2009 to 2014, over 2 million families received the financial support for energy improvement. This barely represented 34% of the families that were entitled to receive electric financial support, and 27% of those families entitled to gas financial support.

As such, in 2016 Cittadinanzattiva launched the ‘Bonus a Sapersi’ (Bonus to Know) project, whose aim was to promote the use of ‘social energy’ financial support (electric/gas bonuses) for vulnerable consumers through 75 meetings / training sessions. It was targeted at social workers and other intermediaries responsible for supporting vulnerable consumers in requesting the support.

The project was carried out by all the main Italian consumer associations.

Target group / beneficiaries

Social workers and intermediaries assisting vulnerable consumers.

Outcomes

The main outcomes were:

- Over 80% of respondents from the 15 associations who worked in 2016 on the project ‘Bonus a Sapersi’ claim to have intercepted citizens who met the criteria for the bonus request but who were unaware of it
- The project allowed social workers to access valuable information to determine their future actions (see future prospects section). For example:
 - » About 39% of citizens said that the procedure to request the bonus is complex or very complex
 - » 47% of the respondents affirm that information is not sufficiently disseminated or accessible

Budget / Funding

Project funded by the Italian Authority for Electric Energy, Gas and Water.

Unique factors / Additional value

N/A

Constraints / Lessons learned

N/A

Evolution / Future Prospects

The project conveyed the need to intervene on some fronts, including:

- 1) Raising awareness using institutional information about the bonus among families
- 2) Providing additional measures against energy poverty
- 3) Raising the ISEE* threshold for access to the bonus from the current 8.107,5 to €11,000, to target the people that need it the most
- 4) Necessity to change the ISEE* calculation criteria, for example by excluding the value of houses of residence and disability pensions, and adding to the calculation other certified family expenses

*ISEE (Equivalent Economic Situation Index) is a tool for assessing the economic situation of anyone applying for discounted social services, based on common criteria.

More information

Project Website:

<http://www.cittadinanzattiva.it/progetti-e-campagne/consumatori/8521-bonus-a-sapersi.html>

Short description / Aims and objectives

The ‘Energia su Misura’ (Customized Energy) program analyses the effects of consumption reduction using feedback tools in social housing. This facilitates the identification of the most effective solutions to reduce energy costs. Special attention is given to the most vulnerable consumers.

It aims to foster good practices among end users in order to stimulate energy efficiency in their homes.

The main project objectives are:

- Monitor domestic consumption through the use of smart plugs
- Get consumption data in order to provide adequate measures to families, so as to improve energy efficiency in their homes
- Analyse family changes and feedback to the measures provided

Target group / beneficiaries

Focuses on those suffering from energy poverty and vulnerable consumers in general.

Outcomes

Initial results have shown that the energy consumed by the families involved is very low, therefore the amount of energy that may be saved through behavioural measures during the day appears to be almost negligible. Nevertheless, appropriate measures are taken in order to improve home energy efficiency and comfort in a way that such measures may be assessed by institutions (e.g. the municipality of Milan, where about 50 families have been involved in the initial phase of consumption monitoring), and replicated in similar contexts.

Budget / Funding

The project was funded by the Italian Ministry of Economic Development.

Unique factors / Additional value

Social factors: energy awareness can be a way to involve families in community activities. As such, appealing to citizens through the idea of monetary savings may be the first step to get them involved. This can potentially help to (1) increase awareness regarding energy matters and (2) increase participation within the community.

Constraints / Lessons learned

Initial distrust on the part of the families can be an obstacle. In this case, involving local officials can be beneficial; the success of the project in Milan was largely owed to the involvement of local officials.

Evolution / Future Prospects

The project will be implemented nationwide. It started in Milan.

More information

Project information in Italian:

http://www.aisfor.it/progetti-27-energia_su_misura

Type of intervention:



Geographical scope:

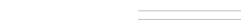
National level practice
[Italy, nationwide]

Leading stakeholder:
NGO



Leading organisation

R.S.E. (Ricerca sul Sistema Energetico)



Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

2016 - 2019

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A





Type of intervention:



Geographical scope:

Municipal level practice
[3 small cities in Latvia:
Rēzekne, Smiltene and
Madona]

Leading stakeholder:
NGO

Leading organisation

Public Policy Institute in
cooperation with NGOs
from Rēzekne, Madona
and Smiltene (in close
conjunction with the
International Energy
Brigades)

Transferability [3]

The practice can be
physically implemented
with minimal cost

*Additional need-based pro-
grams could be developed
by directly providing energy
efficiency services for low to
mid-income residents, or by
paying housing subsidies to
low-to mid-income families
to pay for energy efficiency
improvements. For exam-
ple, programs similar to ‘La-
tvian Volunteers for Energy
Efficiency’ could be develo-
ped at the municipal level to
provide low-cost measures
(such as window-stripping
and reflective pads behind
radiators) as a social service
to those who are financially
unstable and do not live in
energy efficient homes. An
additional benefit would be
if programs created jobs
through the Employment
Office or other unemploy-
ment benefit programs.*

Short description / Aims and objectives

The Latvian Volunteers for Energy Efficiency trained volunteers from each of the Latvian cities in window and door weather-stripping. They used specially adapted carpentry tools and silicon strips in order to provide this service, and thus reduce energy consumption and improve housing conditions. The project’s timeline was as follows:

- 1) Training
- 2) Weather-stripping measures were performed in three small multi-family buildings in three cities
- 3) As part of the program, a resident survey was conducted with 100 individuals in each one of the three cities. The aim of the project was to raise awareness about residential energy efficiency measures

Target group / beneficiaries

The participating cities were chosen based on the willingness of local NGOs to become involved in the project.

Outcomes

The outcomes were divided in two groups:

- **From the weather-stripped houses:** the apartments experienced increased temperatures and greater comfort levels, as well as a decrease in noise levels and pollution from outside. Specifically, one small multi-family building in each of the three towns was weather-stripped. The initial results show temperature increases in these apartments of approximately 2 degrees Celsius.
- **From the houses where city surveys were taken:** 59% of respondents stated that they had large gaps in their windows and 48% felt that weather-stripping and insulation were highly necessary in their apartments. 80% had at some point tried to weather-strip their own windows using either glue-on strips or other materials, and about the same percentage stated that they would be interested in professional long-lasting weather-strip-ping (of those, 44% only at low-price conditions).

Budget / Funding

Financial support came from the George Soros Foundation. The budget was adapted if the work was accomplished by the volunteers or covered by the employment office.

- Calculated at market prices (offered by local companies at €8.23/m²), costs for one building range from €5,000–7,000 and repayment periods range from 2.2 to 3.4 years
- If the work was undertaken by either volunteers or by Employment Office program s, where municipalities cover the salaries of workers, then residents pay solely for materials (2,74€/m²) and repayment periods would be well below one year

Unique factors / Additional value

Provided support to low-income households for energy efficiency improvements to their homes. This was often performed by volunteers, with payment by households for



Constraints / Lessons learned

Constraints:

- Insufficient monitoring after the completion of the project. Consequently, efficiency could not be measured
- Lack of awareness-raising efforts
- Financial problems due to the fact that building conditions were worse than imagined and there were a lack of possibilities to secure co-financing from other partners

Lessons learned:

- These problems could have been overcome by investing larger portions of the initial project financing in informational and educational campaigns, as well as monitoring

Evolution / Future Prospects

The future aim of the project is to scale up the project to provide a free volunteer service to pensioners and socially disadvantaged groups who can benefit from implementing weather-stripping in their houses.

The service will also be available to other residents who are able to pay for the cost of the silicon strips (0.62 €/m - repayment within 1 year).

More information

Inventory of policy, business and civil society initiatives focusing on heating, hot water, and the use of electricity:

<https://goo.gl/C5zKFZ>

Energy Efficiency in multi-family housing - A social and environmental necessity:

http://providus.lv/article_files/1444/original/daudznam_efekt_en.pdf?1331623116

Implementation
timeframe

2001 - 2003

Energy savings

Average energy savings
were 10–20%, depend-
ing on the building

GHG reductions

CO₂ savings range from
16–33 tons/building
per year

Financial savings

Finance was provided
in terms of the worker's
time. As such, there are
no financial savings per se
in the implementation and
there is no information
on what this represents
in terms of long-term
financial saving thanks
to the energy efficiency
improvement





Type of intervention:



Geographical scope:

National level practice
[Lithuania]

Leading stakeholder:

Government



Leading organisation

Housing Energy Saving
Agency (HESA)



Transferability [2]

The practice can be transferred but the cost depends on the gap between system elements in Lithuania and the other countries' context-specific situation

Implementation timeframe

2010-2015
(with ongoing projects)

Energy savings

Energy savings of 62–65 kWh/m² per year (~30–46 %); 82.25 GWh per year (8.22% of the program target for 1,000 GWh year)

GHG reductions

20,880 tonnes per year (9.08% of the program's objective of 230,000 tonnes per year)

Financial savings

Immediate 10-15% savings for apartment owners

Short description / Aims and objectives

The program aimed to encourage low-income households to participate in renovation program s, and to foster the participation of their neighbours. The Housing Energy Saving Agency evolved from the third period of the Lithuanian Residential Energy Efficiency Program (2013), after an incentive and an economic sanction was proposed to low-income households living in multi-family residential buildings.

Economic sanction: On 16th May 2013, the Law on Social Assistance for Poor Families and Single Residents was amended, and stated that any low-income earners who failed to participate in the decision to renovate the multi-apartment building in which they lived and who refused to participate in this renovation work, could lose from 50-100% of subsidies for their energy costs. These sanctions covered a period of three years.

Economic incentive: covering 100% of the renovation costs of low-income households living in multi-family residential buildings.

Target group / beneficiaries

Low-income households living in multi-family residential buildings. Requirement for participation in the program:

- Majority of owners opted for modernisation
- Buildings constructed before 1993
- Buildings that are at least Energy Efficiency Class D

Outcomes

The low-income owners participating in the program received a subsidy covering 100% of renovation costs, including project preparation costs and loan interest payments.

Quantitative outcomes:

- By 2013: 1,332 buildings met subsidy approval.
- By November 2016 (calculations after the first 5-year program finished):
 - » The number of investment plans approved stood at 3,686.
 - » The number of renovated buildings was 960.
 - » Construction work began on 1,944 buildings.

Budget / Funding

€227 million total budget for the 5-year period. The project was funded by:

- The European Regional Development fund (€127 mil)
- National funding (€100 mil)
- Expected funds from commercial banks (€20-40 mil)

Unique factors / Additional value

The introduction of sanctions for those refusing to participate in renovation program s for low-income homeowners. The potential negative effects of this sanction are countered by the provision of 100% subsidies for the renovation costs of buildings housing vulnerable families. The subsidies have helped to unblock some retrofit projects, and has mobilise multi-apartment owner associations to subscribe to the renovation program.

Constraints / Lessons learned

N/A

Evolution / Future Prospects

Several of the Lithuanian experiences and the lessons learned can be replicated in Western Balkans residential energy efficiency programs.

After 2015, the program continued at a similar pace; it is co-funded by the European Union structural-fund investments of the 2014-2020 period.

More information

Project outcomes in numbers:

<http://www.betait.lt/wp-content/uploads/2014/01/DNAMP-savaites-progreso-ataskaita-2016.11.18.pdf>





Residential Energy Efficiency-Social
Safety Net Initiative

MACEDONIA

NETHERLANDS

Energy Leap Project (I)



Type of intervention:



Geographical scope:

Municipal level practice
[Macedonia (Skopje and
Kumanovo)]

Leading stakeholder:

NGO

Leading organisation

Habitat for Humanity Ma-
cedonia with Washington
DC based IRG and the
Macedonian Timel Project

Transferability [3]

The practice can be
physically implemented
with minimal cost

*The main part of the pro-
ject is based on applying
energy efficiency measures
in apartment blocks that
were largely occupied by
vulnerable households; this
can be replicated in any
European country*

Implementation
timeframe

The project took place in
2010, and the renovation
work was implemented
between July and October
2010.

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

The project focused on the application of energy efficiency measures in apartment blocks largely occupied by vulnerable households. The project's goal was to demonstrate that invest-ments made in energy efficiency measures allowed savings in household energy costs.

Habitat for Humanity Macedonia carried out an assessment of the savings made in resi-dential-building energy consumption before and after the energy efficiency measures were implemented.

The project created opportunities for youth employment by introducing an internship programme.

Target group / beneficiaries

The targeted structures were multi-family buildings that were largely occupied by vulnerable households. The selected buildings used different heating sources (district heating, electricity and combined electricity and firewood). Two of the buildings were located in Skopje and one was in Kumanovo.

Outcomes

Three buildings were renovated, as energy audits were performed before and after the retro-fitting works.

The internship program featured 12 interns aged 17-18, who were either studying in high school or were recent high school graduates. They were employed for three months, with a monthly stipend of €106 (provided by Habitat for Humanity). Part of their work was to assist construction firms in the installation of energy efficiency measures in the buildings.

Budget / Funding

The project was funded by USAID.

Unique factors / Additional value

An additional component of the pilot project was the development of the youth workforce in Macedonia. Twelve high school graduating seniors had the opportunity to both train and partici-pate in the installation of energy efficiency equipment in three apartment buildings.

Constraints / Lessons learned

The pilot phase demonstrated that organisations with experience in housing and non-bank financing should be involved in order to integrate energy efficiency into investments for upgra-ding existing low-income housing. The involvement of Habitat for Humanity Macedonia was crucial for the implementation of this pilot. It facilitated over 400 low-income households to obtain microfinancing for home improvements and energy efficiency measures.

The project demonstrated a model that could facilitate those price changes needed for syste-mic energy sector reforms. These steps could reduce impact on vulnerable households and achieve many of the related energy efficiency benefits.

Evolution / Future Prospects

Lessons from this project led to a follow-up proposal to expand the work to more countries in the region. The pilot project also initiated a Stakeholder Advisory Group (SAG), as a coordina-tion and information exchange forum for different stakeholders in the government, industry and civil society. This was intended to serve as a mechanism that brought together those interested in residential energy efficiency, energy price reforms and an improved social safety net.

More information

Project page:
http://www.habitat.org.mk/eng/n_usaid.html

Short description / Aims and objectives

The Dutch initiative 'Energiesprong' (Energy Leap) recognizes the excessive waste of energy wi-thin societies, and aims to improve the energy efficiency of households. The project's main goal is to transform homes into 'Net Zero' energy houses (Net Zero means that a house generates as much energy as it uses). This is accomplished through the utilisation of components such as (1) pre-fabricated facades, (2) new smart heating and cooling, (3) insulated roof tops with (4) solar panels.

The renovation period in completed within one week, a period that allows households to remain within their homes. The renovation comes with a 30-year guarantee.

To renovations are funded by the household, with the money that would have previously been used for energy bills. Thousands of people in the Netherlands already enjoy living in more com-fortable houses and energy efficient homes.

Target group / beneficiaries

111,000 homes within social housing are expected to be retrofitted, with an investment of €6 billion from the Dutch government by 2020. This will be paid for by the energy savings that hou-seholds make for the following 30 years.

Outcomes

The project has been split into three stages:

- **STAGE 1:** The prototyping phase, where 1,000 houses were used for 'proof of concept', and construction companies developed innovative technical solutions
- **STAGE 2:** The product and market acceptance phase, which covered 10,000 houses
- **STAGE 3:** Full industrial-scale rollout for 100,000 dwellings, with a targeted 50-60,000 renovated homes per year. Costs of €50-60,000 per retrofit. A total of 111,000 homes within social housing are expected to be retrofitted, with an investment of €6 billion.
By mid-2015, the first 1,000 prototypes were planned for completion by the four cons-truction companies involved.

Budget / Funding

The necessary upfront capital comes from the WSW Social Bank, which has provided €6.6 billion to underwrite government-backed 30-year loans to housing associations. This generated a 5.25% financial return on investment (using the WSW Social Bank discount rate for corporate projects) over a 30-year period.

The initiative started with a €50 million budget in 2010.

Unique factors / Additional value

By using retrofit technology, it is possible to develop the necessary changes to the households within a rapid time period. In the Netherlands, the building stock lends itself to this approach due to its unified characteristics.

One important difference with existing renovation projects is that all those elements needed for a successful move to zero-energy housing are brought together in a single plan. There are three key and unique characteristics: (1) Only 5% of all works are executed on site (things are prefa-bricated before and brought to the house); (2) There is a 30-year construction guarantee, but no subsidies and (3) Since the new homes are energy efficient and don't need to spend money on energy bills, the household energy bill (approximately €13 billion in the Netherlands) is used to pay for the retrofits that have been implemented.

If the money saved is spent on a mortgage or on the repayment of a loan for approximately 30 years, then €225 billion can be invested in Dutch housing stock. On a national scale, invest-ment input into the project will generate employment for over 55,000 people in the construction industry.

Type of intervention:



Geographical scope:

National level practice
[Netherlands]

Leading stakeholder:

NGO

Leading organisation

Platform31 /
Energiesprong

Transferability [2]

The practice can be
transferred but the cost
depends on how each
government chooses
to implement it, and the
financial/technological
context for each country

Implementation
timeframe

The program was
launched in 2010

Energy savings

Moving from 50%
energy improvements to
zero net-energy, since
the initial phase

GHG reductions

2014 estimates stated
that the average net CO₂
savings, after the renovation
of 111,000 homes, were
0.43 MtCO₂ per year (total
savings minus embodied
energy), representing 2.5%
of the emissions from the
Dutch residential sector





Energy Leap Project (II)

NETHERLANDS



Extraordinary Social Support for the Energy Consumer



Financial savings

The amount that tenants pay for housing costs (rent + energy) remains the same before and after renovation.

By 2014, renovation costs had already dropped by 40% (compared to the first pilot projects from 2011).

For a typical terraced house, builders need to reach a price level of approximately €60,000, including a new kitchen and bathroom (or €40-45,000 excluding these features). Current projects budget at approx. €70,000.

Constraints / Lessons learned

The first 300-350 prototypes were built in 2015, there should have been 1,000 but the rollout was slower than expected.

Some policy changes are required for the project to reach its full potential. Mortgages need to be differentiated against the energy performance of individual houses. If the mortgages were aligned with energy labels (e.g. a G label would have a lower loan-to-income ratio) it would be a powerful incentive to promote energy efficient renovations.

Evolution / Future Prospects

The initial focus was on social housing, but since 2014 the program has already been looking at the private market, care centres and commercial office buildings. Specifically:

- A deal for private homeowners was made with 40 municipalities that are seeking participants
- 20 energy cooperatives will be consulting their members
- 4 major mortgage banks are willing to provide an extra €45,000 per mortgage in addition to their regular limit if these guaranteed energy-neutral propositions are acquired
- 7 retrofit companies have stated that they will sell the retrofit packages
- 25 more construction companies have expressed a desire to participate

Based on the successful Dutch program, a consortium was formed to scale up the existing Net Zero refurbishment technology in the UK and France, and to develop an Energiesprong business case for housing associations. The UK and France were chosen because of their strong housing associations, the fact that they possess a decent volume of similar houses, and additionally a professionally organised building sector.

More information

Online article about the project:

<http://energypost.eu/zero-energy-zero-cost-industrialising-building-sector/>

Project website:

<http://www.energiesprong.eu/>

Short description / Aims and objectives

The Energy Services Regulatory Authority (ERSE) is a public corporate body with administrative and financial autonomy and independent assets. ERSE aims to regulate the natural gas and electricity sectors.

ERSE is governed by its Statutes and legal provisions, and has been approved by Decree-law nº 97/2002 and amended by Decree-law nº 212/2012 and Decree-law nº 84/2013. ERSE functions independently within the framework of the law, without prejudice to either the orientating principles of the energy policy fixed by the government, or to the Acts subject to ministerial supervision under the terms of the law and of its Statutes.

Apoio Extraordinário ao Consumidor de Energia, ASECE (Extraordinary Social Support for the Energy Consumer) is a discount on the electricity and natural gas bill directly set by the Government. Economically vulnerable clients wishing to benefit from the social tariff and ASECE submit an application to the respective electricity and natural gas suppliers, whether they are last resort or market regime suppliers. The suppliers then check with the competent social security institutions that the applicant meets the proper criteria.

Target group / beneficiaries

Eligible: citizens who meet one of the following criteria: receiving one of the following social benefits:

- The elderly, the unemployed, children, people with disabilities
- citizens receiving social insertion income, or those with an annual income lower than the maximum established by law
- Citizens in households with a contracted energy of up to 4,6kV of electricity, or an annual consumption of less than or equal to 500m³ of natural gas

Outcomes

By June 2016, more than 180,000 beneficiaries were recipients of the rate reduction in Portugal, which was already twice that of six months before. Since July 2016, the rate reduction has been fully paid by companies and the number of beneficiaries rose to more than 630,000. These new beneficiaries have been receiving a discount of approximately 33.8% for electricity and 31.2% for gas.

Budget / Funding

Since July 2016, the rate reduction has been financially covered in full by companies linked to the program. Previously, the ASECE costs were covered by a public fund. The social gas tariff is funded by the other gas customers.

Unique factors / Additional value

The automatic process saves beneficiaries the inconvenience of a lengthy bureaucratic process, because the entire administrative burden is passed onto the energy suppliers.

Constraints / Lessons learned

The energy tariff is not enough to solve the issues of accessing sustainable and efficient sources of energy for vulnerable households, as many residents do not have electrical heating equipment due to financial difficulties.

Evolution / Future Prospects

In 2016, the accessibility of the program to vulnerable households was improved.

More information

Project Presentation (in Portuguese):

<http://www.erse.pt/consumidor/Documents/Tarifa%20Social%20e%20ASECE/ASECE%202015.pdf>

Type of intervention:



Geographical scope:

National level practice
[Portugal]

Leading stakeholder:

Government

Leading organisation

Directorate General for
Energy and Geology

Transferability [2]

The practice can be transferred but at significant cost, because the program is inherently context-specific

Implementation timeframe

Ongoing since 2011

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A





Improving Energy Efficiency in Low-Income Households and Communities



Type of intervention:



Geographical scope:

Municipal level practice [Romania]

Leading stakeholder:

Government



Leading organisation

Ministry of Regional Development and Public Administration, with support from the Ministry of Environment and Climate Change, Association of Energy Auditors for Buildings (AAEC) and the United Nations Development Program (UNDP)



Transferability [2]

The practice can be transferred but at significant cost; this is because the budget is very high.

Implementation timeframe

July 2011 - June 2016

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

This United Nations Development Program – Global Environmental Facility (UNDP-GEF) project sought to dismantle the barriers to the implementation of energy efficiency measures among poorer households and communities in Romania, with the overall objective of alleviating energy poverty.

The project: (1) addressed energy efficiency needs, (2) developed appropriate policy measures, (3) strengthened the capacity for the implementation of energy-efficiency measures in poorer regions, and (4) stimulated the market for locally-produced, energy-efficient building materials.

This project aimed to reach over 110,000 beneficiaries and reduce greenhouse gas emissions by over 660,000 tonnes of CO₂eq.

Target group / beneficiaries

Romanian decision-makers and low-income households.

Outcomes

The program helped approximately 160,000 people in Romania to live in more energy-efficient apartment blocks, with lower heating bills.

Proposal of some definitions of energy poverty concepts in Romania, submitted them to the government, and developed the proposal entitled ‘Possible Methodology for Energy poverty Assessment’.

Development of technical documentation for 50 types of apartment blocks. Several demonstration projects for the thermal rehabilitation of social building blocks were undertaken.

Two locally produced, sustainable, energy efficient insulation materials were identified and promoted: Mopatel uses slaked lime as a raw material, and Izomiorita uses woollen raw materials that can be produced from locally available, renewable, and affordable sources, utilising a local workforce from the poor communities. The project provided support for the accreditation process of both companies and obtained the necessary technical agreements for the use of these materials for public buildings.

Budget / Funding

The budget and funding was as follows:

- In 2011, the project was funded by donors to the amount of €102,140,400
- The Global Environment Facility (GEF) awarded the project with a €2,502,234 grant
- Project Finances (€87,125,761) consisted of funds from:
 - » The national government: €84,458,622
 - » The Ministry of Regional Development and Public Administration and the Ministry of Environment, Waters and Forests
 - » Non-Governmental Organisations: €68,096
 - » UNDP: €42,560
 - » GEF: €2,553,210

Unique factors / Additional value

This project was the first of its kind in Romania to directly address the energy poverty of vulnerable households, by improving their energy efficiency and living conditions. This project could not have been implemented without GEF and UNDP support, especially in becoming a catalyst for addressing energy poverty.

A thorough background paper on energy poverty and existing programs to address the issue was drafted (entitled ‘Policies and Initiatives to Combat Energy poverty. Identifying International Best Practices in 2011’).

Improving Energy Efficiency in Low-Income Households and Communities



Constraints / Lessons learned

Political and operational obstacles have diverted the project from its course and have led to implementation delays. These elements were underestimated in the initial risk-assessment process and were due to issues related to the project’s design.

The project was designed to focus on the utilisation of Romanian-only, energy-efficient building materials - despite the fact that a market for those products did not exist at the start of the project and did not develop during the project lifetime. At the end of the project there was only one company in Romania that met the criteria for Romanian-only certified energy-efficient building materials. Efforts to work with this Romanian certified energy-efficient building material were unsuccessful.

Evolution / Future Prospects

Not indicated.

More information

Project implementation experience in Europe and the CIS Region (The Commonwealth of Independent States) for the facilitation of clean energy:

<https://goo.gl/BDp32T>

Project report:

<https://www.energypoverty.eu/publication/improving-energy-efficiency-low-income-households-and-communities-romania-fuel-poverty>





National Program for Home Visits in Energy
Poor Households in Slovenia



Type of intervention:



Geographical scope:

National level practice

All of Slovenia (with the exception in the initial phase of 2014 for Zasavje and Pomurje regions, where the REACH project was implementing ongoing projects)

Leading stakeholder:

Government

Leading organisation

The Eco Fund and the EN-SVET network of energy advisers, in cooperation with the Focus Association for Sustainable Development, the Slovenian Ministry for the Infrastructure, the Ministry of Environment and Spatial Planning, and the Ministry of Social Affairs

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

Ongoing program. The idea was created during a REACH project conference in March 2014. In September 2014 the energy advisers were trained, and the home visits began in October. The operation (initial phase) stopped in mid-2015, and continued until November 2016

Short description / Aims and objectives

This was a nationwide program to provide advice on energy usage in socially disadvantaged households. It was implemented by the EN-SVET national network of energy advisers. This project was under the umbrella of the REACH project (<http://reach-energy.eu/>). REACH aims to reduce energy poverty on a practical and structural level.

In 2014, the initial phase of the program aimed to support 300 energy-poor households by providing energy-saving and water-saving devices that would help to sustainably reduce of energy and water consumption.

Target group / beneficiaries

Target group: households receiving social support.

- **Initial phase:** 50 staff trained under the energy advisers program and visited approximately 300 households which were receiving any kind of social support
- **Phase 2:** visit of more targeted households that were receiving any kind of social support

Outcomes

By December 2014: 200 out of the 300 planned home visits were undertaken.

By September 2014: 55 energy advisers were trained for the purpose of implementing energy analysis, advising households and providing information on the methodology involved.

In January 2015: 30 new energy advisers were trained.

Budget / Funding

Funds intended for the implementation of project tasks, without preparatory costs and payments for current energy advising policies were intended as follows:

- Approximately €10,500 excluding VAT, or €12,600 including VAT, for the implementation of training for energy advisers
- Approximately €10,000 excluding VAT, or €12,000 including VAT, for energy saving devices for households

Together, this amount of €24,600 including VAT funds was earmarked in the budget of the Republic of Slovenia for 2014, on a budget item from the Climate Fund.

Energy advisers were paid approximately €40 per individual household. These costs included travel expenses. (300 households x 40 EUR = €1,200 EUR - energy adviser costs) – These costs were covered by the Eco Fund.

Unique factors / Additional value

With the provision of energy advice services, energy-poor households were provided with more information on their energy and water consumption and expenses. This enhanced their knowledge regarding the topics of energy use, energy efficiency, and environmentally-friendly behaviour. It led to better living and health conditions for members of the households.

With the installation of energy and water-saving equipment (worth €30-40), households could save approximately €108 per year in energy and water expenses.

The program is multi-sectoral and multi-levelled.

The service represents a new concept in the work of energy advisers (EN-SVET). In previous schemes a member of a household had to come to the EN-SVET office for energy advice. This service was mostly used by households that already had resources and wanted to know the best energy-efficient measures for their homes. Households without resources to implement energy-efficient measures did not visit the EN-SVET offices. Therefore, this new service provides an additional value, as it focuses on the target groups (the socially vulnerable and energy-poor households) that are most in need of energy efficiency advice and measures. With

National Program for Home Visits in Energy
Poor Households in Slovenia



on-site visits, energy advisers obtain a far greater insight into the current situation and can try to find solutions for those most in need. Working together with Centres for Social Work and the Eco Fund, they can adjust the energy and water saving equipment package according to the needs of the household.

Constraints / Lessons learned

The project has shown that:

- Strong cooperation between the different actors involved is key to achieving a wider impact
- The work of the local centres for social work is crucial, as they represent the entry point for applications from socially-vulnerable households for these services
- The methodology used data-intensive ways of communicating the information: for the purpose of providing easily accessible energy advice, the communication could be simplified

Evolution / Future Prospects

Based on the 2014 experience, the 2016-2017 plan involves financing and implementing visits in 1,000 households. The program was restarted in November 2016, with enhanced cooperation with centres for social work.

More information

Project description (in Slovenian):
<http://focus.si>

Energy savings

828,9 kWh per household,
248.670 kWh in total

GHG reductions

320,7kg CO₂ per household,
96.210kg CO₂ in total

Financial savings

€108.87 per average household, for the planned 300 home visits in 2014 – leading to total savings of €32.66, and the numerous possibilities and measures available for reducing consumption





Type of intervention:



Geographical scope:

Regional level practice
[Catalonia, Spain]

Leading stakeholder:

NGO



Leading organisation

Alliance Against Energy Poverty APE (Aliança contra la Pobresa Energètica)



Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

The APE was created in February 2014

Energy savings

Indirect

GHG reductions

Indirect

Financial savings

Indirect

Short description / Aims and objectives

The Aliança contra la Pobresa Energètica, APE (Alliance Against Energy Poverty) was founded by neighbourhood associations, workers' assemblies, water and housing advocacy groups, and Non-Governmental Organisations (NGOs) concerned with the overall impact of the national energy model and existing inequalities.

The APE aims to guarantee universal access to basic services (water, electricity and gas), to avoid indiscriminate service cuts and to defend human rights.

Creating a 'social outcry' is an important objective for the APE. The project aims to make the problem of energy poverty more visible on a societal level, by interacting with and mobilising those experiencing energy poverty. The mobilisation was achieved via collective advisory assemblies, advocacy campaigns, and demonstrations. The APE operates at as a grassroots movement to influence both citizens and institutions.

Target group / beneficiaries

People without guaranteed electricity, gas or water supplies.

Outcomes

The core grassroots element of the APE's approach is to hold bi-monthly assemblies in which people who have trouble paying their bills or who have had their energy or water cut, explain their problem to the group so that they all can find a possible solution. Assemblies are places where those affected come together with activists to defend their rights and to collectivise problem-solving mechanisms; it is underlined that the problem goes beyond the issue of 'being able to pay the bills'.

Additionally, different coordination and advocacy meetings are led by a coordination group, which collects and brings forth demands to the political agenda. Therefore, their assemblies and mutual support groups could be seen as another type of political movement.

APE has also produced a 'Red BOOK': a basic guide to energy poverty and to tackle it. The book is available in Spanish and Catalan.

APE have collaborated with another social movement; the PAH (Platform for People Affected by Mortgage Terms) and an NGO (Observatori DESC - Drets Econòmics Socials i Culturals) to submit a Popular Legislative Initiative (ILP). This was presented to the Catalan Parliament and focused on housing rights and energy poverty demands, which was unanimously approved in the final parliamentary session of July 2015. Though its housing provisions were later disputed and annulled at the Constitutional Court of Spain, its energy poverty articles remained and the law is today one of the most important rights-based laws at a European Union level, which legislates over supply cuts for vulnerable people. APE organises numerous initiatives every year, which are not only connected to energy-poverty emergency cases, but also to political decisions and changes in the law.

Budget / Funding

Public funding

Unique factors / Additional value

The APE is a grassroots initiative. It carries out diverse activities, such as demonstrations and advocacy, the usual activities for activists' movements, in addition to counselling and information sharing between members and the people affected by energy poverty.

Constraints / Lessons learned

The success of the organisation is based on uniting former and current street-based movements with organisations working on social justice, in order to create a social, ecological and political bridge. This ultimately creates social outcry and leads to solutions at grassroots and institutional levels.

The APE brings together various entities, with diverse ideological positions and different organising strategies, street-based social movements, as well as more technical-based groups, which have worked on electricity, gas or water issues for years. While such a strategy has its challenges, as each movement has many initiatives and some participants cannot take part in all the activities, overall the APE has strengthened the bonds between the organisations involved.

A process of mutual learning has emerged between movements in the APE that are more ecologically focused, and with those that have a social emphasis. This illustrates the vital importance of an integrated approach as well as an intersectional view; different factors cause inequalities which exacerbate vulnerabilities, and these factors must be addressed accordingly.

Evolution / Future Prospects

The APE is active in the process of negotiating and proposing changes related to energy poverty laws and amendments, as well as political proposals.

The movement acknowledges that there is a long road ahead in terms of collective action, especially with respect to confronting the supply companies at a national level. The experience from other movements has shown that many actions are needed before real results are obtained, but the APE is persistent in this matter. The scale of mobilisation is also critical and the APE is continuing to work in this direction. The APE initiative has a Catalan reach but it collaborates with similar groups on a national scale.

More information

Project page (in Catalan):

<http://pobresaenergetica.es/>

Blog post about the project:

<https://entitleblog.org/2016/09/01/energy-struggles-combating-energy-poverty-in-catalonia/>





Energy Bank

SPAIN



SPAIN



Renovating the Neighbourhoods



Type of intervention:



Geographical scope:

Municipal level practice [Spain, city of Premià de Dalt (10,300 inhabitants) and Sabadell (207,000 inhabitants)]

Leading stakeholder:

NGO



Leading organisation

Banc d'Energia Association



Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

2014 and ongoing

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

The Banc d'Energia (Energy Bank) is an association that promotes energy saving and efficiency to anyone suffering from energy poverty or vulnerability. Any organisation or individual can take part in the Energy Bank; contributions are from individuals, companies and entities that decide to dedicate some of their energy savings to collaborate in the fight against energy poverty. This money goes towards both energy education and to household investments.

Banc d'Energia is a public-private partnership that aims to (1) educate the public on energy poverty and (2) alleviate energy poverty.

Target group / beneficiaries

The organisation targets vulnerable houses and works to educate them about energy efficiency measures, and to support their investments in these measures. Specific target groups are:

- Private and public entities and individuals, who have volunteered to make energy savings in a socially responsible manner
- Beneficiaries: Vulnerable households in Premià de Dalt and Sabadell

Outcomes

Energy savings are transformed into funds for energy efficiency investments in energy-poor households, while pioneering and transformative projects are funded.

Public entities reinvest 35% of the savings attained by internal energy efficiency improvements, while another 35% is allocated to anti-energy poverty measures.

Private entities or individuals also donate at least 35% of the savings made.

There are tax deductions provided by law for contributors: 75% of the first €150, 30% of the rest for citizens, and 35% of the total amount of the donation for legal entities.

Budget / Funding

25% of all donations come from private entities.

75% of individuals contributed up to €150.

Unique factors / Additional value

The bank collects the funds made by individual contributions, and businesses and organisations that dedicate some of their energy savings to fighting energy poverty.

The money collected is invested in the same region where the savings were created through the social support. The social return of economic resources obtained by the Energy Bank is carried out in a territorial manner (local support networks) in terms of both training and energy investments.

Constraints / Lessons learned

The *Banc d'Energia* is cooperating with local authority organisations in a process of trust and mutual support. This could be a constraint, if trust is broken.

Membership and participation in the Energy Bank is always voluntary and therefore there are no limits to participation. However, the energy saving and efficiency measures shared are the results of a process of awareness and energy optimisation that may last several years; maintaining membership for as long as possible is recommended.

Evolution / Future Prospects

Ongoing initiative that continuously tries to involve more organisations and beneficiaries.

More information

Project website (in Catalan):

<http://bancdenergia.org/>

Short description / Aims and objectives

This municipal authority has led the project Renovem els Barris (Renovating the Neighbourhoods) for the renovation of 360 dwellings. The council has simultaneously contracted renovation work and transferred the costs to homeowners through various fractional payment formulas, which are adjusted to their income level. They have also offered the possibility to link the debt to the building, and not to the owner, thus avoiding upfront costs to the most vulnerable households.

Target group / beneficiaries

650 home-owners, 1,250 residents.

Outcomes

Energy-efficient retrofitting (a 30% reduction of estimated energy consumption), health improvements (combatting the cold at home), improvements in neighbourhood infrastructures by empowering its more dynamic sectors (a 50% reduction in police actions in one year).

Budget / Funding

€2 million.

Unique factors / Additional value

The project shows that a transformation in the role of the municipal administration permits a change in terms of interventions' scale; therefore multi-family building renovations can be initiated in low-income areas.

Constraints / Lessons learned

An economic activity is generated in an environment which previously had limited possibilities for initiating renovation work. The local efforts implemented are not economically compensated by the returns from rates that the investment generates for the local administration. It would be desirable to establish cooperation agreements amongst the administrations that would allow the municipal authorities involved to receive some of the funds generated by the activity, and which could be later reinvested in the involvement of new areas.

Evolution / Future Prospects

So far, during the first phase of the project, 360 renovations have been dealt with, while during the second phase (forthcoming), 400 more dwellings will be included.

More information

Project presentation (in Catalan):

<https://goo.gl/GJ5vNX>

Type of intervention:



Geographical scope:

Neighbourhood level practice [360 dwellings in 32 multi-family buildings in the historical neighbourhood of Santa Coloma de Gramenet]

Leading stakeholder:

City Council



Leading organisation

The Municipal Council of Santa Coloma de Gramenet



Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

2014 to 2017

Energy savings

30% of estimated energy consumption

GHG reductions

N/A

Financial savings

No financial criteria are applied





Energy Assessment Points



Type of intervention:



Geographical scope:

Municipal level practice
[Catalonia, Spain]

Leading stakeholder:

NGO/City council

Leading organisation

Barcelona City Council

Transferability [2]

The practice can be transferred but at significant cost

The practice can be transferred but at significant cost because it is context specific; there would be a need to study the national legal conditions that lead to energy poverty

Implementation timeframe

The PAE pilot phase lasted for 5 months, from November 2015 to February 2016. The employment plan pilot phase lasted from January to July 2016. The new plan, combining the two pilot projects, will be implemented for two years, starting from January 2017

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

This project was initiated after a successful pilot phase in which 100 people were trained and employed for 6 months as energy agents. They reached 3,000 vulnerable households in three districts within Barcelona. These agents focused optimized energy bills and low cost energy efficiency measures for households suffering from energy poverty or energy vulnerability.

10 Punts d'Assessorament Energètic, PAEs (Energy Assessment Points) cover the whole city of Barcelona. Citizens can ask information about energy efficiency, energy poverty, energy bills and any energy use related queries. It is a universal service, which specifically focuses on identifying energy poverty situations that do not reach social services or charities. Furthermore, 60 new staff members were trained and employed as energy advisors, as part of an employment plan for long-term unemployed citizens. The management of the PAEs is administered by third sector organisations.

PAEs also communicate with social services, the Housing Department and the Energy Agency of Barcelona City Council. They identify potential abuses and violations of the Catalan Law Against Energy Poverty (Law 24/2015). The vulnerable citizens receive information on how to:

- Reduce household energy and water consumption bills, while maintaining or improving home comfort
- Reduce energy consumption at home
- Improve their housing through the installation of low cost measures for energy efficiency within the home

Target group / beneficiaries

Two target groups:

- 1) **Energy Advisors:** Training is provided to the energy advisors who stationed at the energy points giving information to citizens and the agents that visit households. They had 3 tasks that benefitted the vulnerable households: (1) to analyse utility bills to see if they could be optimized; (3) to assess user's home conditions and offer advice on energy efficient and affordable measures, and (3) to install low-cost energy saving equipment or materials where needed
- 2) **Vulnerable households:** The project reached around 4,100 vulnerable households in the first 10 months. The energy agents visited the households to see assess energy poverty conditions, and provided them with energy efficiency information as well as information on available grants for housing rehabilitation

Outcomes

During the pilot phase, **100 long-term unemployed people were trained to become energy advisors** during a month-long training cycle. They were divided to 5 groups in 5 neighbourhoods, with training coordinated by local social organisations. Around 25 of the trainees were given administrative functions and energy poverty related office tasks, while the other 75 performed home visits and energy efficiency interventions.

Between March and July they visited 3,200 households: 60% of the households visited suffered from moderate or severe energy poverty and 13% had suffered basic supply cuts and had an average debt of €348. Only 33% were aware of the existence of the 'Social Bond' (Spanish rate reduction).

In total, **450 cuts were handled by PAE service providers**, most of which (225) provided notifications of gas supply cuts. A total of 118 direct home interventions took place for the improvement of energy efficiency.

Budget / Funding

- PAE pilot project: €88,000
- PAE extension plan: €4,450,380
- Employment plan: around €2.5 million

Energy Assessment Points



Unique factors / Additional value

Long-term unemployed citizens felt empowered in their work and felt that they were helpful to society. They also showed empathy towards people in energy poverty situations, as they themselves had experienced energy deprivation.

Constraints / Lessons learned

Neither the City Council nor the third sector organisations knew how to enforce the new law against energy poverty. A process of mutual learning arose for both sides. The social services office, which at first did not appreciate the role of the PAEs, appreciated their added value and importance at the end of the pilot project.

Evolution / Future Prospects

Other smaller municipal councils in Catalonia have requested and adopted the same practice of training the unemployed as energy advisors: Viladecans, Girona, Figueres and Cornellà de Llobregat.

More information

Main project page (in Catalan):

<http://habitatge.barcelona/ca/serveis-habitatge/tens-problemes-pagar-habitatge/drets-energetics>





Workshops on energy saving and the optimisation of electric bills



Type of intervention:



Geographical scope:

Municipal level practice
[City of Cádiz, the Province of Cádiz, Spain]

Leading stakeholder:

City Council

Leading organisation

The Energy Transition Board of Cádiz (Mesa de Transición Energética de Cádiz)

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

Ongoing since January 2016

Energy savings

N/A

GHG reductions

N/A

Financial savings

The minimum annual savings per resident after bill optimisation is €100, on average around €180. In some cases savings have reached €400

Short description / Aims and objectives

The volunteers of the Energy Transition Board of Cádiz (an area for citizen participation promoted by the City Council of Cádiz) received specific training and behaviour workshops on domestic energy savings and the optimisation of electric bills for the different neighbourhoods of the city at local social associations. This project promotes collaboration and co-responsibility among neighbours, civil organisations and the City Council itself, for the adoption of an energy model based on solidarity and mutual help.

The City Council of Cádiz agrees on both the timeline and the logistics with civil organisations, and provides materials for dissemination (advertisements, posters, etc.), in addition to advertising the workshops. The associations collaborate on sharing information between their partners and neighbours, and the members of the Energy Transition Board of Cádiz conduct the workshops.

The workshop lasts 1.5 hours and cover problems concerning the current energy model and its alternatives (15min), electricity bill optimisation (45min), and how to save energy at home implementing either no-cost or low-cost measures (30min).

Its main goal is: to help families pay much lower bills, to promote a conscientious and responsible energy culture, and to involve families in a positive and empowering way. Although people of all ages and conditions have participated, the beneficiaries have mostly consisted of people over the age of 50.

The dates of the workshop are pre-determined: in the social affairs offices, the workers (who received training in energy saving and the optimisation of bills in 2016) provide the workshop calendar to those requesting assistance for the payment of their electric bills. The workshops are conducted by a volunteer and accompanied by a support worker, who can solve any problems that may arise.

The Cádiz Energy Transition Board holds evaluation meetings every two weeks. Public acceptance, assistance, and any difficulties and recommendations are discussed, in order to improve both the presentation and the way the workshops are conducted.

Target group / beneficiaries

Cádiz residents.

Outcomes

In 2016, 25 workshops were held, with between 10 and 40 participants. More than 400 residents of Cádiz have received energy saving training.

Budget / Funding

- Training: Volunteers
- Advertising and posters: €15,000
- Materials: €500

Unique factors / Additional value

The Energy Transition Board, through direct contact and dialogue with the residents of Cádiz, has identified the main problems relating to energy poverty in the city.

This requires co-responsibility and solidarity among city residents. Awareness and empathy are combined with the need for a change in the energy model, with direct assistance to families through energy empowerment (which stems from knowing how to interpret the information on an electrical bill). This empowerment also protects families, as they are informed about the bad practices implemented by energy companies and are advised on how to respond.

Workshops on energy saving and the optimisation of electric bills



Constraints / Lessons learned

A large section of the population has no knowledge about how to interpret their electricity bills. The idea of a contracted power (more amperes for using appliances simultaneously) is not understood, and as a rule, the charges applied are incomprehensible. Users do not know their tariffs or how to use their appliances efficiently.

In a 30 minutes session participants can be taught how to optimise their contracts with the energy suppliers. Trainers must know their subject and participants should be accompanied, at least during the first workshops, by someone who supervises the content.

Evolution / Future Prospects

During the first year the workshops have been carried out in neighbourhood associations throughout the city. In 2017, workshops were held for all types of associations, prioritising those that work with families in situations of economic or social vulnerability, while providing assistance for the payment of their bills (through NGOs such as Caritas, the Red Cross, Cardijn Foundation and Mujeres de Acero, etc.). Later on other options will be explored.

More information

Article on the project (in Spanish):
<http://institucional.Cádiz.es/area/Mesa%20de%20transici%C3%B3n%20energ%C3%A9tica/2430>





A Catalogue of Good practices against Energy Poverty for the Province of Barcelona



Type of intervention:



Geographical scope:

Regional level practice
[Province of Barcelona:
311 municipal councils]

Leading stakeholder:

NGO/Public authority

Leading organisation

Diputació de Barcelona:
The Regional Authority of
the Province of Barcelona

Transferability [3]

The practice can be
physically implemented
with minimal cost

Implementation
timeframe

6 months in 2015

Energy savings

Indirect
(Not quantified yet)

GHG reductions

Indirect
(Not quantified yet)

Financial savings

Indirect
(Not quantified yet)

Short description / Aims and objectives

Energy policies remain under the jurisdiction of the Spanish central government. Municipal councils have less authority, but as their social services departments are dealing with issues related to energy poverty on a daily basis, they need to provide a solution. Some municipalities in the Province of Barcelona have taken action, while others haven't. This catalogue of good practices against energy poverty was a response to municipal appeals for a planned response and options on how to perform at a local level.

The aim of the catalogue was to understand how the social services of the municipalities are dealing with energy poverty and what barriers and needs they have encountered. It sought to diagnose the state of energy poverty problems in the region, in order to be able to plan a more informed response. The main gaps and barriers were identified within these actions, as well as any hidden opportunities.

Target group / beneficiaries

Municipal administrations in the region.

Outcomes

Methodology: 310 municipal groups were investigated through surveys, interviews and focus groups. There were two main focus groups:

- One with representatives of the energy sector, both from the private and public sectors
- The other with representatives of the social care sector, also both from private and public institutions

In a third focus group, both sectors were mixed. The municipal actions were classified in three main domains: Detection and Diagnosis, Awareness Raising, Training and Capacity Building.

The catalogue showed a clear picture of the energy poverty in the Province of Barcelona and the responses undertaken at local level. They were accompanied by specific recommendations on improvements, a catalogue of actions, and a list of national and international best practice. It served as a guide for municipal governments on how to take action against energy poverty, and it illustrated the need for cooperation between different relevant actors.

Budget / Funding

Funded by the Provincial Government of Barcelona.

Unique factors / Additional value

The catalogue provided tools, ideas, and good practices for promotion at local level. It showed that despite many factors in the energy poverty field depend on the central government; local authorities also have room to act, if their departments cooperate. Therefore, a more resilient response could be achieved, while optimising funds and preventing duplicated expenses.

The analysis was made from an overall/holistic perspective. Instead of the current reactive response to an emergency, implemented by the social services, an integrated preventative assistance approach for the local policies could be introduced; therefore providing multiple benefits and synergies. Other methods of identifying energy-poor households could be adopted, rather than solely via social services.

Constraints / Lessons learned

At local level, many of the identified initiatives are possible and have great potential for replication.

A reactive, not a preventive approach is still the main approach used.

Municipal governments were not gathering the specific figures on energy poverty. This kind of classified information is needed in order to improve diagnostics and policies.

A Catalogue of Good practices against Energy Poverty for the Province of Barcelona



In Spain, energy poverty refers to electricity, gas and water. The water sector is currently the only one administered by the municipal authorities and the figures showed how this supply was less problematic than electricity or gas supplies. It might be due to the fact that, as a public tender, the follow-up of the contractors is more exhaustive and they are more likely to cooperate with the council departments than the electricity and gas supply companies that operate in the free market.

Evolution / Future Prospects

The Provincial Government of Barcelona is already implementing some actions. The catalogue was used by them for planning initiatives.

More information

Project website:
<http://www.diba.cat/web/benestar/pobresa-energetica>





Self-Financing Communities (CAF-ACCIO)

SPAIN



Type of intervention:



Geographical scope:

Neighbourhood level practice
[Catalonia, Spain]

Leading stakeholder:

NGO

Leading organisation

ACAF and Ecoserveis associations

Transferability [3]

The practice can be physically implemented with minimal cost

Strong relationships and confidence among the members of the community are a crucial element for the successful implementation of the project. The methodology from Spain could be applied to any European country

Short description / Aims and objectives

A large subgroup of the vulnerable population is composed of newcomers from impoverished countries. The lack of a relationship network, access to bank credit in their new country, and conditions of economic uncertainty, are often contributing factors to energy poverty.

This project combines the expertise of Ecoserveis in fighting energy poverty, with the experience of self-funded communities (CAF) from the Associació de Comunitats Autofinançades, ACAF (Association for Self-Funded Communities). The practices of self-funded communities developed by the ACAF have been carried out in African, Latin American and Asian countries for decades, and many people from these areas already know about them.

The project was implemented between October 2015 to October 2016 in seven self-funded communities in Catalonia, which were selected after taking into account geographic diversity, different kinds of users, and various operating group models. However, the methodological guidance and social interventions developed by the project represent a starting point, not a goal. During 2016-2017, the ACAF and Ecoserveis took a step forward and began training newcomers in the methodology of self-funded communities, to provide a real solution against energy poverty by means of mutual aid.

Target group / beneficiaries

The initial part of the project targeted migrants from Africa and South America who had been living in Catalonia for at least 3 to 4 years, and who were members of established communities with strong relationships and trust levels (usually around 10-15 people). The projects targeted migrants who do not have money to spend on energy efficiency improvements in their homes and who were likely to stay in their dwelling for at least three years.

Outcomes

By October 2015, seven self-financing communities were involved in the project, which consisted of approximately 750 people aged between 30 and 70, with middle and low-income levels (under €12,000 per year in Spain).

The activities in the project consisted of meetings, interviews and planning actions for each CAF:

- The preparation of a workshop on domestic energy use and the prevention of energy poverty among CAF members
- Workshops on basic supply bills for residents and CAF members
- Service-learning workshops in the homes of CAF members (in which they learn to install energy-efficient, low-cost materials)
- The co-financing replacement of electrical energy-inefficient appliances
- An explanation of the social intervention modelling order to prevent energy poverty in volunteer projects which are against energy poverty

A guide was developed, explaining the self-financing system, the methodology developed for Catalonia on reducing energy consumption and bills, and the intervention model. Training for social workers was conducted at the end of the initial phase of the project.

Budget / Funding

The final budget approved for the development of the project 'Self-funded Communities: A Collective Tool to Prevent Energy poverty' was €37,200, of which €27,800 was awarded by the 'La Caixa' social projects organisation, which represented funds amounting to 75% of the grant.

Phase 2: €57,900 grant from 'la Caixa' (2016-2017)

Self-Financing Communities (CAF-ACCIO)



Unique factors / Additional value

The initiative has promoted empowerment and self-sufficiency, helping participants to avoid dependence on banks and social service aid, while encouraging energy-saving habits and improvements at home.

During the first stages of the project, the ACAF found that a large amount of loans requested by groups were used to pay the bills of those who could not afford basic supplies, so energy efficiency preventive measures were needed to tackle the root of the problem.

Constraints / Lessons learned

Strong relationships and mutual aid among the members of the community were vital for the successful implementation of the project among self-financing groups.

The results of energy-saving improvements are only visible in wintertime, but are crucial for beneficiaries. In this case, energy efficiency measures were implemented rather late, during the spring and the summer.

Evolution / Future Prospects

Falta texto.

More information

ACAF website:

<http://www.cafaccio.cat/>

Ecoserveis website:

<http://www.ecoserveis.net>

Implementation timeframe

Phase 1:

October 2015 to 2016

Phase 2:

October 2016 – still ongoing

Energy savings

Around or less than 10% in consumption, 30% in energy bills and other essential improvements.

GHG reductions

No data available

Financial savings

Between 35-40% during the initial phase, i.e. the optimisation of energy bills





Type of intervention:



Geographical scope:

Municipal level practice
[Catalonia, Madrid,
Aragon and Andalusia]

Leading stakeholder:
NGO

Leading organisation

Ecoserveis Association
and the ABD Foundation

Transferability [3]

The practice can be
physically implemented
with minimal cost

*A partnership between an
environmental and social
organisation is needed, in
order to combine techni-
cal knowledge and social
insight and access. To-
gether they should produce
educational materials, and
identify and contact target
groups*

Short description / Aims and objectives

The Fuel Poverty Group, FPG, is a network of people and organisations acting against energy poverty. It was set up by Ecoserveis, an energy and environmental non-profit organisation, and by ABD, a social foundation with experience working with engaged volunteers. The project timeline was as follows:

- 1) ABD created a team of volunteers from universities, neighbourhood organisations, and companies
- 2) Ecoserveis trained the volunteers to become energy advisors
- 3) The volunteers became a tool for mobilisation and citizen engagement against energy poverty. As such, they visited households and advised vulnerable consumers on how to increase energy efficiency in their homes

The Fuel Poverty Group has developed a strategy based on prevention and direct action against energy poverty, by training volunteers to be energy advisors in neighbourhoods, and by carrying out on-site visits within households.

Target group / beneficiaries

Citizens are provided with information and empowered to become informed consumers aware of saving strategies for their utility bills. The volunteers become agents of change and social transformation in their immediate environment. Two target groups:

- 1) Volunteers with various professional backgrounds, from universities, social sector organisations and companies
- 2) Socially vulnerable groups who receive the information

Outcomes

The Fuel Poverty Group has over 100 volunteers, who have supported approximately 1,100 vulnerable people.

Since the beginning of 2013, 8 training courses for volunteer groups of around 20 people have been carried out. The volunteers attended a 10-hour training course on the specifics of energy literacy (use of energy, energy and water bills, tariffs and energy market), how to carry out assessment procedures, and social approaches to inform people about strategies for reducing energy consumption.

The volunteers were permitted to carry out three main activities with the support of the two NGOs. A minimum of two people were needed to organise community workshops on energy use. This included managing helpdesks; offering individual assessment and advice for people who suffer from energy poverty. A further step involved conducting a simple energy audit or diagnosis in vulnerable households, by Ecoserveis professionals and volunteers. The NGOs were responsible for finding venues for conducting workshops and advisory sessions, and did so through partnerships with local organisations, such as neighbourhood associations, the social services, and training centres.

Budget / Funding

The project was backed by municipal grants, grants from the Catalan Regional Government, and grants from private companies.



Unique factors / Additional value

The project has established a strong partnership between an energy-centred NGO (with technical knowledge) and a social organisation that deals with sensitive societal challenges. The mutual learning process has enriched the initiative and the future projects of both organisations.

The energy advisory services aim to increase the self-sufficiency and dignity of the most vulnerable sections of the population, providing them with the knowledge and resources they need in order to enhance their access to quality education and decent housing.

Constraints / Lessons learned

The retention of volunteers is an ongoing challenge. On average only 10-20% stayed with the project. A mailing group, monthly meetings and weekend actions/interventions are used to keep the interest and engagement of the volunteers.

The lack of available funds for recruiting a local coordinator to promote engagement among the volunteers could be a constraint or delay-causing circumstance in the future.

Evolution / Future Prospects

The group has local representatives in the region of Andalusia, which has increased in 2017. The Energy Poverty Group has been introduced in the provinces of Madrid and Aragon.

The project is currently in the process of strategic reconsideration and the introduction of innovative practices.

More information

Project website:
<http://energiajusta.org>

Project website (Ecoserveis):
<http://www.ecoserveis.net/en/fpg-tots-amb-energia/>

Implementation
timeframe

The Fuel Poverty Group in
Catalonia was founded in
2013 and it is ongoing

Energy savings
N/A

GHG reductions
N/A

Financial savings
N/A





Catalan Law 24/2015 on Urgent Measures to address Energy Poverty Emergencies



Type of intervention:



Geographical scope:

Regional level practice [Catalonia, Spain]

Leading stakeholder:

Regional Government, grassroots

Leading organisation

The Alliance Against Energy Poverty (APE), the Platform for Mortgage Affected People (PAH) and Observatori DESC (Social and Cultural Ecobomic Rights, from Catalan Drets Econòmics Socials i Culturals)

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Short description / Aims and objectives

Electricity prices in Spain are the fourth most expensive in Europe, as consumption accounts for only 40% of electricity, water and gas bills. A 60% increase in electricity prices has occurred since 2008. The price of water has increased by 65% since 2008 and the Spanish Association of Environmental Sciences has noted that in the Barcelona Metropolitan Area alone, the number of water supply cuts rose from 27,359 in 2011 to 72,039 in 2012.

In Spain, when a consumer does not pay their energy bills for a specific period of time, they receive a notification, and if they do not pay the next bill then their electricity supply is cut. A new Catalan law aims to change this practice. Law 24/2015 states that the supply company must notify the social services about any upcoming supply cut off due to non-payment. If after investigation the social experts conclude that the household is vulnerable, then the supply cut will be prevented.

The law ensures the right of access to drinking water, electricity and gas supplies for those living in Catalonia. It resulted from a legislative citizens' initiative that was made law by a majority vote in the Catalan Parliament July 2015. The main contributors were the Alliance Against Energy Poverty, the PAH and the DESC Observatory.

Target group / beneficiaries

The beneficiaries are residents in Catalonia who suffer from energy poverty. Targeted organisations include electricity, water, and gas suppliers, as well as social service offices at municipal level.

Outcomes

The law guarantees the right of all people to basic supplies of water, electricity and gas. The breach of the imposed obligations can result in fines of up to €90,000. A legal process against those energy companies that break the law may be initiated by public institutions, such as a regional government, as in a recent energy-poverty death case in Reus, in the Province of Tarragona in November 2016. An 81-year old woman living alone, died in her home because of a fire, which had been started by a candle – this had been her only light source for the previous 2 months, after her electricity had been cut off.

Many electricity, gas, and water providers operating in Catalonia follow the provisions of the law. It has prevented around 39,000 supply cuts, according to the Regional Government of Catalonia (December, 2016). The number of companies applying the law grew after the death case in Reus, as companies sought to prevent more tragedies and avoid the associated media attention.

Budget / Funding

There are incurred costs for energy suppliers and the municipal social service offices. A targeted solidarity fund for paying the energy debt of vulnerable households is envisaged.

Unique factors / Additional value

The law is a result of a legislative citizen's initiative.

It applies the principle of precaution, stating that energy suppliers cannot cut off a consumer before reporting their situation to the social services. If the latter discovers that the household is vulnerable, their supply must not be cut off. Household debt payments are planned to be paid for by a solidarity fund against energy poverty. A fund had not been created by December 2016; these debts have been building up for energy companies since the enforcement of the law.

Catalan Law 24/2015 on Urgent Measures to address Energy Poverty Emergencies



Constraints / Lessons learned

The initial version of the law, as proposed by the social organisations, was also intended to prevent evictions and reduce the risk of homelessness. It established compulsory social rents, the right to relinquish home ownership instead of paying off a mortgage, as well as the introduction of emergency rehousing measures. In April 2016, the Council of Ministers decided to present a Constitutional Appeal against Catalan Law 24/2015, as they stated that the Catalan law violates the concept of property which is established in the Spanish Constitution and Civil Code. Later, the measures regarding the prevention of evictions were annulled, although the articles to ensure the supply of electricity, gas and water to those in situations of social risk were not changed.

One of the challenges for the organisations working within this field is the reduction of debt: the law avoids the energy cuts, but the debt for the family remains.

Evolution / Future Prospects

Other regional communities in Spain are following the example of Catalonia. In November 2016, Aragon adopted its Law on the Reduction of Energy Poverty, introducing similar provisions to the Catalan law. The political party that proposed this law aims to introduce these measures to other regions as well.

A review of the existing Social Bond (a rate reduction aimed at alleviating energy poverty) is expected in the near future as part of the amendments made to Spanish law 24/2013 of the electricity sector. New groups that were previously not covered could become eligible for support, such as people facing supply cuts or the working poor. The Catalan example showed that one sentence in a law, or even an entire law itself, is not enough to protect vulnerable consumers without an operational enforcement mechanism.

More information

APE website:
<http://pobresaenergetica.es/>

PAH website:
<http://afectadosporlahipoteca.com/>

Observatori DESC website:
www.observatoridesc.org

Implementation timeframe

Adopted in July 2015

Energy savings

Indirect
(Not quantified yet)

GHG reductions

Indirect
(Not quantified yet)

Financial savings

Indirect
(Not quantified yet)





Type of intervention:



Geographical scope:

Municipal level practice
[Cornellà del Llobregat,
Catalonia, Spain]

Leading stakeholder:

NGO/City council

Leading organisation

The Municipal Council of
Cornellà del Llobregat and
the Ecoserveis Association

Transferability [2]

The practice can be
transferred but at
significant cost

Short description / Aims and objectives

Run4Energy was the first charity race held for the energy poverty cause in Spain. It took place during the 'Dignity Week' in the city of Cornellà del Llobregat in 2015 NGOs organized various activities for the public which focused on social issues. The aim was to collect money for interventions in vulnerable households, while local residents took part in enjoyable physical activities.

It was an awareness-raising race for local residents with energy poverty-related problems, as parallels can be established between domestic energy consumption and human energy consumption while exercising. Participants who contributed to the energy saving initiative were also locals who took part in various activities, such as dancing workshops, riding electric bicycles, making lemonade, etc. Part of the awareness campaign was based on transforming the energy used by the runners for the race into kWh for the vulnerable households. At the end of the event, the City Council noted the kWh accrued with the organised activities and the calories burned by the participants, and matched it to an equivalent sum of kWh for intervention projects, which are currently being carried out in vulnerable households (including billing optimisation, the distribution of low-cost material packs and individual energy diagnosis and training).

Target group / beneficiaries

All the local residents of Cornellà de Llobregat were targeted as participants in the race, while the energy poor/vulnerable citizens from the city were the beneficiaries, as defined by social service criteria.

Outcomes

In 2015, 800 people participated. In 2016 the number rose to 1,000. Each participant received a bag containing information materials and energy-efficient light bulbs.

With the sum gathered from the race in 2015, 15 households were supported through low-cost energy-efficiency measures, advice, and training.

In the weeks before and after the race, four workshops were organised in the neighbourhood on topics such as energy and gas bills, energy consumption and habits, sound, and efficient lighting.

A guide was produced for municipal councils in the Barcelona Metropolitan Area on how to organise a charity race against energy poverty (i.e. offering awards for the best photos shared on the social media).

Budget / Funding

All interventions were paid by the municipal council, while Ecoserveis contributed with an awareness campaign and human resources.

Unique factors / Additional value

The initiative included sports activities, which are becoming increasingly popular as part of a healthy lifestyle: sports motivation, together with raising awareness and collecting money for preventative actions against energy poverty. It was the first energy poverty race in Spain, where charity races are very popular.

Constraints / Lessons learned

A strong partnership between an organisation with experience in implementing races (in this case the municipality of Cornellà de Llobregat) and an energy expert positively impacted upon the project, because of the knowledge and expertise shared regarding obtaining relevant documentation, permission from the municipality, and security requirements.



Evolution / Future Prospects

After the first two events, the municipal council became interested in establishing an energy office.

An alternative model for private companies could be developed, i.e. for sports or energy sector companies that would like to present themselves as responsible social actors, contributing to efforts against energy poverty by participating and funding such charity events.

As a growing number of people run in cities and share their accomplishments on social media, mobile applications could be used for publicity/broadcasting purposes and to raise awareness about energy poverty. This could be relevant in other cities in Spain, or even internationally.

More information

Project website:
<http://www.ecoserveis.net/en/portfolio/run4energy/>

Implementation
timeframe

The first event took place
in May 2015, the second in
2016, and the third in 2017

Energy savings

77,700 kWh in 2016
108,600 kWh in 2015

GHG reductions

N/A

Financial savings

Around €250 were saved
per household (15 vulnerable
households, after the first race
interventions in 2015)





Type of intervention:



Geographical scope:

Municipal level practice
[Sunderland, United Kingdom]

Leading stakeholder: NGO

Leading organisation

The Centre for Health Economics and Medicines Evaluation, Bangor University in partnership with the Gentoo social housing and sustainability group and Nottingham City Homes

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

12 month implementation. Households were recruited between April and December 2014 to avoid issues relating to seasonality. Data collected at baseline before housing improvements, and again at 6 and 12 months after the installation of housing improvements

Energy savings N/A

GHG reductions N/A

Financial savings

A 36% reduction in energy poverty (according to the 10% threshold definition). Health costs were reduced by 16% to £504, resulting in a £94 cost reduction per household (£50,000 worth of National Health Service cost savings per year). Per household, General Practitioner (GP) visits dropped by 10%; hospital visits by 67%; accident and emergency department attendance by 45%; and inpatient stays by 4% over a six month period.

Short description / Aims and objectives

Energy efficiency boilers and double glazing were installed in 228 households in Sunderland by Gentoo, as part of their 1800-home Energy Saving Bundle scheme. Beneficiaries of the retrofit scheme were surveyed 6 months and 12 months after the home improvement works, to establish their impact on the residents' health and wellbeing, in addition to health service use and energy poverty indicators.

The aim of this research project was to understand the impact that

warmth-related housing improvements have on health, well-being and quality of life of families who live in social housing. It also sought to ascertain the costs and outcomes associated with new warmth-related housing improvements, compared to existing and unmodified social housing.

Target group / beneficiaries

228 households or 473 tenants, living in social housing in Sunderland.

Outcomes

One additional room per house was fitted for heating as a result of the improvement work carried out for 23% of households. Self-reported health statuses improved by 3% and satisfaction with financial circumstances improved by 3%.

Budget / Funding

Jointly funded by Gentoo and Nottingham City Homes; average cost of improving each house £3,725 (new combi boiler at £2,500 per boiler) and double-glazing (£240 per window).

Unique factors / Additional value

This study was one of the first economic evaluations to examine the impact of housing improvements on the health, quality of life, and well-being of social housing tenants.

The findings presented in this cohort and cost-consequence study demonstrated that the retrofitting of new energy-efficient combi boilers and double-glazed windows in social housing could be an effective means of improving health status, reducing anxiety and improving home heating. However, the transference of these effects to mental well-being and health-related quality of life was limited. Applicability of the health-related quality-adjusted life year (QALY) framework therefore appeared restricted. Additional research was needed to develop a housing-specific approach to utility measurement.

Constraints / Lessons learned

The lack of a control group was a major limitation. Recruitment of a suitable control group would have allowed a more robust approach to economic evaluation, such as cost-utility analysis, both to examine the findings and to test economic evaluation methods in this context. It was likely that the 12-month time horizon was too short to demonstrate the full extent of the intervention effects.

Evolution / Future Prospects

A full randomised controlled trial, with parallel economic evaluation, is required in this area of research.

More information

Project website:
<http://cheme.bangor.ac.uk/documents/warm-homes-health-briefing.pdf>

Short description / Aims and objectives

The Eaga Charitable Trust provides financial support for work that contributes to understanding and addressing the causes and effects of energy poverty. It aims to promote a basis of sound evidence in order to underpin decision-making with respect to public health and wellbeing, while combatting energy poverty. The trust encourages effective action in order to ensure fair access to energy services and reduced health inequalities for all groups in society.

The Trustees of the Eaga Charitable Trust encourage Masters students to produce dissertations that relate to energy poverty issues.

Target group / beneficiaries

Researchers working on energy poverty. All types of organisations and individual research consultants may apply for a grant from the Eaga Charitable Trust.

Outcomes

Eaga Charitable Trust grants are consistently oversubscribed. During 2016, applications that addressed one or more of the four subject areas were prioritised. A full list of the projects is available here: <http://www.eagacharitabletrust.org/projects/>

The Trust gives priority to funding proposals that have the potential to inform or influence national perceptions and policies and which have a broad geographical focus. A project that operates at a local level will only be considered for a grant if it clearly demonstrates innovation; identifies the policy relevance of the project; has wide-ranging applicability; and has well developed evaluation and dissemination plans.

Budget / Funding

Grant requests should be within the range of £2,500 and £25,000.

Unique factors / Additional value

The Eaga Charitable Trust provides targeted funding for leading/prominent research projects, in the UK and EU.

Constraints / Lessons learned

The subject of this research needs to demonstrate direct relevance and application to UK energy poverty policy.

Evolution / Future Prospects

The Eaga Charitable Trust has very limited funding available for grants and it is currently spending most of its endowment fund. If the trust is to continue to fund influential policy-related research and action projects, it will require on-going financial support.

More information

Project website:
<http://www.eagacharitabletrust.org/grants-offered/>

Type of intervention:



Geographical scope:

National level practice
[United Kingdom / European Union Member States]

Leading stakeholder: NGO

Leading organisation

Eaga Charitable Trust

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

The Eaga Charitable Trust has been supporting research on the topic for 20 years. The research projects are usually between 1 and 3 years

Energy savings

Indirect
(Not quantified yet)

GHG reductions

Indirect
(Not quantified yet)

Financial savings

Indirect
(Not quantified yet)





The ‘Boiler on Prescription’ Scheme

UNITED KINGDOM

UNITED KINGDOM

Warm Zones Approach



Type of intervention:



Geographical scope:

National level practice
[United Kingdom]

Leading stakeholder:
NGO

Leading organisation

The Gentoo social housing and sustainability group, in partnership with the Sunderland Clinical Commissioning Group (CCG) and the Durham Darlington Easington and Sedgefield (DDES) CCG

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

18 months between September 2014 and March 2016

Energy savings

Around 25% emissions per property

GHG reductions

Each household saved around £125 per annum on their fuel bill

Short description / Aims and objectives

A scheme to enable GPs/family doctors to ‘prescribe’ energy efficiency across the country (double glazing, boilers and insulation) to patients with health conditions exacerbated by living in cold and damp homes. The project attempted to calculate health improvements to those whose homes were improved with energy-efficiency measures.

Target group / beneficiaries

For the pilot phase: 12 homes with very poor insulation, inhabited by people with COPD (Chronic Obstructive Pulmonary Disease) were chosen.

Outcomes

GP appointments dropped by 60%, attendances dropped by 30% and emergency admissions dropped by 25%. Outpatient visits dropped by 22%. The temperature in people’s living rooms and bedrooms rose by over 3°C.

Budget / Funding

Sunderland’s clinical commissioning group provided £50,000, from which energy efficiency measures cost an average of £5,000 per property.

Unique factors / Additional value

The scheme benefits vulnerable families, the National Health Service and the environment. Customers told Gentoo that they were feeling better.

Financial savings

The patients’ energy bills have been reduced on average by 14% (£30 a month), while savings were made to the following National Health Service costs per person: outpatient appointments are estimated to cost the National Health Service about £100, GP visits about £20, and emergency hospital admission costs £2,500 (outpatient visits reduced by a third).

Constraints / Lessons learned

The partnerships with the Clinical Commissioning Groups allowed health data to be used as a measure of success.

Evolution / Future Prospects

Gentoo is also currently working with the Centre for Health Economics and Medicine Evaluation, Bangor University and Nottingham City Homes on the ‘Warm Homes for Health’ project.

More information

Closing report
<http://www.gentoogroup.com/media/1061811/boiler-on-prescription-closing-report.pdf>

Short description / Aims and objectives

Warm Zones delivered an aid package for all types of homes, providing access to gas supplies, new funding, free heating system, benefits and energy advice services. Warm Zones offers up to 100% subsidies for loft insulation and wall insulation (either cavity wall or solid wall insulation), in addition to new boilers, heating controls and other improvements to heating systems.

It aims to facilitate the efficient and effective integrated and appropriate delivery of practical measures, in order to alleviate energy poverty and improve domestic energy efficiency in defined areas.

Target group / beneficiaries

Households not eligible for mainstream grant-funded schemes.

Outcomes

Accessed between 1 million and 440,000 households (in more than 360,000 homes) insulation and heating measures installed.

Budget / Funding

More than 44 million pounds was the value of confirmed secured claims.

Unique factors / Additional value

Warm Zones has a broad range of funders and service providers.

Financial savings

Fuel bills reduced by approx. £37 million.
Income benefits of >£44 million savings to the National Health Service of >£5.3 million.

Constraints / Lessons learned

Not indicated.

Evolution / Future Prospects

Not indicated.

More information

Project website:
<http://warmzones.co.uk/>

Type of intervention:



Geographical scope:

National level practice
[Across the United Kingdom, incl. Northern England, Hull and Humberside, the Midlands, London and the South East]

Leading stakeholder:
NGO

Leading organisation

Warm Zones. A not-for-profit Community Interest Company, and subsidiary of NEA (National Energy Action)

Transferability [2]

The practice can be transferred but at significant cost
Political enthusiasm and support are required

Implementation timeframe

Established in 2000 and ongoing

Energy savings

N/A

GHG reductions

CO₂ reductions of approx. 200,000 tonnes





Type of intervention:



Geographical scope:

Municipal level practice
[10 key UK areas]

Leading stakeholder:

NGO



Leading organisation

Green Vision Energy Ltd. in partnership with the Nottingham Community Housing Association (NCHA)



Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

November 2015 until 2018

Energy savings

Reduction in tenants' energy bills

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

HIP is an innovative solution to help the energy efficiency of households and reduce tenant energy bills. The 'Whole House' approach was chosen as a solution because it uses several technological innovations that complement each other to provide maximum savings; High Heat Retention Storage Heaters, Solar Thermal Hot Water Cylinders, Voltage Optimisation Units, Water Saving Showerheads and Aerator, LED Lighting, and Real Time Energy Monitors.

Target group / beneficiaries

By the end of 2015, measures to 13 properties were successfully installed, while 22 more properties were included in April 2016.

Outcomes

The tenant behavioural changes EPC rating increased.

Additional unanticipated savings were present.

Budget / Funding

£26 million, funded by National Energy Action (NEA) from fines imposed on 'The Big 6' (the leading energy providers in the UK) for not reaching energy saving targets. About 20% of funding comes directly from the NCHA.

Unique factors / Additional value

The Whole House approach is creating synergies and additional savings.

Constraints / Lessons learned

The Whole House approach is likely to require high upfront investment, which will be paid back in the long term.

Evolution / Future Prospects

Commitment to future projects.

More information

Project website:
<https://www.greenvisionenergy.co.uk>

Slide presentation:
<http://www.nea.org.uk/wp-content/uploads/2016/09/Greenvision-Energy.pdf>

Short description / Aims and objectives

A group of 15 local authorities form the Cosy Homes in Lancashire (CHiL) energy support programme. From external wall insulation to new boilers, CHiL is addressing energy poverty in the region and has to date assisted more than 7,000 households. Operating as a partnership has enabled CHiL to utilise a common brand, to access bulk-buying discounts, to share access to legal advice, and to develop an innovative approach to funding; making a Whole House approach to retrofitting possible.

Target group / beneficiaries

The program focuses on energy poor households in the oldest properties, located within the most deprived areas of Lancashire.

Outcomes

- Over 7,000 homes and 17,000 people are now benefitting from warmer homes and lower energy bills
- 1,675 solid wall insulations
- 4,140 cavity wall insulations
- 4,588 loft insulations (including top-ups)
- 520 new boilers
- 5 biomass boilers for blocks of flats, totalling 2,210 kW
- 3,429 households provided with energy efficiency advice

Budget / Funding

Combined public health funding. The local authorities also contribute the expertise of their Energy Officers to CHiL's project.

Unique factors / Additional value

CHiL's major achievement has been establishing working relationships with 15 local authorities and Lancashire County Council, working together to subsidise energy-efficiency measures for the most vulnerable households. This is a rare example of a local authority entering into a contract directly with energy companies in order to deliver a full range of energy-efficiency measures.

Constraints / Lessons learned

One of the challenges CHiL has faced is that the businesses it needs to work with require a single legal entity to deal with. As the largest member of the partnership, Blackpool Council has fulfilled this role so far, but CHiL wants to create a more equal governance structure in the future.

Evolution / Future Prospects

The next step is to establish CHiL as a social enterprise, with the goal of reducing dependence on local authority funding over time.

More information

Project website:
<http://www.chil.uk.com/>

Type of intervention:



Geographical scope:

Municipal level practice
[Lancashire, United Kingdom]

Leading stakeholder:

Government



Leading organisation

Blackpool Council in partnership with 14 Energy and Health authorities



Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

Ongoing since 2014

Energy savings

N/A

GHG reductions

Since coming into force in 2014, the production of 5,600 tonnes of CO₂ has been avoided

Financial savings

N/A





Type of intervention:



Geographical scope:

Neighbourhood level practice
[United Kingdom, Royal Borough of Greenwich and the London Borough of Lewisham]

Leading stakeholder:

NGO

Leading organisation

The South East London Community Energy

Transferability [3]

The practice can be physically implemented with minimal cost

Community groups need funding to ensure the sustainability of their initiative

Implementation timeframe

Working on project bases since March 2015. Currently paused

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

The Energy Café is an energy advisory service run by community groups such as the South East London Community Energy (SELCE), in order to help those living in energy poverty. It is normally staffed by volunteers who provide advice on energy issues to the public. Advice provided by the café has addressed energy market engagement, with the main aim of explaining how to interpret energy bills and improve energy efficiency, instigate behavioural changes, and introduce renewable energy sources.

Target group / beneficiaries

Those targeted are the energy-poor; however limited resources prevent better targeting. Energy shops therefore cater for the needs of those who are fuel poor and those at risk of energy poverty, in addition to those who are not energy poor.

Outcomes

Their ‘People Power’ café program , which was funded by the Ebico Trust, was launched in March 2015 and provided personalised one-to-one advice sessions for 250 households at risk of energy poverty. This took place over the course of the winter months in 2015, across four locations in Greenwich and Lewisham on a bi-weekly basis.

As a winner in a Community Energy Saving Competition, the SELCE delivered a series of innovative pop-up energy cafés over the course of three weeks, during March 2015. 138 people were supported, of which 38% were above 60 years of age, 27% were parents of young children; 26% were disabled; 14% were carers for the disabled or those suffering from long-term illnesses and 29% were recipients of means-tested benefits.

Participants received personalised, face-to-face support to help them switch energy suppliers and improve energy efficiency in their homes. Information was provided on trusted providers of energy debt support.

Budget / Funding

Pop-up energy cafés were implemented as a winning project of the Community Energy Saving Competition, which was managed by the Department of Energy and Climate Change (DECC). The People Power café program was funded by Ebico Trust.

Unique factors / Additional value

Overcoming barriers to seeking advice with the aid of an informal context.

Constraints / Lessons learned

Research findings indicate that energy cafés could provide a key service in identifying those people that may also need help beyond the payment of their energy bills. An efficient use of funds for energy poverty alleviation could involve energy shops acting as a triage service that matches the client to the intervention which best meets their needs, in the cheapest manner. Research concludes that energy shops could contribute to an inter-agency energy poverty alleviation strategy.

However, in order to realise their potential, funders and policy makers should create opportunities for funding and capacity-building in order to support community energy groups. Interagency work and cooperation between community groups, local authorities and health authorities is vital to the success of energy shop initiatives.

Evolution / Future Prospects

The SELCE is committed to tackling energy poverty directly. They will use any financial surplus from their renewable generation work to fund support for those who are most vulnerable. Their initial work on energy poverty has given them a much better understanding of the issues affecting people in SE London. The SELCE will continue to build on this knowledge and seek further funding in order to develop their core activities in this area.

More information

Website: <http://selce.org.uk/tackling-fuel-poverty/>

Short description / Aims and objectives

Green Doctors offer households a range of simple energy-efficiency measures, including low-energy light bulbs, draught proofing, and water saving devices. They also provide guidance to residents if they are eligible to receive government and energy company grants that may help them to install more significant energy saving measures, such as loft or solid/cavity wall insulation and boiler replacements. They offer residents debt assistance and also offer energy tariff or company switching advice. Another important part of the service is advising residents on simple behavioural changes that can help them take control of their energy use. These changes could include heating rooms individually, using energy-saving light bulbs and washing laundry at 30 degrees.

Target group / beneficiaries

Households at risk of energy poverty across London.

Outcomes

33,500 home visits.

Budget / Funding

- - -

Unique factors / Additional value

Not indicated.

Constraints / Lessons learned

Not indicated.

Evolution / Future Prospects

The Green Doctor model has been successfully delivered in partnership with many London Boroughs and Housing Associations. Groundwork creates bespoke programs to tackle energy poverty and associated poor health problems in vulnerable residents, often as part of their Warm Homes, Healthy People programmes.

More information

Project website:
<https://www.groundwork.org.uk/Sites/london/Pages/greendoctorsldn>

Type of intervention:



Geographical scope:

Municipal level practice
[London, United Kingdom]

Leading stakeholder:

NGO

Leading organisation

Groundwork London (NGO)

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

Ongoing

Energy savings

N/A

GHG reductions

50,000 tonnes

Financial savings

£300 on average saved by households





Seasonal Health Interventions
Network (SHINE)

UNITED KINGDOM



Type of intervention:



Geographical scope:

Neighbourhood level
practice

[Islington Borough,
London, United Kingdom]

Leading stakeholder:

City Council



Leading organisation

London Borough of Islington



Transferability [3]

The practice can be
physically implemented
with minimal cost

Implementation
timeframe

Ongoing since 2010

Energy savings

N/A

GHG reductions

15,500 tonnes

Financial savings

At least £3.3 million

Short description / Aims and objectives

The scheme aims to tackle cold and damp homes, as well as other physiological, social and environmental factors. It targets vulnerable residents for seasonal health interventions, and it operates on the principle that most people affected by energy poverty also face other problems relating to health, finance, housing issues, that could be brought to the attention of agencies other than the energy poverty team. SHINE takes a holistic ‘one stop shop’ approach to seasonal health, with one referral leading to an assessment for almost 30 different interventions, including energy efficiency improvements, benefit cheques, fall-risk assessments, fire safety checks, medicine reviews, enablement and befriending services, telecare etc. The network consists of around 100 organisations, and referrals are received from both statutory and volunteer sector services.

Target group / beneficiaries

Those targeted are people considered especially vulnerable i.e. people aged over 75, those with respiratory or cardiovascular diseases, children under 5 in low income families, those with dementia or severe mental illness, those with autoimmune disease and those with haemoglobinopathies (thalassaemia, sickle cell disease).

SHINE is open to all residents in Islington, regardless of housing tenure.

Outcomes

Between December 2010 and October 2016, SHINE received over 12,000 referrals, 2,300 just in 2015/16.

Budget / Funding

Funded by the Islington Council. Funding in the past has been received from the European Commission and the National Health Service. The operational costs of the large network (2,000+ clients per year) are around £145,000, while operational costs to expand would be much less.

Unique factors / Additional value

The holistic ‘one stop shop’ approach. SHINE is a first of its kind; a single point referral system that offers advice and support to Islington residents.

Constraints / Lessons learned

One of the main challenges is achieving cross-working between those departments and external agencies involved in SHINE. This requires a great deal of sustained effort to achieve, but has been made slightly easier by a close working relationship with the local Public Health Team. Many departments were concerned that SHINE may have been interfering with their work, but it has in many cases enhanced their work and led to cross-referrals. They believe this holistic approach is vital in gaining maximum benefit, therefore worth the extra effort in development.

Evolution / Future Prospects

The SHINE model operates in the neighbouring borough of Hackney and elements of SHINE have also been replicated in Lewisham, Wandsworth, Norwich and Hertfordshire. With the inclusion of much of SHINE's learning in the NICE (National Institute for Health and Care Excellence) guidelines on excess winter deaths, further replication is expected.

SHINE is working to encourage neighbouring boroughs in London to follow its lead in tackling energy poverty with this model and to collaborate in doing so. With wider application its partners in the referral network would not be limited by the geographical boundaries of Islington when they are making referrals.

More information

Project website: <http://fuelpoverty.eu/shine/>

UNITED KINGDOM



Short description / Aims and objectives

Oldham Council, the Oldham Clinical Commissioning Group (CCG) and Oldham Housing Investment Partnership (OHIP) signed the country's first ‘Joint Investment Agreement’ to help tackle energy poverty in the Borough.

By reducing energy poverty, the partners hope to reduce demand, and therefore make significant savings in other areas (such as health care and social services). For every individual who has been removed from energy poverty status, Oldham CCG allocated £250 and Oldham Council £50 into a fund for future investment. Additional Support for individuals aged over 50 is provided by Age UK Oldham.

Target group / beneficiaries

Nearly 800 households were supported under the scheme.

- Year 1 = 1,074 (target of 1,000) citizens
- Year 2 = 1,247 (target of 1,200) citizens
- Year 3 = 1,223 (target of 1,200) citizens

Outcomes

- 60% of respondents with a physical health problem felt that the initiative had a positive impact on their health.
- Four-fifths reported a positive impact on their general health and wellbeing.
- Almost all of those who self-reported as being at ‘high risk’ of mental illness on completion of the General Health Questionnaire moved to ‘low-risk’.
- 84% saw a reduction in their fuel bills.
- 96% of respondents found their home easier to heat.
- Attendances and emergency admissions for the participants dropped by 2%.
- Emergency hospital admissions down by 32%.
- GP appointments went down by 8%.
- While the cost of drugs prescribed increased by 14%, this may be due to improved patient management of conditions at home.

Budget / Funding

The initial investment agreement of £200,000 came from the Oldham partners. Oldham Council and the OHIP invested £77,500 each and the Clinical Commissioning Group (CCG) invested £45,000 (this paid for Year 1 of the scheme).

Following this, £300,000 for payment by results (£250,000 paid for by CCG and £50,000 by Oldham Council per annum) has been re-invested for the project to continue (now entering Year 4).

Unique factors / Additional value

Innovative financing of project's further development – by using the ‘payment by results’ method. For every individual removed from energy poverty status, Oldham CCG has allocated £250 and Oldham Council £50 into a fund for future investment.

Constraints / Lessons learned

Not indicated.

Evolution / Future Prospects

The funding of the project is secured with the ‘payment by results’ method.

More information

Project website: http://www.oldham.gov.uk/warm_homes_oldham



Warm Homes Oldham

Type of intervention:



Geographical scope:

Municipal level practice

[Oldham, United
Kingdom]

Leading stakeholder:

City Council



Leading organisation

Oldham Council, the
Oldham Clinical Commis-
sioning Group (CCG) and
Oldham Housing Invest-
ment Partnership (OHIP)



Transferability [2]

The practice can
be transferred but
at significant cost

Implementation
timeframe

Ongoing for 4 years
since 2012

Energy savings

N/A

GHG reductions

N/A

Financial savings

Estimated savings of
nearly £40,000 to the
CCG (Clinical Commis-
sioning Group)





Affordable Warmth Access Referral Mechanism (AWARM)



Type of intervention:



Geographical scope:

Neighbourhood level practice
[Wigan Borough, Greater Manchester, United Kingdom]

Leading stakeholder:

City Council

Leading organisation

Wigan Council and Wigan Borough Clinical Commissioning Group (CCG)

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

Ongoing for 2 years since 2015

Energy savings

Not quantified yet

GHG reductions

Not quantified yet

Financial savings

Savings on hospital admissions could be up to £120,000 per annum

Short description / Aims and objectives

In 2015 Wigan Council sought funding to effectively upscale its existing AWARM scheme in order to target 2,000 new citizens who were at risk of energy poverty.

The scheme ensures the provision of a single-point-of-contact health and housing referral service for people living in cold homes, in line with the UK National Institute for Health and Care Excellence (NICE) Guideline NG6.

Suitable residents are identified through data from the CCG and local GP surgeries. Referrals for the scheme also came from community health services, the fire service, hospital discharge teams and wider primary care services, in addition to referrals from health, housing and social care professionals visiting people in their homes.

Target group / beneficiaries

2,000 new people at risk of being in energy poverty and who were predicted to have unplanned hospital admissions due to illnesses caused or exacerbated by living in a cold home.

Outcomes

To be evaluated.

Budget / Funding

The £200,000 revenue cost is being provided by Wigan Council and Wigan Borough CCG through a joint commissioning fund, whilst £100,000 has been awarded by the government to top-up the capital cost of heating and insulation measures.

Based on previous delivery, the cost of processing an AWARM referral was £125. By upscaling the program to 1,000 referrals per year, the cost has been reduced to £100 per referral.

Unique factors / Additional value

Significant funding from the CCG achieved on an ‘invest-to-save’ basis using a ‘payment-by-results’ model.

Constraints / Lessons learned

Due to heavy workloads, it was difficult to motivate some practitioners to spending a little extra time with their patients in order to find out if their housing conditions are impacting upon their health. This is despite AWARM making the referral process as easy as possible, such as through the RCGP Single Click Referral Module. To overcome this, AWARM identified an enthusiastic person in each GP practice and delivered a comprehensive training session for all referrers, and provided free Keep Warm Packs for practitioners to hand out to patients who agreed to be referred to AWARM.

Evolution / Future Prospects

An academic evaluation of AWARM is being undertaken by Sheffield Hallam University using pre and post intervention questionnaires in order to identify if there has been any improvement in health and wellbeing, and a consequential reduction in hospital admissions and costs to the UK National Health Service.

More information

Blog site:
<https://www.vcatrafford.org/news/greater-manchester-awarm-affordable-warmth-access-referral-mechanism>





ACHIEVE - Actions in Low Income Households to Improve Energy Efficiency through Visits and Energy Diagnosis

Type of intervention:



Type of stakeholders:

Government agencies, NGOs

Leading organisation

CLER, Network for Energy Transition (France [coordinator]), the Energy Agency of Plovdiv (Bulgaria), Groupe Energies Renouvelables Environnement et Solidarités (France), the Severn Wye Energy Agency Limited (UK), Caritas Association Frankfurt (Germany), Focus Association for Sustainable Development (Slovenia), Institut de l'Ecologie en Milieu Urbain (France)

Geographical scope

Bulgaria, France, the United Kingdom, Germany, Slovenia

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

April 2011 to April 2014

Energy savings

No data available

GHG reductions

On average, 320 kg of CO₂ per year-per household. 640,000kg for 2,000 visits.

Financial savings

An average saving of €150 per household, or €300,000 for the 2,000 visited households

Short description / Aims and objectives

The long-term unemployed, volunteers, and students were mobilized and trained to develop a large-scale energy advisory service for low-income households facing difficulties with their energy bills. The service was based on home visits, whose main purposes were:

- 1) To understand the energy consumption, bills, and habits of vulnerable consumers, and to check their appliances with a set of reporting/analysing tools
- 2) To distribute and install a set of free energy and water saving devices, and give advice to the households on how to implement further practical measures for saving energy
- 3) To analyse which longer-term solutions may be provided in order to improve the situation of those affected by linking local actors to a concerted local action plan

Target group / beneficiaries

Beneficiaries of the projects are low-income households. Those also targeted are the long-term unemployed, students or volunteers, who were trained to become energy advisors.

Outcomes

Around 2,000 households were visited by the 150 advisors who were trained during the project. The duration of the training course for energy advisors was 50 hours on average (plus the time dedicated to their supervision during the entire project). Most of the visits lasted an average of 60-90 minutes (twice, as there were 2 visits scheduled).

Comprehensive local action plans were set up in each pilot area. Between 15 and 30 people participated at each site level in focus groups, representing 7 to 14 different organisations or key stakeholders. A variety of materials and tools were created for the project: training modules, guides for the trained advisors and for structures hiring the advisors, calculation tools to assess the actual and future consumptions of the households before and after a visit.

Budget / Funding

Total budget of €1,307,536; 75% of which was funding from the EU.

An average of €44 from various free energy and water saving devices were distributed to the visited households.

Unique factors / Additional value

Provided practical experiences and skills for students and long-term unemployed people, allowed them to study energy-related disciplines, therefore making them more competitive on the job market.

The aim of ACHIEVE was to contribute to practical solutions (energy use and behaviour) and structural solutions (retrofitting buildings) in order to reduce energy poverty.

Constraints / Lessons learned

When recruiting energy advisers to be trained, a particular focus should be put on their social and communication skills; the project found that technical capacities can be strengthened, but communication skills are harder to learn.

Time dedicated to 1 visit was much higher than expected, as people had a lot to say to advisers (sometimes beyond the core purpose of the visit).

The long-term unemployed or volunteers trained to perform the visits could leave the program when another job opportunity arose.

Evolution / Future Prospects

The Bulgarian and Slovenian organisations participated in a large European project on energy poverty (REACH) afterwards. France adopted the Energy Transition Law in 2015.

More information

Project website: <https://ec.europa.eu/energy/intelligent/projects/en/projects/achieve>

CASH - Cities' Action for Sustainable Housing Results



Type of intervention:



Type of stakeholders:

City Council and Regional Governments

Leading organisation

CASH is a network of 11 partners (10 cities and one region) led by Echirolles City

Geographical scope

France, Italy, Bulgaria, Hungary, Germany, Denmark, Netherlands and the United Kingdom

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

2009 to 2013

Energy savings

Indirect (Not quantified yet)

GHG reductions

Indirect (Not quantified yet)

Financial savings

Indirect (Not quantified yet)

Budget / Funding

...

Short description / Aims and objectives

As a contribution to Climate Change issues, the network sought to reduce energy consumption both *of* buildings and *in* buildings. It also sought new solutions for the renovation of social and affordable housing units, in order to improve their energy efficiency and to influence user behaviour through public involvement.

The project aimed to help reduce energy consumption in buildings in order to help their occupants. It proposed new solutions and promoted new policies for the sustainable renovation of social and affordable housing units in the European Union.

Target group / beneficiaries

Target groups were the participating municipalities/mayors and local stakeholders, including citizens, while beneficiaries are low-income households (target groups of the newly developed housing policies).

Outcomes

Through the organisation of 6 thematic seminars on renovation and EE, and through the elaboration of local action plans with local support groups created for that purpose, partners exchanged and provided knowledge, experience and technical know-how.

The 11 partners in the URBACT project CASH combined their own experiences with input from experts in order to produce a guide on the integrated energy-efficient renovation of social housing, with advice for obtaining higher levels of EU support. The partners also took these findings back to their own Local Support Groups, where they were added to Local Action Plans.

Another input was a compendium of cities' actions with pilot projects and actions in course and planned 'Cities' Actions for Sustainable Housing'.

In April 2013, Mayors in partnership with CASH signed a Declaration of Intent on Energy Social Housing and Energy poverty.

Unique factors / Additional value

The project aim was to help reduce the energy consumption of buildings and to assist their occupants. It proposed new solutions and promoted new policies for the sustainable renovation of social and affordable housing units in the European Union.

Constraints / Lessons learned

As the high technical potential for achieving energy savings in housing was not being fulfilled, CASH's partners understood there were other factors that needed to be taken into account. One was the question of identity, where housing type can take on a predominant role in cities, neighbourhoods and even individual families. Others concerned quality of life and living costs. Unfortunately, the most affordable housing is often of the poorest quality, especially in countries where there is no governmental system for social housing. Renovation costs for individual households have to be affordable, and be undertaken with acceptable costs for house owners.

Evolution / Future Prospects

In cities where CASH took place, Local Action Plans started to be implemented, General Practitioner processes improved, and lasting relationships increased. Rhône-Alpes, for example, is strengthening its working relations with various local partners. For Echirolles, systematic asset management has become a priority. Frankfurt is planning the development of a refurbishment roadmap for its entire housing stock. The situation and necessary renovation of all houses in the city are being analysed and will form the basis of a renovation plan.

As a direct consequence of CASH, Les Mureaux has officially launched the Seine Aval Platform for Energy Efficiency, a completely new taskforce concept and an innovative process for education, training, research, and communication on energy efficiency.

More information

Project website: <http://urbact.eu/cash-cities-action-sustainable-housing>

Cash guide: <http://urbact.eu/cash-results>





EC-LINC - Energy Check for Low Income Households

Type of intervention:



Type of stakeholders:

Companies, Governmental agencies, NGOs

Leading organisation

Berliner Energieagentur GmbH (Germany - coordinator), e7 Energie Markt Analyse GmbH (Austria), Energia Klub Környezetvédelmi Egyesület (Hungary), Koepel van Milieuondernemers in de Sociale Economie (Belgium), Changeworks Resources For Life (United Kingdom), Caritasverband für das Erzbistum Berlin e.V. (Germany), Die Energie- und Umweltagentur NÖ (Austria)

Geographical scope

Austria, Belgium, Germany, Hungary, and the United Kingdom

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

April 2011 to February 2014

Energy savings

Electricity savings of 284.81 kWh/h per year and 290 MWh during the project. Savings of heating energy of 1,021 kWh/h per year and 1,040 MWh during the project.

GHG reductions

197 kg CO₂ savings per household/per year; 755 kWh savings per household for €35 in Hungary.

Financial savings

N/A

Short description / Aims and objectives

The project 'Energy Check for low income households' established tailored information and consultations to assist low income households to help them save energy and water at home. No-cost and low-cost measures were combined within an advisory service which was specially designed to provide practical knowledge on energy efficiency and viable advice to households who may be suffering from energy poverty.

Target group / beneficiaries

Energy-poor families and the long-term unemployed/low-skilled.

Outcomes

During the home visits, advice was provided on the efficient use of energy and water. Small devices such as compact fluorescent lamps (CFLs) and tap aerators were provided for free. Each household received an individual report with a description of their potential savings and further advice on changing their behaviour.

Training courses were held for 24 energy advisors. There were a total of 1,019 consultations, which were split per household. For example, 265 low-income households were visited by 7 energy consultants in the municipality of Óbuda, Budapest.

Budget / Funding

Overall budget of €806,636, including €604,977(75%) from the EU.

Unique factors / Additional value

The re-integration of the long-term unemployed or low-skilled workers into the regular job market, by training them to advise households on saving electrical power, water, and heating energy.

The development and implementation of replicable energy consultation schemes tailored for low-income households in order to achieve significant and quantifiable savings of electrical power, water and heating energy through low-cost or no-cost measures.

Raising awareness with respect to the rational use of energy in low-income households in direct consultation in their homes; through immediate action and the installation of small saving devices.

Constraints / Lessons learned

It was not possible or expedient to find a common definition of energy poverty in Europe during the project duration. However, in 2013 the partners agreed on a 'soft definition', i.e. a person is energy poor if he or she has financial difficulties when paying for a reasonable level of energy consumption.

Raising the interest of private and low-income household occupants is a much specialised task. Promotion materials and measures to address this target group have to be tailored carefully. If some households could be reached, then the chances of obtaining support via word-of-mouth recommendations from the households are very positive. Local networks are helpful, as they may already have access to the target group.

Evolution / Future Prospects

Local or regional networks are the crucial point for pilot projects, such as those created in EC-LINC. The projects need political support and good will to be successful and sustainable. They possibly need further financial support from stakeholders (utilities, municipalities or other local actors). A good basis is needed from the existing national or local frameworks, to enable conditions that stimulate the implementation and performance of the project (e.g. communal climate protection or energy efficiency plans etc.)

More information

Project website: <https://ec.europa.eu/energy/intelligent/projects/en/projects/ec-linc>

ECOLISH – Energy Exploitation and Performance Contracting for Low Income and Social Housing



Type of intervention:



Type of stakeholders:

Companies, city councils, universities, governmental agencies, NGOs

Leading organisation

Cauberg-Huygen Raadgevende Ingenieurs bv (Netherlands), Municipal Council of Heerlen (Netherlands), Klima-Buendnis / Alianza del Clima e.V. (Germany), Techem Energy Services GmbH & Co. KG (Germany), the National and Kapodistrian University of Athens (Greece), the Pieriki Local Development Agency S.A. (Greece), the Municipal Council of Pecsvarad (Hungary), the University of Pecs (Hungary), Ogre County Council (Latvia), Arpas Energy Contracting bv (Malta), Riga Technical University (Latvia), the Federation of European Heating and Air-conditioning Associations (Netherlands)

Geographical scope

Germany, Greece, Hungary, Latvia, Malta, the Netherlands

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

December 2006 to November 2009

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

The project sought to overcome barriers in promoting energy efficiency in low-income households and for residents of social housing, by organising and evaluating pilot projects using Energy Performance Contracting (EPC) and Energy Exploitation in four European countries (the Netherlands, Latvia, Greece and Hungary).

Energy Performance Contracting combined with third-party financing is theoretically a good solution to this problem, as an investment can be made with limited upfront investments from the occupants. The ECOLISH consortium therefore tried to demonstrate the feasibility of this concept in four European countries.

Target group / beneficiaries

Vulnerable households, residents of both private and social housing.

Outcomes

This project achieved:

- Template and guidelines for Energy Performance Contracting and Energy Exploitation models
- Detailed implementation plans for target groups in the EU, including municipalities, housing corporations, real estate developers and utilities
- Follow-up pilot projects in a number of European cities and municipalities
- Improved indoor environment and health for occupants, in combination with low energy costs

Budget / Funding

€1,289,973, including €644,986,50 from the EU.

Unique factors / Additional value

The ECOLISH project is aimed at answering a challenging question: how can multi-residential buildings and single family dwellings with poor energy efficiency be refurbished, when their occupants do not have the financial resources with which to invest in refurbishment works themselves?

Constraints / Lessons learned

Technical solutions to refurbishing these multi-residential buildings are not a problem (although comfort standards and expectations differ greatly from one country to another).

To implement an EPC, the occupants need to organise themselves into a legal entity and this can be highly challenging, due to individual and shared ownership issues. Public bodies could improve their roles in supporting/organising the residents. Furthermore, the lack of strategic long-term vision by the residents hinder the implementation of more robust improvements (e.g. improving the building envelope), which require longstanding repayment terms.

The financing by ESCOs of individual homeowners is possible for all pilot locations; however ESCOs need to gain the trust of residents. Furthermore, because of their low incomes, the residents find it difficult to obtain credit. An offer from an ESCO should therefore include a clear plan for providing residents with financial resources. The use of mortgages and revolving funds should be adapted to this situation.

Evolution / Future Prospects

Follow-up pilot projects in a number of European cities and municipalities

More information

Project website: <https://ec.europa.eu/energy/intelligent/projects/en/projects/ecolish>



ELIH MED - Energy Efficiency in Low Income Housing in the Mediterranean

Type of intervention:



Type of stakeholders:

Companies, city councils, universities, governmental agencies, NGOs

Leading organisation

ENEA (Italy, Coordinator) and 18 other partner organisations from Belgium, Cyprus, France, Italy, Malta, Slovenia and Spain

Geographical scope

Belgium, Cyprus, France, Italy, Malta, Slovenia and Spain

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

The ELIH-MED was implemented from April 2011 to December 2014

Energy savings

Existing buildings in Cyprus had energy performance improvements by at least 30% or by 2 Energy Classes, according to the national methodology for the energy certification

Short description / Aims and objectives

The ELIH-MED project focused on improving the energy efficiency of low-income dwellings in Mediterranean countries. 7 countries covering the whole Northern Mediterranean (MED) coastline worked together to improve energy efficiency and promote energy saving in low income housing (LIH) in the MED area.

The main objective of ELIH-MED was to identify and test the feasibility of cost-efficient technical solutions and innovative financial mechanisms. It was backed by the ERDF (European Regional Development Fund), through large scale pilot actions.

The project achievement was extended to the entire Mediterranean area, taking into account the differences of the region in comparison to the rest of Europe.

As a strategy project, ELIH-MED placed its efforts in developing and obtaining political consensus on a transnational operational program on energy efficiency for low-income buildings, as a significant component of a macro-regional strategy in the Mediterranean area.

Target group / beneficiaries

Low-income households, decision-makers and stakeholders in the energy poverty and energy efficiency sectors.

Outcomes

1,000 representatives from low income dwellings were selected in 6 partner countries to take part in the ELIH-MED pilot activities. Different energy efficiency improvement measures were identified after the appropriate energy audit had been made for each dwelling, such as: thermal insulation, direct sun protection with exterior shading, efficient heating and cooling systems, efficient lighting, and water heating with solar panels.

- Strategies and policies that address energy efficiency in LIH in the MED area
- An Operational Plan for a coordinated policy in the application of the European Union structural funds for energy efficiency in LIH
- An analysis of financial mechanisms and technical solutions adaptable to LIH in the MED area
- Energy efficiency improvement in 420 representative LIH dwellings through the large-scale experimentation of innovative technical and financial solutions
- The promotion of intelligent energy-management systems at local and regional levels through the experimental use of multi-energy smart meters in 135 low-income dwellings
- The reduction of energy bills through the utilisation of smart metering systems

Budget / Funding

Supported by the European Commission as part of the Med Programme: Objective 2.2 framework (EU transnational cooperation program within the 'Territorial Cooperation Objective' of the European Union Cohesion Policy).

€250,000 (including sponsored photovoltaic systems), or, €10,000 per pilot scheme

Unique factors / Additional value

ELIH-MED recognises the importance of accompanying refurbishment projects with awareness-raising campaigns, so that inhabitants understand the challenges of the project and the benefits they can reap from it. These campaigns are also needed at a regional level (e.g. for municipalities, regional government, etc.) and at the national level.

Cyprus Energy Agency persuaded private photovoltaic installers to grant the beneficiaries with additional installations of photovoltaic (PV) systems. In total, 11 pilot dwellings of those selected, benefited from the use of PV systems, which were the first dwellings in Cyprus used for PV net metering.

ELIH MED - Energy Efficiency in Low Income Housing in the Mediterranean



Constraints / Lessons learned

The individual targets that were set for the project were very ambitious. Active contributions from National Authorities and organisations were needed in order to successfully confront all the problems and difficulties that arose. The active involvement of politicians, governmental authorities, and local authorities, funding organisations, private companies and other agencies were achieved.

Evolution / Future Prospects

A proposal is developed for the creation of a rotating fund to finance energy upgrades in households in Cyprus.

More information

Project website:
<http://www.elih-med.eu/>

GHG reductions

Total annual CO₂ emissions based on EPC methodology were reduced from 615 tonnes to 279 tonnes, which reflects a 55% reduction (for Cyprus)

Financial savings

The reduction of annual energy costs for the households concerned were by at least 30%. €6/m² of the 4,923m² covered heated space (for Cyprus)



COLD@HOME

Type of intervention:



Type of stakeholders:

Media, individual experts

Leading organisation

The Energy Action Project (EnAct)

Geographical scope

Headquarters in Paris, France

COLD@HOME focuses on energy poverty in Europe and North America

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

Project Development phase (Fiscal Year 2014/15)

Phase 1 (Fiscal Year 2015/16 and Fiscal Year 2016/17)

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A

Short description / Aims and objectives

The Energy Action Project (EnAct) is a new model for energy reporting that uses a multimedia platform to engage with, inform, explain to and empower audiences.

The pilot project COLD@HOME aims to fundamentally change the role of the media in reporting on energy poverty in diverse contexts around the globe. The project consisted of partnering with energy experts to ensure that reporting is accurate, while supporting their aim to raise awareness and prompt action to solve energy poverty. The growing problem of energy poverty was selected as an initial topic because it is present, yet often invisible and misunderstood.

Target group / beneficiaries

People around the globe, promoting the awareness of those suffering from energy poverty, as well as experts in the field who are willing to contribute to the process of awareness-raising and share knowledge on the topic.

Outcomes

COLD@HOME focused on technological solutions and what governments and organisations are doing to help citizens, and encouraging individual citizens to take action to improve their own circumstances. COLD@HOME created and collected content on technical, policy, financial and cultural/social solutions. They also examined how small steps to save energy at home combined with the deployment of more efficient devices and large-scale retrofits, ultimately help keep energy costs down for everyone.

EnAct used stories and web documentaries about real people to 'engage' with its audiences. Blogs that were jointly developed by journalists and energy experts informed and explained the complexity of the problem and the efforts underway to address it. An 'Act Now' section provided tips on how people can reduce their energy consumption, where to go for help, or how to help others in need.

Budget / Funding

Start-up support from ROCKWOOL International.

Unique factors / Additional value

Energy actors spend a lot of time talking to each other (including writing academic papers and presenting the project at conferences) and all seek media attention. However, the level of news available to members of the public is low.

This approach of experts and journalists collaborating on content helps the experts to understand the importance of storytelling and of finding ways to explain their work in relatively simple terms.

EnAct aims to provide its followers with the opportunity to participate in online panel discussions with energy experts. The anticipated format is a one-hour 'Town Hall' meeting with 3-4 experts reflecting diverse perspectives on a given topic, including a Question & Answer debate at the end.

Constraints / Lessons learned

In order to pursue their goal of building content over the long term, potential financial partners or sponsors are being sought.

Evolution / Future Prospects

Not indicated.

More information

Project website: <http://www.coldathome.today>

Organization website: www.en-act.org

EVALUATE - Energy Vulnerability and Urban Transitions in Europe



Type of intervention:



Type of stakeholders:

University

Leading organisation

Berliner Energieagentur The Centre for Urban Resilience and Energy

Geographical scope

Poland, Czech Republic, Hungary and the Republic of Macedonia

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

Ongoing since March 2013 for 5 years.

Energy savings

Indirect (Not quantified yet)

GHG reductions

Indirect (Not quantified yet)

Financial savings

Indirect (Not quantified yet)

Short description / Aims and objectives

The project aims to investigate the manner in which urban institutional structures and everyday practices shape energy vulnerability. It uses an energy vulnerability framework to explore energy poverty and domestic energy deprivation in Europe.

It aims to investigate the character, prevalence and evolution of energy poverty in European cities with reference to the post-communist states of Eastern and Central Europe (ECE). The project involves a comparative study of eight urban districts within four ECE cities: Gdańsk (Poland), Prague (the Czech Republic), Budapest (Hungary) and Skopje (the Republic of Macedonia).

Target group / beneficiaries

Vulnerable households in the participating ECE cities.

Outcomes

Detailed analyses of documentary evidence (legal acts, policy statements, strategy reports, news items), combined with a total of 168 expert interviews undertaken between April 2013 and March 2015. The interviewees included representatives of various government ministries and agencies, local authority employees, independent regulatory bodies, companies and private enterprises, advocacy and lobbying groups, residents' associations and housing co-operatives, as well as members of parliament, journalists and academics. Additional interviews were also undertaken at the European Commission in Brussels and the Energy Community Secretariat in Vienna.

All key peer-reviewed publications are available with full open access [here](#).

Budget / Funding

A [European Research Council](#) funded project.

Unique factors / Additional value

EVALUATE represents the first comprehensive investigation of the multiple social and spatial dimensions of energy vulnerability in the heart of post-communist cities.

Previous work in the region and elsewhere has indicated that energy vulnerability arises as the result of poor inter-sectoral coordination. The research examines the ways in which this condition is produced and mitigated through the interaction of relevant decision-making institutions in energy, social welfare, health and housing domains.

Constraints / Lessons learned

The complex and dynamic character of energy poverty across member states needs to be acknowledged by decision makers at various scales of governance. Two trends directly connected to key driving factors are highlighted here:

- First, the European Union policies need to consider the differential impact that the ongoing global economic and Euro area crisis is having on welfare levels across member states, with a particular emphasis on the effect of austerity measures on monetary and material deprivation rates.
- Second, the efforts to liberalise and privatise the EU's energy sector need to take into account domestic energy affordability and access criteria, while undertaking a careful consideration of the energy poverty risks that the transition to a low-carbon European Union poses; increasingly higher real energy prices in the forthcoming decades.

Evolution / Future Prospects

The team continues its work on the topic under the European Energy Poverty Observatory project.

More information

Project website: <https://urban-energy.org/evaluate/>



ENERGY AMBASSADORS - Campaign to Fight Against Energy Poverty and Raise Awareness on Energy Efficiency and Energy Savings

Type of intervention:



Type of stakeholders:

Companies, government agencies, NGOs

Leading organisation

PRIORITERRE (France), the Centre for Renewable Energy Sources CRES (Greece), the Energy Agency for Southeast Sweden Ltd (Sweden), Samso Energy Agency (Denmark), the Severn Wye Energy Agency Ltd (United Kingdom), Ecuba LTD (Italy), Sofia Energy Centre Ltd. (Bulgaria), Harghita Energy Public Service (Romania), Ecoserveis (Spain)

Geographical scope

Bulgaria, Denmark, France, Greece, Italy, Romania, Spain, Sweden, UK

Transferability [3]

The practice can be physically implemented with minimal cost

Implementation timeframe

May 2009 to October 2011

Energy savings

4,500 MWh have been saved through advice on behavioural changes

Short description / Aims and objectives

The Energy Ambassadors (EA) campaign, which operated in 9 different European Union countries, aims to tackle energy poverty and help vulnerable groups to managing their water and energy consumption through the intervention of social workers who have been trained in these tasks. As such, social workers have incorporated energy advice into their daily work routine and the vulnerable population are taught how they can reduce their energy consumption significantly with simple actions.

Target group / beneficiaries

The project had 2 target groups:

- The social workers receiving training
- Beneficiaries of the project: families in need

Outcomes

Thanks to the project, 300 social workers were trained to become energy ambassadors. Around 18,000 people were reached with energy saving advice which was provided via home visits, office meetings and events. 48 Energy Ambassadors committee meetings were organised. At the start there were 17 Energy Ambassadors, this later increased to around 100 (all of whom were social workers). 11 seminars for social and private housing associations or owners have been organised with nearly 400 participants in total. 62 public events to raise awareness on energy savings were carried out, with 2,100 participants contacted.

Energy factsheets containing relevant information were developed as a tool for energy ambassadors to use during visits or phone interviews. These sheets are available in national languages and are downloadable on the website. Around 700 intervention sheets have already been handed to the partners after only 5 months of groundwork.

Each partner organised at least 2 or 3 EA committees and 2 public seminars, together with the social workers. This was challenging, because social workers were overwhelmed by their daily work on other topics and coping with emergency situations, so it was hard to find time to train them on energy issues.

Budget / Funding

€930,972 including €698,229 (75%) from the EU.

Unique factors / Additional value

Enhancing the capacity and understanding of energy-related issues for social workers who visit the homes of vulnerable groups for various reasons and who could improve living conditions in these dwellings with simple advice on behavioural changes, and low-cost or no-cost energy saving materials.

Constraints / Lessons learned

The EA project experienced a great success in those countries where it was implemented, and learned that an excellent media response can be achieved when solutions are needed. The importance of partnerships and cooperation between public actors, housing providers, the financial and private sector was also cohesive and well-maintained. Cooperation between several organisations working to reach a common goal was fostered through the project. Information and support for target groups was essential in improving energy efficiency.

Adapting the experience of one country was an excellent way of sharing good practices and experiences in order to create new ideas in other countries. A common project basis may possibly be attained. However, there is a need to adapt it to the national context. Social workers and final target groups, grant systems, national laws, regulations, and priorities can differ vastly. The website allowed the dissemination of the project to other regions and to new organisations.

ENERGY AMBASSADORS - Campaign to Fight Against Energy Poverty and Raise Awareness on Energy Efficiency and Energy Savings



Partners need to adapt the training and intervention of social workers with respect to their availability. Social workers usually prioritise social emergencies. Flexibility is needed to provide energy advice, as this role lies outside their day-to-day duties. Many Energy Ambassadors continued asking for support, especially during home visits, as they did not feel totally able to provide good advice.

Evolution / Future Prospects

Some organisations (such as Ecoserveis), continued training energy advisors using and upgrading the project-built capacity.

More information

Project website:
<https://ec.europa.eu/energy/intelligent/projects/en/projects/energy-ambassadors>

GHG reductions

The amount of energy saved also corresponds to the prevention of 1,451.5 tonnes of CO₂ emissions per year

Financial savings





EPEE - European Fuel Poverty and Energy Efficiency

Type of intervention:



Type of stakeholders:

Government agencies, universities, NGOs

Leading organisation

Alphéeis (France; coordinator), Centre Universitaire de Charleroi (Belgium), Agence de l'Environnement et de la Maîtrise de l'Energie (France), The Liaison Committee for Renewable Energies (France), ASSOCIAZIONE RETE DI PUNTI ENERGIA (Italy), Eco-serveis (Spain), National Energy Action (United Kingdom)

Geographical scope

Belgium, France, Italy, Spain, and the United Kingdom

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

December 2006 to November 2009

Energy savings

Indirect (Not quantified yet)

GHG reductions

Indirect (Not quantified yet)

Financial savings

Indirect (Not quantified yet)

Short description / Aims and objectives

Unless concerted efforts are made by all actors (state, private, charity, community, individual), both energy consumption in the home and greenhouse gas emissions will continue to rise, further aggravating energy poverty. Though the phenomenon is not clearly defined across Europe, there are evidences of common trends, such as unpaid energy bills, illnesses and self-disconnection.

This project focused on low-income tenants who were suffering from energy poverty and could not afford to make improvements to their homes. The underlying goal was to identify the best and most appropriate mechanisms for each national context and to make energy poverty a priority within national and European energy policies.

Target group / beneficiaries

Low income tenants and European decision-makers.

Outcomes

A European workshop organised to discuss the definition of 'energy poverty'. 16 workshops were held in five countries to find solutions to alleviate energy poverty. Options included, limiting the impact of energy price increases, improving housing stock, and increasing household revenues.

Existing national policies for addressing energy poverty were analysed and used to disseminate best practices.

Budget / Funding

€989,533, including €494,766.50 (50%) from the EU.

Unique factors / Additional value

In the absence of effective national legislation to protect vulnerable consumers, it would seem equitable that the EU should take a more active role in safeguarding the interests of these consumers.

Constraints / Lessons learned

While the causes (increased prices, poor housing stock) and consequences (debt, health impacts) of energy poverty are similar across Europe, the approach of public authorities to the problem varies. As such, there is a lack of quantitative data available.

Situations differ greatly from one country to another.

It is difficult to define common indicators and to find relevant quantitative data to characterise the situation in different countries on a comparative basis.

Evolution / Future Prospects

The Catalan government, in the context of a revision of the 2006-2015 Energy Plan, announced that countering energy poverty was one of the strategic objectives of the region's policies. This action, the first of its kind in Spain, is seen as a tool for the creation of sustainable social development. The legal framework for tackling energy poverty in the region has been further developed afterwards.

In France, Valérie Létard, the Secretary of State for the Environment, announced a major action plan to combat energy poverty in 2010. Proposals resulting from participant discussions were presented to her in December 2009.

In Poland, the Minister for Energy declared policies against energy poverty as a priority. The country's energy savings agency is now awaiting details on specific measures. The first step was the passing of a recent law, which defines the concept of vulnerable consumers. The minister stated that a 30% energy-rate reduction may be made available for these consumers.

More information

Project website: <https://ec.europa.eu/energy/intelligent/projects/en/projects/epee>



EPOV - European Energy Poverty Observatory

Short description / Aims and objectives

A new European Energy Poverty Observatory (EPOV) will be developed by a pan-European consortium of organisations, led by Dr Harriet Thomson and Professor Stefan Bouzarovski from the University of Manchester. The overarching aim of the EPOV is to engender transformational change in the availability of information on the socio-economic extent of energy poverty in Europe, and measures to combat it. Via the following objectives, the EPOV will:

- Improve transparency by bringing together disparate sources of data and knowledge from across the whole of the EU, to provide a user-friendly, open-access resource that will promote public engagement as well as informed decision-making by local, national and EU-level decision makers
- Enable networking and facilitate knowledge sharing and co-production among member states and relevant stakeholders
- Disseminate information and organise outreach work that will connect and build on existing pan-European and member-state initiatives in the energy poverty domain
- Provide technical assistance to the widest possible range of interested parties, based on a holistic approach to understanding and addressing energy poverty in the European Union

Target group / beneficiaries

All European energy poverty stakeholders.

Outcomes

The project was at an initial stage at the moment of conducting this publication (2016).

Budget / Funding

From the European Commission.

Unique factors / Additional value

The project will bring together disparate sources of data and knowledge that exist in varying degrees across the whole of the EU.

Constraints / Lessons learned

N/A.

Evolution / Future Prospects

N/A.

More information

Project website: <https://ec.europa.eu/energy/en/events/launch-eu-energy-poverty-observatory-epov>

Type of intervention:



Type of stakeholders:

Universities, companies, NGOs

Leading organisation

The University of Manchester (United Kingdom), Ecofys (Netherlands), European Policy Centre (Belgium), Intrasoft International (Luxembourg), National Energy Action (United Kingdom), the Wuppertal Institute (Germany)

Geographical scope

EU 28

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

40 months

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A



FinSH - Financial and Support Instruments
for Fuel Poverty in Social Housing

Type of intervention:



Type of stakeholders:

Government agencies,
universities, NGOs

Leading organisation

Groupe Energies Renouvelables Environnement et Solidarités (France, coordinator), SCIC Habitats Solidaires (France), Otto-von-Guericke-Universität Magdeburg (Germany), Ecuba S.R.L. (Italy), Krajowa Agencja Poszanowania Energii S.A. (Poland), Severn Wye Energy Agency Limited - SWEA (United Kingdom)

Geographical scope

France, Germany, Italy, Poland, and the United Kingdom

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

December 2007 to May 2010

Energy savings

The project contributed to increased energy savings (Not quantified yet)

GHG reductions

The project contributed to increased CO₂ reductions (Not quantified yet)

Financial savings

The project contributed to increased financial savings (Not quantified yet)

Short description / Aims and objectives

The aim of the FinSH project was to develop relevant support schemes to address financial and social barriers for energy efficiency retrofitting in social housing. The project contributed to the reduction of energy poverty and increased energy saving in social housing in Europe. It effectively combined financial, social and energy approaches.

The project includes both the analysis of financial products to foster energy -efficiency retrofitting and the development of practical support guidelines in order to increase access to these financial products for energy-poor households and social housing providers.

This analysis helped organisations throughout Europe that work with social housing tenants at risk of energy poverty, encouraging them to participate in energy efficiency program s and measures. The project worked closely with banks, energy and social experts and with relevant and current European Union and national initiatives.

Target group / beneficiaries

Vulnerable households living in social housing.

Outcomes

- Financial products and related necessary social schemes to increase energy-efficient retrofitting in social housing
- Enhanced communication and networking between actors from various fields of expertise: finance, social, energy
- More information on existing financial possibilities to increase the use of energy-efficient equipment and retrofitting

Budget / Funding

€617,185, including €308,582.50 (50%) from the EU.

Unique factors / Additional value

The project combined financial, social and energy approaches for enhancing energy efficiency retrofitting and therefore tackling energy poverty in social housing.

Constraints / Lessons learned

Financial products and mechanisms are quickly evolving. The financial crisis and high oil prices in 2008 increased energy poverty awareness. The transferability of reviewed financial mechanisms is not high as most products are developed to match specific local conditions. Most schemes are public financing schemes.

During the project, the legislative context for energy poverty has been evolving with a new European definition of energy poverty.

Financial mechanisms are only part of a process for improving energy-efficiency measures in low-income households.

Evolution / Future Prospects

N/A

More information

Project website:
<https://ec.europa.eu/energy/intelligent/projects/en/projects/finsh>

INSIGHT_E

Short description / Aims and objectives

INSIGHT_E is a European, scientific and multidisciplinary think-tank for energy that reports to the European Commission and other energy stakeholders. It supports energy policy at European level by providing advice on policy options and assessing their potential impact, and works actively in the field of energy poverty.

The INSIGHT_E consortium runs an Energy Observatory, which is focused on monitoring the EU's transition to sustainable and efficient means of energy production and consumption.

Three deliverables have been designed to ensure the think-tank's work responsive to the European Commission's questioning, reactive to changes and focused on impact.

- 1) Rapid Response Energy Briefs: ad-hoc provision of information
- 2) Policy Reports: In-depth analysis of policy options and potential impacts
- 3) Hot Energy Topics: Anticipation of the policy agenda and trend analysis

Target group / beneficiaries

European institutions and residents

Outcomes

The consortium has over 700 stakeholders in their advice network and has produced 26 publications since the project began.

The INSIGHT_E produced a policy report on 'Energy Poverty and Vulnerable Consumers in the Energy Sector across the EU: Analysis of Policies and Measures' in May 2015, which was presented to the European Commission in June 2015 as well as at various public forums.

The European Policy Centre has coordinated the launch of an Energy Poverty Task Force to assess the role of the European Union in tackling energy poverty. The Task Force was launched at an event in January 2016 in Brussels,

Two INSIGHT_E reports from December 2016 on energy poverty and protecting vulnerable consumers in the energy sector informed on the impact assessment and the resulting new legislation of the European Commission's Clean Energy Package.

Budget / Funding

INSIGHT_E is funded by the European Commission under the FP 7 Framework Program for Research and Technological Development.

Unique factors / Additional value

Quality research assessing the role and impact of energy related European Union policies, including energy poverty issues.

It consists of 3 highly experienced consultancies, 5 leading European universities, 1 high-level European Research Centre, and an independent think tank (among other bodies).

Constraints / Lessons learned

N/A.

Evolution / Future Prospects

After finishing the first main policy report on energy poverty in May 2015, the think-tank continued its research into the topic by forming an Energy Poverty Task Force in early 2016 and assessed the impacts of the Clean Energy Package, as announced in November 2016.

More information

Project website: <http://www.insightenergy.org>



Type of intervention:



Type of stakeholders:

Companies, universities,
NGOs

Leading organisation

Enerdata SA, E4SMA SRL, the Energy Institute 'Hrvorje Požar', the Institute of Energy Economics and the Rational Use of Energy of the University of Stuttgart, IFRI (French Institute of International Relations), KIC InnoEnergy, the Karlsruhe Institute of Technology, KTH Royal Institute of Technology, the Paul Scherrer Institute, The Stakeholder Forum, University College Cork and University College London

Geographical scope

Belgium, Croatia, France, Germany, Italy, Ireland, Netherlands, Sweden, Switzerland, and the United Kingdom

Transferability [1]

The practice cannot be physically transferred due to the need for specific conditions

Implementation timeframe

Active since July 2014

Energy savings

N/A

GHG reductions

N/A

Financial savings

N/A



REACH - Reduce Energy Use and Change Habits

Type of intervention:



Type of stakeholders:

Governmental agencies and NGOs

Leading organisation

Focus – The Association for Sustainable Development, Slovenia

Geographical scope

Slovenia, Croatia, Bulgaria, Macedonia

Transferability [2]

The practice can be transferred but at significant cost

Short description / Aims and objectives

In South-East Europe, at least 30% of households struggle with energy poverty issues. The aim of REACH was to facilitate energy poverty abatement at practical and structural levels. This project sought to enable energy-poor households to take action, to save energy and change their habits, and to establish energy poverty as an issue that demands structural solutions at local, national and European Union levels.

Target group / beneficiaries

- Energy-poor households
- Local actors that can help address energy poverty, such as social care/support services, local authorities, social advisors, schools, local energy providers, building managers and others
- Local, national and European Union level decision makers

Outcomes

- 5 workshops for local actors
- Over 40 local actors engaged
- 42 teachers, 200+ trained energy advisors
- 38 events, 90+ media appearances; outreach of 150,000+ people

Elements that ensure transferability of results:

- The action builds heavily on past experiences of other European Union actions, which ensures that the knowledge already gained and experience is transferred to new countries and to new actors, while also ensuring that the actions involve experienced partners
- The activities are designed to ensure that partners shape starting points together (e.g. terms of reference, evaluation framework), in order to define differential factors between countries, which therefore ensures that those policies created are relevant for the specific characteristics of all those countries included and that they are transferable to other countries with similar situations
- The actors from countries that are not covered in the project are invited to participate in several activities relevant to the transfer of knowledge (workshops on the European Union experiences and the training of partners), which ensures the transference of this know-how to additional countries
- The dissemination of the action and the ensuing results are planned in a broad manner, ensuring that the communication work is focused on local and national levels and also on dissemination of the action with respect to interested actors throughout Europe (presenting the action at EU-level events, European Union network-based dissemination), therefore, the project will be publicised to several actors in countries not covered by the action itself
- The key policies of the action will be available in English to enable transferability to other countries, while also being available in 4 languages of the South-East Europe region (Slovenian, Croatian, Bulgarian and Macedonian), which means that these strategies will be easily accessible for other countries in the region (Bosnia and Herzegovina, Serbia, Montenegro)

All in all, the action will aim at ensuring transferability at different levels:

- At a local level: methodologies for organising the action in different localities will be available to other interested areas and information about the action will be delivered to them
- At a national level: with respect to local situations, the action will comprise suggestions on what can best be done at a national level, so as to prevent or mitigate energy poverty. These solutions will be debated at a national level – again, approaches and results will be transferable to other similar countries (mainly South-East and Central and Eastern Europe)
- At a European level: the action will present those policy recommendations formulated at a European Union level, transferring local and national specifics into the European Union level policy debate, which, together with an ambitious transfer of the project results and findings, will ensure transferability at a European level



REACH - Reduce Energy Use and Change Habits

Budget / Funding

Total costs: €568,489

Main elements of costs: staff, sub-contracting, travel costs and allowances

Contributions: Intelligent Energy Europe Program of the European Union

Unique factors / Additional value

- Working with vocational schools and students, providing them with practical experience
- Focusing on local actors and building networks between them
- Showing households how to change their habits and providing them with tailor-made advice for action.
- Bringing energy poverty to the attention of decision-makers, stimulating them to develop and implement structural solutions to energy poverty in the national context

Constraints / Lessons learned

There are three preliminary lessons learned:

- 1) Cooperation with the organisations that have access to households is a must and has to be well planned to overcome reluctances of some households to receive visits and to participate in the project.
- 2) Field visits must be integrated into an official program. Basing the work on volunteer schemes complicates and prolongs the implementation period and increases the efforts the project team has to make, as each new person needs to be educated in turn on how to implement field visits, collect and report data, and how to interact with vulnerable groups.
- 3) The project requires the proper study of legislation in all possible aspects of the activities involved. Some issues emerged during the implementation, for instance, the security and safety during the visits; the fact that the students of vocational schools are minors is also problematic to some extent; there is an issue of taxation of gifts and donations (the free devices given to households fall into category of gifts).

One positive lesson learned is that the students are very satisfied with the action and enjoy participating in it. They find it interesting and state that is educational from a practical standpoint. Working with schools and students promotes enthusiasm, which in turn influences local communities.

Evolution / Future Prospects

REACH works to achieve several layers of sustainability:

- Targeting vocational school students; perceived as a sustainable factor, as students are provided with hands-on experience which is often lacking in their curriculum
- Teachers are trained to transfer their know-how to students
- Students are likely to implement the energy saving measures they were taught in their present and future homes
- Energy saving measures implemented in households will affect the long-term habits of their members, reducing energy use
- Post-visit support to households guides them when seeking support for greater measures, such as façade insulation or changes to heating systems
- REACH promotes the implementation of policies for energy poverty at national and European Union levels, which will have long-term effects
- REACH is seeking to establish a platform for inter-sectoral approach, linking the different actors that need to act together

More information

Project website:
<http://reach-energy.eu/>

Also:
<https://ec.europa.eu/energy/intelligent/projects/en/projects/reach>

Implementation timeframe

March 2014 to February 2017

Energy savings

768 TOE

GHG reductions

1,280 tonnes of CO₂

Financial savings

€512,000



REELIH - Residential Energy Efficiency
for Low-income Households in Eurasia

Type of intervention:



Type of stakeholders:

NGOs

Leading organisation

Habitat for Humanity International (HFHI) and USAID

Geographical scope

Pilot projects in Bosnia and Herzegovina and Armenia; regional activities throughout Eastern Europe

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

Launched in 2012 for 5 years

Energy savings

Energy efficiency retrofits may reduce energy consumption by as much as 50%, and lead to direct savings. Furthermore, these retrofits allow low-income families to properly heat their homes, preventing the adverse health effects caused by the cold, dampness, and air pollution

Short description / Aims and objectives

The REELIH project seeks to demonstrate how communities can work with private and public sectors in order to obtain resources for energy efficient retrofits, thereby reducing poverty, improving living conditions, reducing CO₂ emissions, and contributing to energy reform. The project was first implemented in Bosnia and Herzegovina and Armenia, before being applied in Europe and the Commonwealth of Independent States.

Target group / beneficiaries

Low-income households in collective housing/multi-family buildings.

Homeowners within the selected buildings had to reach a consensus not only on the energy efficiency renovations they wanted to implement in their individual apartments and common spaces, but also on their ability to co-finance these renovations, through individual or collective loans if necessary.

Outcomes

To date (2016), REELIH has completed retrofits in four buildings in Bosnia, and eight in Armenia, directly benefiting over 2,300 people with up to 50% in energy savings. Results from these pilot projects fuel advocacy activities in order to influence public policy and the energy efficiency sector.

Budget / Funding

HFHI funded the preparatory work for the development of REELIH from its own undesignated funding sources. HFHI hired a consultant familiar with the Residential Energy Efficiency project in Macedonia, and used internal finance, program, and HR capacities. During the project inception phase (October 2012 – January 2013), HFHI conducted a rapid assessment of four countries (Serbia, Bosnia, Ukraine, Armenia) to choose two demonstration countries, based on a set of selection criteria. The total cost of the preparatory and inception phase was around \$50,000, a cost shared between HFHI and USAID.

Over the course of 5 years, the project has been working with \$1.5 million from USAID. Habitat is shouldering a cost share of over \$500,000 and has already leveraged around \$100,000 of private and public capital from private financial institutions and governments.

Unique factors / Additional value

REELIH states that it is the only energy efficiency project in the region that works with households and homeowner associations. Although 90% of apartments in Eastern Europe are owned by individuals, banks have shied away from the complexity of providing loans to numerous households with low incomes, as doing so appears unprofitable, and there is a lack of precedence for such actions. REELIH is changing this attitude, and demonstrating the benefits of working with homeowner associations and governments.

REELIH is innovative in that it brings an impressive range of stakeholders together: homeowners, entrepreneurs, economists, bankers, and policymakers. This project is characterised by its reliance on public and private partnerships; savings, loans, and subsidies are combined for residential energy efficiency investments. REELIH is building trust and facilitating cooperation between communities and the private and public sectors, thereby unlocking greater potential, and obtaining resources and expertise for the poor.

Constraints / Lessons learned

Energy efficiency renovations of residential buildings took place in a complex interaction between different stakeholders: municipalities, financing organisations, utility companies and the representatives of homeowners, usually in the form of homeowner associations. This complexity is known as the *eco-system* of stakeholders for residential energy efficiency.

REELIH - Residential Energy Efficiency
for Low-income Households in Eurasia



In several countries, homeowner associations have serious representation and credibility issues towards other stakeholders; at the same time, homeowners lack confidence when working with municipal councils and banks. Municipal councils do not prioritise the provision of subsidies for energy-efficiency renovations made to privately-owned buildings and they also generally underfinanced in this region. Banks do not have any experience providing loans to entities such as homeowner associations, and in some countries homeowner associations lack the independent legal status required for loans to be authorised.

In the underdeveloped markets of Eastern Europe and Central Asia there is a need for an actor who can bridge the gap, build trust and facilitate the development of complex financing models among the different stakeholders. Independent and professional facilitation is needed.

Evolution / Future Prospects

The project has already been transferred from Macedonia to Bosnia and Herzegovina, and Armenia. In December 2011, Habitat Macedonia launched an energy-efficiency project that supported by a USAID grant.

REELIH is also spreading on a local scale. For example, the REELIH project in Bosnia will extend from the BIH Federation into the Republika Srpska (Serbia), since the signing of Cooperation Agreement with REELIH by a mayor in the Serbian Republic.

Regional-level advocacy activities are aimed at improving the environment for residential energy-efficiency investment by engaging national and international policymakers, such as like-minded NGO actors and industry actors, in order to devise new policies and practices.

More information

Project website:
<https://getwarmhomes.org/>

GHG reductions

In Bosnia - a decrease from current levels of CO₂ emissions - 152 t/pa from individually heated homes (28%) and 623 t/pa from centrally heated homes (44.5%)

Reductions of current levels of NO_x emissions – 8.3 t/pa from individually heated homes (28%) and 33.91 t/pa from centrally heated homes (44.55%)

In Armenia (due to smaller energy efficiency interventions only in the common spaces) a professional energy audit company estimated that the average savings for each building is 7.3 tonnes of CO₂ per year

Financial savings

Bosnia: financial savings from individually-heated homes ranges from 53.8% (Lukavac) to 38% (Srebrenik) – 43.77% in the Tuzla Canton region

Financial savings from centrally-heated homes range from 8.8% (Banovici) to 24.2% (Lukavac) – 22.10% in the Tuzla Canton region



SMART-UP – Consumer Empowerment in a Smart Meter World

Type of intervention:



Type of stakeholders:

Companies, NGOs

Leading organisation

Alpheelis SAS (France, coordinator), Asociación Ecoserveis (Spain), National Energy Action (UK), Projects in Motion Limited (Malta), AISFOR SRL (Italy)

Geographical scope

France, Italy, Malta, Spain, United Kingdom

Transferability [2]

The practice can be transferred but at significant cost

Implementation timeframe

February 2015 to February 2018

Energy savings

Vulnerable consumers are encouraged to take action by changing energy-related behaviour and consumption habits in order to achieve an average of 10% energy savings

Short description / Aims and objectives

The Smart-Up project will encourage vulnerable customers in member states that have embarked on the roll-out of smart meters to actively use them (together with ‘in-house displays’) for their energy savings. Previous studies have shown that smart meters do not lead to energy savings in the residential sector unless households actively use them and modify their energy-use behaviour. This project sought to fill this gap and raise awareness.

A training program is being developed for DSOs, energy utilities, installers, social workers and other frontline staff who are in touch with vulnerable people, so that they can inform vulnerable consumers about the benefits brought about by smart metering and advise them on how to use them.

Target group / beneficiaries

5,000 households are expected to be advised and receive enhanced support from around 400-500 trained frontline staff.

There is no common definition of energy vulnerable people in Europe, and the project will address various target groups suffering from energy poverty and who live in different types of households.

Outcomes

Existing training packages were adapted to the different national contexts: one for training smart meter installers, and another for frontline staff in contact with vulnerable consumers. Guidelines on how to fit the training packages to other member state contexts are to be developed, including monitoring tools.

Between 50 and 100 installers and other frontline staff are to be trained in each project partner country. Each of them will deliver face-to-face advice to 10 to 20 households, to reach 1,000 households in each country (5,000 in total).

122 people were trained in Spain, of whom around 100 were the long-term unemployed, reaching 3,100 households. In addition, 60 vulnerable households were divided into 5 experimental groups in order to study their energy behaviour during a whole year.

There was a control group of 20 people with installed smart meters, to monitor their consumption development.

Budget / Funding

€791,493 total budget under H2020.

Unique factors / Additional value

The new feature is the use of smart-meters and in-house displays, as well as the expected interactions between humans and their energy usage.

In Spain, additional value was provided by training long-term unemployed individuals, providing peer-to-peer advice, and experience sharing.

Besides empowering vulnerable consumers, the project provides feedback on their specific needs, how to appropriately communicate, and how to help them benefit from smart metering. The project will also consolidate data on how much energy can be saved if vulnerable households are empowered to make best use of the opportunities that smart metering offers.

Constraints / Lessons learned

Consumers in general find it difficult to know how much they are consuming, how much they will have to pay in their next bill or how much they can reduce their energy consumption, e.g. by changing their fridge/freezers. This problem is exacerbated with respect to vulnerable consumers. This is one of the main barriers that need to be overcome by this project.



SMART-UP – Consumer Empowerment in a Smart Meter World

Digital exclusion among target groups who lack the skills and abilities to work with smart meters and energy diaries require ongoing support and supervision (only 2 of the three experimentation groups had a follow-up helpline service).

A specific challenge was the identification of energy-poor households, since at a European Union level there are no unified criteria on their selection. Without proper identification, the corrective measures taken cannot be applied properly, and support cannot be provided to those who need it the most.

Communication with stakeholders and their involvement was also challenging.

The envisaged 10% reduction of the consumption could be hard to attain during the winter months, however it could be possible during spring and autumn.

Evolution / Future Prospects

A constant learning process for project participants using the information gathered. The distribution of a second questionnaire to around 2,000 households in total is anticipated, which will show if or how much energy and money the households have saved.

More information

Project website:
<http://smartup-project.eu/>

GHG reductions

9 GWh per year primary energy

Financial savings

Expected in an upcoming report

Installers and frontline staff will inform vulnerable consumers about available grants and assistance they can access, as well as additional support to repair or replace heating systems and inefficient appliances, where appropriate

Although there are significant differences between member states on the level of policy and program development for the alleviation of energy poverty, most member states have national experiences to build on. If not, they can adapt initiatives from countries with similar socioeconomic backgrounds, climate conditions, governance models, or policy trends.

An analysis of these case studies has illustrated the importance of social agents' contribution to the field; throughout Europe, they are building their expertise on energy poverty interventions and how to implement these measures in vulnerable households. The involvement of different but complementary agents, such as public departments on energy, housing, welfare, consumer protection and health, as well as civil society organisations, is key to shaping a resilient and efficient system to identify and tackle energy poverty.

At both national and regional levels, it is highly recommended to design strategies that foresee short-term measures to alleviate the emergency cases, but also long-term strategies addressed to tackle the structural causes. The combination of short and long-term strategies could effectively offset the increasingly higher trends of energy poverty rates observed in many countries.

Although several case studies have indicated that energy poverty has a direct impact on health, initiatives involving health professionals are scarce. The utilisation of health professionals in energy poverty programs could be very promising in terms of raising awareness, identifying vulnerable households, and improving the quality of life of vulnerable households. Additionally, energy poverty is linked with substantial indirect costs to health systems in the member states. To establish a direct link between energy poverty measures and the associated reduction of costs within health systems could be an opportunity to raise awareness among decision makers regarding the need to invest in long-term strategies to reduce energy poverty, as a way to optimise public budgeting.

Collaboration and shared responsibility is essential; energy efficiency is an emerging field in many countries, so the policy-making process should foresee the integration of lessons learned from local initiatives as well as progress achieved in similar countries.

There were a range of barriers associated to achieving energy efficiency in many of the case studies. One of the major constraints was the lack of political will or appropriate collaboration between relevant agents, rather than financial limitations. This underlines the need to collaborate and create synergies between several stakeholders, which might help to ease situations that are hindered by a lack of knowledge or expertise. Cooperation between stakeholders has been proven to boost creative solutions to the problems encountered.

The key aspects to consider when planning energy poverty strategies at national, regional or local levels are:

1 ··· Work on establishing a strong network

Involve public and private (companies and civil society) stakeholders, ensure cross-cutting knowledge and competencies by involving stakeholders from different fields (e.g. energy, consumer protection, housing, health and welfare). To maintain strong relationships, it is vital to implement regular meetings and targets.

2 ··· Foresee emergency-relief measures as well as long-term strategies

Long-term sustainability is a key-factor to developing efficient programmes.

3 ··· Learn from the success and challenges of other organisations and countries

At local level, in other countries and at international level. Spending time learning from other initiatives can actually be time-effective. As it has been highlighted, there are in fact many energy poverty initiatives around Europe and while taking time to learn from them before implementing a new one can seem time-consuming it can in fact save time and help to achieve better results.



- € Financial support
- 🏠 Household energy efficiency
- 👁️ Transparency and information sharing
- 📄 Information and engagement
- 🔌 Consumer protection



Atlas of Energy Poverty Initiatives in Europe

State-by-State **Review**

