



# EnergyMeasures

Tailored measures supporting energy vulnerable households

D2.3

## **Periodic update #1 on engagement of energy poor for behaviour change**



<http://www.energymeasures.eu>



@NRGMeasures

February 2022



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 894759

## Document Information

Deliverable ID	2.3		
Deliverable Title	Periodic update #1 on engagement of energy poor for behaviour change		
Lead beneficiary	EA		
Contributing beneficiaries	UCC, DUNE, PON, KAMPC, PNEC, HABI, ECOE, TIG, GAB, BUR, ENE		
Due date Annex I	2022.02.28		
Issue date	2022.02.28		
Dissemination level	Public		
Author(s)	Charles Roarty, Paola Velasco-Herrejón		
Document checked	Niall Dunphy	Date:	2022.02.28

### Copyright

© 2022 EnergyMeasures Consortium

The EnergyMeasures Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 894759. For more information on the project, its partners, and contributors please see <http://www.energymeasures.eu>.

























This report, if not confidential, is licensed under a Creative Commons Attribution 4.0 International Licence (CC BY 4.0); a copy is available here: <https://creativecommons.org/licenses/by/4.0/>. You are free to Share – copy and redistribute the material in any medium or format, and Adapt – (remix, transform, and build upon the material for any purpose, even commercially. Licence Terms: (i) attribution (you must give appropriate credit, provide a link to the licence, and indicate if changes were made; you may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use); (ii) no additional restrictions (you may not apply legal terms or technological measures that legally restrict others from doing anything the license permits).

### Disclaimer

The information contained in this document represents the views of EnergyMeasures consortium as of the date they are published. The EnergyMeasures consortium does not guarantee that any information contained herein is error-free, or up to date, nor makes warranties, express, implied, or statutory, by publishing this document. The information in this document is provided as is and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and liability.

The content of this report represents the authors' views only and it is their sole responsibility. It cannot be considered to reflect the views of the European Commission and/or the European Climate Infrastructure and Environment Executive Agency (CINEA). The European Commission and the Agency do not accept responsibility for the use that may be made of the information it contains.

## EnergyMeasures Consortium

	University College Cork – National University of Ireland, Cork		IE
	Energy Action CLG		IE
	DuneWorks BV		NL
	Het PON & Telos		NL
	Gemeente Eindhoven		NL
	APB Kamp C		BE
	SAAMO Provincie Antwerpen vzw		BE
	Stowarzyszenie Gmin Polska Sieć Energie Cités		PL
	Residential Building Management Company Habidom DOOEL		MK
	Association Municipal Energy Efficiency Network EcoEnergy		BG
	Tighean Innse Gall		UK
	Oikoplus GmbH		AT

### Project Coordinator:

Dr Niall Dunphy, Director, Cleaner Production Promotion Unit, University College Cork, Ireland  
 e: [n.dunphy@ucc.ie](mailto:n.dunphy@ucc.ie) | w: [www.ucc.ie/cppu](http://www.ucc.ie/cppu)

## Table of Contents

About EnergyMeasures .....	5
Introduction .....	8
1. Belgium .....	9
2. Bulgaria .....	12
3. Ireland.....	14
4. Netherlands .....	18
5. North Macedonia .....	21
6. Poland .....	22
7. United Kingdom .....	24
Conclusion.....	26
Appendix 1: Household Engagement Plan Ireland.....	27
Appendix 2: Behaviour Change Plan Example .....	28

## About EnergyMeasures

EnergyMEASURES is working to address energy poverty in seven European countries, namely: Belgium, Bulgaria, Ireland, Netherlands, North Macedonia, Poland and the United Kingdom. The project comprises two complementary and synergistic strands of work.

The first strand involves working with energy poor households to improve their energy efficiency through a combination of low-cost measures, and changes in energy-related behaviours and practices. Recruited householders will be provided with low-cost energy measures and empowered to change their energy-related behaviours and practices through an approach that takes account of existing housing conditions and is reflective of their lived experience.

The second strand comprises working with municipalities, energy authorities, housing associations and other relevant actors to assess how current multi-level institutional contexts affect efforts to alleviate energy vulnerability in the participating countries. This knowledge will be used to develop and support the implementation of policy and practice measures which will address structural issues that combine to trap households in energy poverty.

Through this work the project contributes to reducing participants' vulnerability to energy poverty, while at the same time cutting household energy consumption and associated GHG emissions.

For more information see <http://www.energymeasures.eu>

***Description of the deliverable and its purpose***

This document forms a periodic update on the engagement of energy poor for behaviour change for the EnergyMeasures project at month 18 of its work programme (February 2022). The deliverable comprises a brief overview of the main activities for identification, recruitment and engagement of energy poor households in each country, a review of the status of engagements, and provides a detailed breakdown of the timeline and updated targets for the coming 24 months. The task has progressed well in its different engagement activities. However, the Covid-19 pandemic has caused delays with household recruitment and engagement. The deliverable outlines the measures taken to remedy the impacts of the pandemic and the specific implementation plan for each focal country.

## **Glossary**

DCENR	Department of the Environment, Climate and Communications
DoA	Description of Action
EA	Energy Action
MABS	Money Advice and Budgeting Service
NGO	Non-Governmental Organisation
OCMW	The public centre for social welfare in Turnhout
PNEC	Polish Network Energie-Cités
TIG	Tighean Innse Gall
SEAI	Sustainable Authority of Ireland
SVdP	Society of St Vincent de Paul
UCC	University College Cork
WP	Work Package

## Introduction

The EnergyMeasures project is working to implement coordinated household energy engagement programmes and address structural issues surrounding energy poverty in seven European countries (Belgium, Bulgaria, Ireland, Netherlands, North Macedonia and the United Kingdom). For this purpose, the project is working with energy poor households to improve their energy efficiency through a combination of low-cost measures, and changes in their energy-related behaviours and practices.

Following Task 2.2 were key indicators that characterise those most at-risk of energy poverty were mapped out, and energy poor and at-risk households were recruited, as part of Task 2.3 householders will be provided with low-cost energy measures and facilitated to change their energy-related behaviours and practices through an approach that both takes account of the nature of the housing units and is reflective of the lived experience of the household members.

This document forms a periodic update on the engagement of energy poor for behaviour change for the EnergyMeasures project at month 18 of its work programme (February 2022). During the last six to nine months, the project partners developed and updated engagement plans, which describe how the engagement of energy poor households within the context of EnergyMeasures will be implemented in each country. The different specificities associated with the focal communities in each country together with varying manifestations of the Covid-19 pandemic, and difference in approaches to re-opening of society has meant it best for these plans to be country-specific. These country-level engagement plans draw from D1.1<sup>1</sup> and D1.2<sup>2</sup>, which outline the project's approach to identifying energy poor households and integrating behaviour change approaches in household engagement respectively.

This deliverable comprises the summary plans of the six countries involved in household engagement. These synopses include an overview of the main activities for identification, recruitment and engagement of energy poor households in each country, a review of the status of engagements, and provides a detailed breakdown of the timeline and updated targets for the coming 24 months. The task has progressed well in its different engagement activities. However, the Covid-19 pandemic has caused delays with household recruitment and engagement. The deliverable outlines the measures taken to remedy the impacts of the pandemic and the specific implementation plan for each focal country.

Country overviews are divided into four tables. The first table contains a brief description of the engagement activities done up to date and a note of the target socio-demographic groups. The second table provides the number of households engaged to date. Section three presents the planned recruitment and engagement activities, with their respective target groups and the number of households that are planned to be engaged using each method. As part of these engagement activities, in-person household visits are intended to be supplemented and complemented with the use of appropriate remote engagement techniques. Finally, the last table provides a revised timeline with targets for recruitment and engagement of energy poor households. A copy of the full engagement plan for Ireland is included in Appendix 1.

---

<sup>1</sup> D1.1 Review of methods of identifying energy poor households

<sup>2</sup> D1.2 Guidelines for integrating behaviour change approaches while engaging energy poor



## 1. Belgium

In Belgium, more than one household in five is affected by energy poverty. The vast majority of energy-poor households are single people or single-parent families (almost 70%). Single elderly women (+65) and single-parent families headed by a woman are particularly vulnerable. There are also twice as many renters as owners who are affected by energy poverty. The main causes of energy poverty in Belgium are insufficient income, poor housing quality, and rising energy prices. Additional reinforcing factors are a low level of education, a small social network, low technical skills and a lack of access to the necessary information and services. In recent years, there has been an increase in electricity prices, as well as in the number of instalments plans with energy suppliers. Moreover, more and more instalment plans are not followed (Koning Boudewijnstichting 2020).

There are several social housing companies active in Belgium, but the share of social housing is still far too small to cope with the social housing shortage. The waiting time for a social house is 4 years on average and is still rising. As a result, a large proportion of families with the lowest incomes are forced to rent on the private rental market. Demand far exceeds supply, forcing many poorer tenants to live in substandard housing. The quality of the homes in which the lowest income households live is below average in several respects: less or no insulation, more frequent moisture problems, less space, less comfort, and hardly any renewable energy sources. (Heylen, K. & Vanderstraeten, L. 2019).

SAAMO (previously Samenlevingsopbouw) and Kamp C, are jointly working to implement the EnergyMeasures project in Belgium. Household engagements were originally planned to take place in the city of Turnhout, a medium-sized city in the province of Antwerp, leveraging the support of the city municipality. After a long wait due to Covid 19 related challenges, in December 2021, the organisations signed a contract with the city/region of Turnhout and the OCMW (the public centre for social welfare in Turnhout) to gain access to the groups targeted for the purpose of the project. However, given the volatility of current circumstances with Covid-19 pandemic, there is a little uncertainty as regards the level of city municipality activities in the coming year, an alternate timetable (a Plan B, so to speak) providing for lower activity is included as Table 4, where it would take a little longer to recruit the country target of 500 households. This plan will require to revise primary sources of referrals and aim to increase recruitment activities on the ground. To this purpose, SAAMO and Kamp C are following an adjusted strategy which comprises five steps:

- (1) Collective engagement as a starting point (through organised events and action days);
- (2) Initial remote engagement (via telephone) including initial advise, support and data collection;
- (3) Second engagement in the form of a home visit to provide a draft of the behaviour plan and an additional round of data collection;
- (4) Provision of a low-cost measure package;
- (5) Remote post intervention follow-up through a WhatsApp group where additional tips can be provided.

The updated strategy reflects a shift from referrals through the city/region of Turnhout and OCMW to the promotion of events by SAAMO and Kamp C where householders can register in a collective setting.

**Table 1: Recruitment and engagement activities to date (SAAMO and Kamp C as of February 2022)**

Recruitment activity	Activity description	Target group
Collective outreach actions	<b>Collective actions</b>   Energy lectures & Education for newcomers. SAAMO has already given some lectures, which led to some referrals. This avenue seems to be most promising.	Newcomers Seniors Ethnic groups
Referrals from SAAMO desk	<b>'Goed Plan'</b> dossiers and the permanent <b>advisory desk</b> at SAAMO. The advisory desk has so far provided very few referrals. Target value from this avenue needs to be re-evaluated.	Owners and tenants, as well as households in energy poverty
Outreach actions in collaboration with students	The first action day, planned in November 2021 in collaboration with <b>Thomas More College</b> , was cancelled due to covid-19 related restrictions. New dates are set in March.	Energy vulnerable residents
Referrals from social organisations	<b>OCMW (contract signed)</b>   Public centre for social welfare: Households with budget meters and/or energy bills in arrears. Due to covid-19 and bureaucratic delays concerning the signing of a contract for information exchange between OCMW, Kamp C and SAAMO, no referrals have taken place so far. The contract is now signed.	Householders assisted by social organisations
Referrals from public bodies	<b>City/Region of Turnhout (contract finally signed)</b> Conformity Assessment of homes (mandatory not until 2024) → Identifying homes that are under par in the private rental market Energy cutters → Referring energy poor households Due to covid-19 and bureaucratic delays concerning the signing of a contract for information exchange between OCMW, Kamp C and SAAMO, no referrals have taken place so far. The contract is now signed. Target value from this avenue needs to be re-evaluated.	Owners and tenants, as well as households in energy poverty

**Table 2. Households engaged to date (SAAMO and Kamp C as of February 2022)**

Total of households	Q1	Q2	Q3	Q4	Total
<b>2021</b>			8	4	12
<b>2022</b>	-	-	-	-	-
					<b>12</b>

**Table 3: Overview of adjustments in recruitment and engagement activities planned (SAAMO and Kamp C Q1-Q4 2022)**

Recruitment activity	Activity description	Target group	Estimated # households	Preparation plans
Collective outreach actions	<b>Collective actions</b>   Energy lectures & Education for newcomers	Newcomers Seniors Ethnic groups	64	Actions calendar and prepared content
Outreach actions in collaboration with existing projects	<b>'Binken weten beter'</b> in 2022 Piggy-backing of EM during 40 outings of this awareness raising project against aggressive sales for energy contracts	Energy vulnerable residents	80	Actions calendar and prepared content
Outreach actions in collaboration with students	3 action days (2 in 2022 and 1 in 2023): Collaboration with <b>Thomas More College</b> , combining the energy and social studies departments.	Energy vulnerable residents	120	Actions calendar prepared lessons as initiation & content for students going from door to door
Referrals from social organisations	<b>OCMW (contract signed)</b>   Public centre for social welfare: Households with budget meters and/or energy bills in	Householders assisted by social organisations	100	Engage with this organisation to

	arrears (additional supported actions: lectures for OCMW social workers)			establish strategies for collaboration
Engage gatekeeper organisations to facilitate referrals	<b>Energy cutters</b>   Referrals from this organisation that offers energy scans and advice (similar to EM) but limited in scope as a family is only allowed 1 scan regardless of change of home or circumstances (possibly via <b>OCMW</b> )	Households not eligible for 2 <sup>nd</sup> scan (if they have had one in the past)	- (see above)	Engage with this organisation to establish strategies for collaboration
Referrals from SAAMO desk	<b>'Goed Plan'</b> dossiers and the permanent <b>advisory desk</b> at SAAMO could provide some limited referrals, though not as many as originally estimated. (alternatives via Binken and lectures)	Energy vulnerable residents	38 (previously estimated at 170)	Prepared content
Engage energy masters as volunteers	Home energy scans by volunteer group <b>'Energy Masters'</b>	Energy vulnerable residents	30	Prepared training and content
Referrals from public bodies	<b>City/Region of Turnhout (contract)</b> Conformity Assessment of homes (mandatory not until 2024) → Identifying homes that are under par in the private rental market Energy cutters → Referring energy poor households	Owners and tenants, as well as households in energy poverty	- (previously estimated at 210)	Contract signed <b>City/Region of Turnhout</b> remains an important strategic partner for future structural changes
Plan B   Contacts arising from social research by SAAMO	<b>Collective engagement within vulnerable neighbourhoods</b> Distribution of leaflets in target neighbourhoods <sup>3</sup> and organisation of future actions	Energy vulnerable residents	-	Prepared content
Plan B   Collective engagement in school	<b>Collaboration with school</b> in one of the target neighbourhoods, combining outreach for second-hand clothes, school material...	Vulnerable families with children	-	Content to be created
Plan B   Collaboration with social organisations	Collaboration actions with e.g. <b>food banks, women centred campaign, church groups, coffee chat, ...</b>	Vulnerable citizens	-	Content to be created
Plan B   Contacts arising from new municipalities	Roll-out of 'home meter' in <b>other municipalities of the Kempen region</b>	Energy vulnerable residents	-	Prepared content
Plan B   Contacts arising from publicity campaigns	<b>Publicity</b> for EnergyMeasures on local radio, newspapers, web and social media	Energy vulnerable residents	-	Content to be created after the success and establishment of other actions

<sup>3</sup> In 2020, the city of Turnhout council wanted to work on social connections and encounters in vulnerable neighbourhoods in Turnhout and engaged SAAMO for a research assignment to enquire dozens of residents and key figures in 9 vulnerable neighbourhoods of the city and to observe life in the neighbourhood. The main focus in each case was the quality of life in the neighbourhood and the experiences of the residents. This "Look into the Neighbourhood" assignment made a quantitative and extensive qualitative study to clarify the characteristic problems/opportunities of the most vulnerable neighbourhoods/places and/or vulnerable groups in one neighbourhood, drawing conclusions based on this and formulating concrete recommendations. The finding of this study provides valuable information and connections to test other forms of engagement in the coming years, such as collective engagement within a neighbourhood. [http://www.samenlevingsopbouw-antwerpenprovincie.be/uploads/kijkindewijk\\_low.pdf](http://www.samenlevingsopbouw-antwerpenprovincie.be/uploads/kijkindewijk_low.pdf)

**Table 4. Estimated household engagement numbers adjusted to Covid-19 (SAAMO and Kamp C Revised targets, January 2022).**

<i><b>Total of households</b></i>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>			8	4	12
<b>2022</b>	60	75	75	115	325
<b>2023</b>	95	-	-	-	95
					<b>432</b>

## 2. Bulgaria

Bulgaria has been topping the chart on energy poverty on most of the indicators monitored by the EU Energy Poverty Observatory (2020). A large proportion of Bulgarian citizens cannot afford the costs of heating their homes to comfortable temperatures. 33.7% of the population are unable to keep their homes sufficiently warm (with all the adverse health effects this causes) – the highest rate in the EU. The same applies to the share of households that cannot afford cooling in the summer – 49.5%. Greece has the highest share of the population with overdue energy bills, but Bulgaria firmly holds second place at 31.7%. All factors that determine the level of energy poverty - low incomes, high energy prices (compared to the purchasing power of the population), and poor energy performance of buildings (over 90% being in energy classes D, E, F and lower) – are at play. Although progress has been made in recent years, especially through the National Program for Energy Efficiency in Multifamily Residential Buildings, the energy poverty in Bulgaria remains the most severe and the Bulgarian residential buildings – the most inefficient in Europe. Recent analyses of local NGO EnEffect based official data of the National Statistical Institute for the population's incomes and consumption figures for 2018, shows that more than 50% of the Bulgarian population are at risk of energy poverty.

The Municipal Energy Efficiency Network EcoEnergy is a non-profit association of Bulgarian municipalities, providing technical support and assistance for the successful design and implementation of local energy and climate policies, to increase energy security and promote sustainable development at a local and regional level. EcoEnergy is focusing on lower-income householders in multi-family apartment buildings in Gabrovo and Burgas (c. 28.5k and 119k households respectively). Working through its energy projects and with linked third-parties is identifying and recruiting energy poor households, having the target of 600 households.

EcoEnergy, Burgas and Gabrovo municipalities are leveraging their existing networks to engage with householders in multifamily apartment buildings in the two cities. The EnergyMeasures project has been promoted to the target groups through liaising with local authorities and homeowner's organisations through emails, phone calls and meetings. Municipal communications offices have been contacted to publicise the project on local radio and newspapers, through its substantial web and social media presence, and NGOs and civil society groups have been attracted to publicise and otherwise support the project offering.

**Table 5: Recruitment activities to date (ECOEnergy as of February 2022)**

Recruitment activity	Activity description	Target group
<i>Engage the local authorities and relevant experts to promote the project among HOAs</i>	The communication has taken place through direct emailing, phone calls to chairs of homeowners' associations, and direct meetings, during which the project team members, supported by local experts from the municipalities, have explained the project's goals and answered questions.	Energy vulnerable householders in multifamily apartment buildings
<i>Engage HOAs and commence the household visitations</i>	Homeowners' associations in Gabrovo and Burgas were invited to register with the project, setting up the initial household visits and data gathering arrangements. At the onset of the direct on-site meetings, project experts have surveyed the householders, followed by data analysis and evaluation, leading to specific recommendations. In addition, there have been training courses on the benefits of deep energy building retrofitting and the impact energy saving measures available for energy managers, HOAs, and householders.	Energy vulnerable householders in multifamily apartment buildings
<i>Communication and dissemination efforts</i>	Project activities have been actively promoted via local radio, online TV channels, websites and newspapers, participation at various public events, and disseminated via social media accounts (Gabrovo, Burgas, EcoEnergy and EnEffect's facebook pages) and via EcoEnergy monthly newsletter (9 publications).	Energy vulnerable householders in multifamily apartment buildings

**Table 6. Households engaged to date (ECOEnergy as of February 2022)**

Total of households	Q1	Q2	Q3	Q4	Total
<b>2021</b>			145	189	334
<b>2022</b>	-	-	-	-	0
					<b>334</b>

**Table 7: Overview of planned recruitment activities (ECOEnergy Q1-Q4 2022)**

Recruitment activity	Activity description	Target group	Estimated # households	Preparation plans
<i>Direct engagement</i>	Direct visits to households to provide a short report about the energy analysis during the heating period, discuss the package of measures to be deployed, which would also correspond to the requirements for participation in the national renovation support programme, and suggest a suitable behaviour change plan.	Energy vulnerable householders in multifamily apartment buildings	300	Preparation of tailor-made behaviour change plan; finalization of the reports from initial visits.
<i>Direct engagement</i>	Organise training courses both online and in person for municipal energy managers, public officials, HOAs, householders, social service providers.	Energy vulnerable householders in multifamily apartment buildings	60	
<i>Referrals from social organizations</i>	Liaison with NGOs and public providers of social services	Energy vulnerable householders in multifamily apartment buildings	10	Collaboration with organisations for households' recruitment

<i>Follow-up support for householders</i>	Scheduled direct visits to chosen households - collecting feedback, providing advice and guidance where possible, and redirecting for support if appropriate. Assistance will be also provided where needed in choosing contractors, switching energy providers, and accessing grants.	Energy vulnerable householders in multifamily apartment buildings	40	Based on data evaluation from the initial visits. Emailing and social media updates are foreseen to keep people engaged, providing information on support available to optimise their energy measures.
<i>Small-scale competition</i>	A competition with energy-efficient appliances as incentives based on provided feedback on the results from the implementation of the behaviour change strategies.	Energy vulnerable householders in multifamily apartment buildings	600 (all engaged households)	The rules of the competition will be designed by EcoEnergy, while the administration and awarding process will be delivered by the municipal authorities. It is planned that the competition would have a larger scope than the initially provisioned by attracting additional sponsors and supporters, so that more households would receive a chance to win awards – which would also contribute to the parallel publicity and communication actions at local level.

NOTE: It is expected that the different households would be subjected to more than one engagement activity

**Table 8. Estimated household engagement numbers adjusted to Covid-19 (ECOEnergy Revised targets January 2022)**

<i><b>Total of households</b></i>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>			145	189	334
<b>2022</b>	50	166	50	-	266
<b>2023</b>	0 <sup>4</sup>	-	-	-	-
					<b>600</b>

### 3. Ireland

Depending on the metric used, the Irish government's Energy Poverty Strategy suggests that the rate of households experiencing energy poverty in Ireland is between 8.8% based on self-reported inability to heat, and 28% derived from modelled expenditure and building energy rating data (DCENR, 2016).

Energy Action CLG was founded in 1988 with the main aim of helping alleviate fuel poverty in Ireland by addressing the thermal needs of disadvantaged householders. Energy Action's primary target group for

<sup>4</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.

EnergyMeasures are elderly people living in single-family, owner-occupied houses in a large urban area, namely Dublin City and environs. The organization aims to recruit 500 households by tapping into their existing networks including SEAI, DCC, Housing Associations and NGOs including MABS, SVdP to engage with target householders.

Household recruiting activities have included the distribution of 10,000 leaflets with information about the project and energy advice at key locations such as Senior Citizen Complexes, MABS, SVDP, Senior Citizen Groups, Friends of the Elderly, Age Action, Third Age Ireland, ALONE, Irish Environmental Network, Environmental Protection Agency.

Previous plans included the involvement of two Local Authorities to access relevant target groups. However, the Covid 19 pandemic had a serious impact on gaining access to households due to the stop of in person municipal services. Additionally, the scheme of the Pandemic Unemployment Payments have limited Energy Actions ability to recruit staff members that will work as energy advisors.

Future recruitment activities will include training city wardens and caretakers on the importance of energy efficiency measures so that they can identify and encourage energy-saving practices in their complexes, organising an energy efficiency competition between EnergyMeasures participating senior citizen complexes. Furthermore, energy suppliers have been contacted to support the EnergyMeasures project recruitment efforts.

The UCC target group are disadvantaged communities in Cork City (c. 70k households), which University College Cork have traditionally engaged in educational and social outreach programmes. The unit is building on these existing contacts to implement an outreach programme involving university staff (*e.g.*, maintenance and technical personnel) volunteering to undertake low-cost measures for energy poor households in Cork City.

UCC's household recruiting activities have included liaising with local organisations including, Carbery Housing Association and NCE Energy Hub, to engage them as gatekeepers for the project in their localities, distributing leaflets in target areas, and contacting University student societies and the UCC Media and Communications Office to publish the initiative on local radio and newspapers, through its substantial web and social media presence. Gatekeeper organisations will publicise the project and refer energy households to the project team.

From the launch of the project in September 2020 the implications of COVID-19 and its social impacts has been a constant background to the EnergyMeasures project. Due to the pandemic and the extensive 'lock-downs' and social restrictions imposed in Ireland to mitigate its impacts, it has not been possible to commence engagement from March 2021 as originally envisaged in the description of action.

The engagement in Ireland has been rescheduled to fit in with the planned 'reopening' of society as the vaccination programme progresses and the pandemic threat lessens. Accordingly, the Irish government has commenced a staged phasing out of social restrictions, and it is expected that these will be substantially lifted by January 2022 (albeit there will likely be some low-level restrictions for the near term). As a result, the household recruitment and engagements that were originally scheduled to commence in March 2021,



started in January 2022 (with some preliminary recruitment over November and December as circumstances allowed).

**Table 9: Recruitment and engagement activities to date (Dublin as of February 2022)**

Recruitment activity	Activity description	Target group
<i>Engage gatekeeper organisations to facilitate referrals</i>	Both Threshold and ALONE Housing Association, have engaged with Energy Action to the possibility of working on their houses.	Tenants and clients of the gatekeeper organisations
<i>Referrals from social organisations</i>	Engaged with large stakeholders such as MABS, SVP, Threshold and ALONE so that they can help publicise the offering of the project and refer energy poor households to the project	Householders assisted by social organisations
<i>Referrals from public bodies</i>	Liaise with Dublin City Council and South Dublin County Council bodies) so that they can support in identifying and referring energy poor households.	Tenants and service users of the public bodies
	Engage with County Councillors in Dublin and Meath.	Households
	Liaise with Energy Suppliers who may identify most needy vulnerable customers.	Households
	Identify vulnerable households through Sustainable Energy Authority Ireland, BEWHS.	Households
<i>Direct engagement</i>	Held the first Energy Advice training for MABS (Money Advice & Budgeting Services), who have nationwide offices.	Energy vulnerable residents in target areas
<i>Contacts arising from publicity campaign</i>	Distribution of 10,000 leaflets in target communities. 40 posters have been placed in churches, libraries and pharmacies.	Energy vulnerable residents in target areas

**Table 10. Households engaged to date (Dublin as of February 2022)**

Total of households	Q1	Q2	Q3	Q4	Total
<b>2021</b>			-	7	7
<b>2022</b>	16	-	-	-	16
					<b>23</b>

**Table 11: Overview of planned recruitment activities (Dublin Q1-Q4 2022)**

Recruitment activity	Activity description	Target group	Estimated # households	Preparation plans
<i>Referrals from social organisations</i>	Liaise with other social organisations so that they can support in identifying and referring energy poor households.	Householders assisted by social organisations	77	Engage with organisations to establish strategies for collaboration
<i>Direct engagement</i>	Organise Energy Advice training at community centres, housing associations and retirement associations.	Energy vulnerable residents in target areas	100	Liaise with community centres and organisations to set dates and times.
<i>Referrals from public bodies</i>	Liaise with South Dublin City Council so that they can support in identifying and referring energy poor households.	Tenants and service users of	150	Engage with public bodies to establish



		the public bodies		strategies for collaboration
<i>Contacts arising from publicity campaign</i>	Distribution of 1200 leaflets in target communities (Mayfield, Gurranabraher and Shandon). Publish poster again in relevant FB pages.	Energy vulnerable residents in target areas	150	Prepare content

**Table 12. Estimated household engagement numbers adjusted to Covid-19 (Dublin Revised targets January 2022).**

<i>Total of households</i>	Q1	Q2	Q3	Q4	Total
<b>2021</b>			-	7	7
<b>2022</b>	83	120	140	150	493
<b>2023</b>	0 <sup>5</sup>	-	-	-	-
					<b>500</b>

**Table 13: Recruitment and engagement activities to date (Cork as of February 2022)**

Recruitment activity	Activity description	Target group
<i>Engage gatekeeper organisations to facilitate referrals</i>	Contacted organisations such as Carbery Housing Association and NCE Energy Hub to publicise the offering of the project and refer energy poor households to the project team at UCC.	Tenants and clients of the gatekeeper organisations
<i>Referrals from social organisations</i>	Liaised with social organisations such as St Vincent de Paul, Cork City Partnership and Cork City Library so that they can support recruitment activities.	Householders assisted by social organisations
<i>Contacts arising from publicity campaign</i>	Distributed 1200 leaflets in target neighbourhoods and supermarkets (Blackpool, Churchfield, Gurranabraher, Hollyhill and St Lukes) and shared information about the programme in relevant Facebook groups (Community Network and Cork Northside Community). Published information about the programme in two online newsletters: - Comharchumann Forbartha Mhúscraí - PPN Cork County	Energy vulnerable residents in target areas

**Table 14. Households engaged to date (Cork as of February 2022).**

<i>Total of households</i>	Q1	Q2	Q3	Q4	Total
<b>2021</b>			-	9	9
<b>2022</b>	22	-	-	-	22
					<b>31</b>

**Table 15: Overview of planned recruitment activities (Cork Q1-Q4 2022)**

Recruitment activity	Activity description	Target group	Estimated # households	Preparation plans
<i>Referrals from social organisations</i>	Liaise with social organisations such as MABS, Parishes and Student Unions so that they can support in identifying and referring energy poor households.	Householders assisted by social organisations	25	Engage with organisations to establish strategies for collaboration
<i>Direct engagement</i>	Organise energy clinics at community centres, housing associations and retirement associations.	Energy vulnerable	50	Liaise with community centres and

<sup>5</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.

		residents in target areas		organisations to set dates and times.
<i>Referrals from public bodies</i>	Liaise with Cork City Council and Cork County Council (and other relevant public bodies) so that they can support in identifying and referring energy poor households.	Tenants and service users of the public bodies	25	Engage with public bodies to establish strategies for collaboration
<i>Contacts arising from publicity campaign</i>	Distribution of 1200 leaflets in target communities (Mayfield, Gurranabraher and Shandon). Publish poster again in relevant FB pages.	Energy vulnerable residents in target areas	28	Prepare content

**Table 16. Estimated household engagement numbers adjusted to Covid-19 (Cork Revised targets February 2022).**

<i>Total of households</i>	Q1	Q2	Q3	Q4	Total
<b>2021</b>			-	9	9
<b>2022</b>	51	20	20	50	141
<b>2023</b>	0 <sup>6</sup>	-	-	-	-
					<b>150</b>

## 4. Netherlands

Energy poverty is a relatively new term used in policy circles in the Netherlands even though it has been demonstrated that energy poverty occurs in the country (Breukers, Agterbosch and Mourik 2020; Straver et al 2021). Policy initiatives are emerging in various parts of the country, often initiated by municipalities. Housing corporations, energy cooperatives and other social organizations are also increasingly tackling energy poverty issues. There are no national programs or strategies aimed at reducing energy poverty in the Netherlands, although the pressure to do so is increasing (Straver et al 2021). Within Eindhoven, Energiebox is one initiative that has had a long trajectory providing households with energy-saving advice and aids.

The municipality of Eindhoven (Gemeente Eindhoven), PON & Telos and DuneWorks are working in the city of Eindhoven targeting households that are energy and income poor. The three organisations aim to recruit 400 households using conventional media, social media and direct personal contact with household and communities. Conventional media will include press releases, local newspapers (Eindhoven's Dagblad or neighbourhood newspaper) and newsletters from (neighbourhood) partners. Social media will comprise information in a Facebook Group and WhatsApp groups. Direct contact with households is planned to be attained through targeted door-to-door contact and meetings. The municipality of Eindhoven will also collaborate with existing initiatives, networks, NGOs and other partners such as Foodbanks, church organisations, and initiatives providing social benefits and financial arrangements for the poor to identify and refer households.

Table 17 lists the three organisation's efforts to recruit households up to date. However, the implications of COVID-19 and its social impacts have had important implications for the Dutch context, reflected in lower

<sup>6</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.

recruitment levels than planned for Q4 of 2021 and Q1 of 2022. Table 18 describe the activities planned to increase household engagements.

**Table 17. Recruitment activities to date (Eindhoven as of February 2022)**

<b>Recruitment activity</b>	<b>Activity description</b>	<b>Target group</b>
<i>Give information on the project to intermediate organisations</i>	We initiated a cooperation with Werkplaats Financien XL. This is an NGO that provides free guidance and financial advice to habitants of Eindhoven. They have five different offices, one in each part of the city. We have presented the project to the director, who shared the information with her staff. In the beginning of February 2022 one of our energycoaches has had an appointment at the Werkplaats Financien XL to explain more about the project. An alderman of the Municipality was also there and he was also informed by the energycoach.	Households assisted by social organisations
<i>Give information on the project to intermediate organisations</i>	We initiated a cooperation with WIJEindhoven. This is an NGO that provides social work to all habitants of Eindhoven and they work with around 100.000 clients each year. We have presented the project multiple times to the consultants working there and project materials have been shared regularly on their intranet.	Households assisted by social organisations
<i>Give information on the project to intermediate organisations</i>	The project is a regular agenda item on the meeting of the energy poverty workgroup between the municipality and the four housing corporations. The housing corporations have shared the project on social media and by flyer with their tenants (40.141 households in total).	Households that rent their house from the social housing agencies
<i>Flying within the intended group of households</i>	We have recruited households in a targeted manner via flyer distribution at the food bank.	Households assisted by social organisations
<i>Direct approach of the target group</i>	We have recruited households in a targeted manner by adding the project to a letter sent out to 6500 households with a minimum income, in cooperation with the Social Domain of the municipality.	Households known by the municipality
<i>Direct approach of the target group</i>	We have recruited eligible households under 2731 applications (numbers are for the period May - December 2021) for the regular Energiebox.	Households known by the regular Energiebox
<i>Give information on the project to intermediate organisations</i>	We have contacted various religious organisations, 25 in total, in order to share the project with households they work with.	Households assisted by churches/mosques
<i>Give information on the project to intermediate organisations</i>	We have contacted several NGO's. E.g. Ik Wil, Sociale Raadsliden, Vluchtelingenwerk, Jonge Moeders.	Households assisted by social organisations

**Table 18. Households engaged to date (Eindhoven as of February 2022)**

<b>Total of households</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>				19	19
<b>2022</b>	-	-	-	-	-
					<b>19</b>

**Table 19: Overview of planned recruitment activities (Eindhoven Q1-Q4)**

<b>Recruitment activity</b>	<b>Activity description</b>	<b>Target group</b>	<b>Estimated # households</b>	<b>Preparation plans</b>
<i>Direct approach of the target group</i>	We have made agreements with the food bank to repeat this flyer campaign in February.	Households assisted by social organisations		Printing flyers, add them to the foodboxes.
<i>Direct approach of the target group</i>	We planned to flyer at the largest mosque in Eindhoven	Households assisted by churches/mosques		Waiting for the administration of the mosque to plan a date, probably in March.
<i>Direct approach of the target group</i>	We planned to set up an stand at the foodbank and give more information about the project	Households assisted by social organisations		Have to settle a date when the boxes are handed out and we are allowed to give our information.
<i>Direct approach of the target group</i>	We will send a letter to employees of the sheltered workshop who fall in the lowest income group to ask them to participate in Energiebox Plus.	Households that have a low income and probably live in energypoverty		Printing the letter by the municipality and send it to the employees
<i>Direct approach of the target group</i>	The regular Energiebox will send an e-mail to all the 5500 households that they have given an advise to in the last two years, to see if there are households that can join the project.	Households that a familiair with Energiebox and probably are interested to join		Sending the e-mail to the households by Energiebox
<i>Broad approach tot the target group</i>	We write an article about Energiebox Plus & EnergyMeasures and place that in an weekly newspaper that is send to people living in Eindhoven	Households that haven't heard from the project until now		Rewrite the article that is already written by Het PON & Telos and make it suitable for the weekly
<i>Search for more entrances to the target group</i>	We planned to do a social media search on local social projects in Eindhoven that we can use to give information on the project. Follow-up on this will be that we get in contact with these projects so that we can tell more about our project.	---	---	Give instructions to our intern, so that she can work on it.

**Table 20. Household engagement numbers adjusted to Covid-19 (Eindhoven revised targets January 2022)**

<b>Total of households</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>				19	19
<b>2022</b>	81	100	40	80	301
<b>2023</b>	80 <sup>7</sup>	-	-	-	80
					<b>400</b>

<sup>7</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.

## 5. North Macedonia

Energy is used inefficiently in Macedonia, with energy intensity significantly above the average for the European Union. The high energy intensity is a result of aged and often obsolete energy infrastructure and poorly maintained and/or outdated energy-using capital stock – especially in buildings. Residential multi-apartment buildings, estimated at 11,500 in Macedonia, account for a significant share of the total energy consumption in buildings and are at the same time highly energy inefficient. According to recent findings of the Western Balkans Residential Energy Efficiency Market Assessment, the penetration rates of energy-efficient materials, appliances and equipment is very low in Macedonia (on average not exceeding 10%), especially in households with lower incomes. Most of the buildings in Macedonia are 30 to 50 years old, lack thermal insulation and have poor energy performance. About 6% of all residential building stock in Macedonia is estimated to meet the national energy performance requirements and belong to energy class C or D, while all other residential buildings can be classified in lower energy classes thus need energy efficiency retrofiting. Technical opportunities for improving energy efficiency in existing buildings are thus significant with potential energy savings estimated between 30-70%. Furthermore, there is low experience with awareness of and knowledge of energy efficiency measures and financing among households.

Habidom is a residential building management company that aims to improve the living conditions in collective residential buildings. The organisation is targeting female-headed and elderly couples households living in multi-family apartment buildings and learning low incomes. Households are being recruited by distributing leaflets in residential buildings already managed by Habidom (146 residential apartment buildings which have a total of 3,602 households).

**Table 21. Recruitment activities to date (Habidom as of February 2022)**

Recruitment activity	Activity description	Target group
Engage homeowners	Contacted homeowners to explain the goal of the project and started the interview process.	Households managed by Habidom
Public campaign	Facebook campaign twice a week	Households

**Table 22. Households engaged to date (Habidom as of February 2022)**

Total of households	Q1	Q2	Q3	Q4	Total
2021			-	30	30
2022	-	-	-	-	-
					30

**Table 23. Overview of planned recruitment activities (Habidom Q1-Q4)**

Recruitment activity	Activity description	Target group	Estimated # households	Preparation plans
Direct engagement	Direct communication with households that fit within the criteria selection	Vulnerable households	500	Engage with all the representatives from the 180 buildings we manage to choose vulnerable households

**Table 24. Estimated household engagement numbers adjusted to Covid-19 (Habidom revised targets February 2022)**

<i><b>Total of households</b></i>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>				30	30
<b>2022</b>	120	200	200	50	570
<b>2023</b>	0 <sup>8</sup>	-	-	-	-
					<b>600</b>

## 6. Poland

4.6 million people in Poland live in energy poverty, accounting for 12% of the population. Particularly vulnerable groups include: (1) the people living in the countryside, (2) young families on their first job (or without), (3) residents of high-poverty urban areas and (4) elderly and disabled people. The first group represents 2/3 of all energy poor, while the last one ¼ of all. The risk of falling into energy poverty is considerably higher for households living on social benefits than for other socio-economic groups.

The Association of Municipalities Polish Network „Energie Cités” (PNEC) is a non-governmental organisation which, since 1994, supports sustainable energy planning and implementation on the local level. PNEC will implement the EnergyMeasures project in the city of Bielsko-Biała, in cooperation with city authorities.

PNEC is targeting two main groups: private owners occupying single-family buildings and private owners of flats in multi-family buildings (both with the focus on the elderly and the families leaving on social benefits). Due to the lack of data to identify energy poor households, the selection/recruitment of households will be mostly made on the basis of (1) income per person, (2) technical condition of the building.

PNEC's household recruiting activities include a multi-channel campaign to inform the general public about the project using traditional and social media, and a strategy for involving stakeholders. Traditional media comprise project information on the city website, city newsletter, local free bulletins, housing association bulletins and community, housing association and church boards. Also contact with local independent media (like “Kronika Beskidzka”, “Dziennik Zachodni”, Radio Bielsko) will be established for advertising EnergyMeasures. The text and the graphics of the advertisement has been designed jointly by PNEC and the city of Bielsko-Biała. The social media campaign complements traditional media by reaching young people through Facebook pages and groups. The stakeholder involvement strategy aims to reach households through institutions such as the Municipal Social Services Office, local schools, housing associations, churches, seniors clubs, relevant NGOs (e.g. focusing on social issues or energy issues). Most of households registered to date have been recruited through municipal channels by filling application form offline.

<sup>8</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.

**Table 25: Recruitment activities to date (PNEC as of February 2022)**

<b>Recruitment activity</b>	<b>Activity description</b>	<b>Target group</b>
<i>Engagement of organizations</i>	Contact with local NGOs (a.o.Caritas, local activation centre) to propose cooperation and set up the conditions of their support	householders associated by local organizations
<i>Preparation of dedicated promotion content</i>	Close cooperation with the City Hall to adjust content to city website, local newspapers and radio. Preparation of leaflets, social media campaign and content of letters distributed to target groups.	energy vulnerable residents in target areas
<i>Recruitment details</i>	Preparation of second recruitment path to include digitally excluded residents	digitally excluded residents
<i>Promotion</i>	Distribution of 1000 of leaflets and 20 posters in target neighbourhoods and housing estates.	householders living in cooperative housing

**Table 26. Households engaged to date (PNEC as of February 2022)**

<b>Total of households</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>			-	-	-
<b>2022</b>	18	-	-	-	18
					<b>18</b>

**Table 27. Overview of planned recruitment activities (PNEC Q1-Q4 2022)**

<b>Recruitment activity</b>	<b>Activity description</b>	<b>Target group</b>	<b>Estimated # households</b>	<b>Preparation plans</b>
<i>Referral of President</i>	Direct encouragement for housing estate councils from city council by sending letters and promotion plan for estates	Vulnerable residents of old city's housing estates	110	President's Letter of Recommendation for every housing estate council
<i>Local recruitment points</i>	Liaise with social workers who can support the identification and referring energy poor households. The points to submit an application will be available. Thanks to that direct contacts with target residents possible	Householders assisted by Municipal Social Welfare Center	80	clear strategy of cooperation with public bodies
<i>Direct engagement of local social activists</i>	Support in identifying and referring energy poor households by local activists. They will receive information package to hand on during activities with proteges and on their standard communication channel	Elderly or excluded citizens supported by social organizations	80	using local newsletters, information during social organizations' meetings
<i>Contacts gained from social media and offline campaign</i>	Distribution of 2000 leaflets and 30 posters in the crucial public and private spaces (churches, clinics, public buildings, information boards)	Energy vulnerable residents in target areas	130	posters, leaflets in public space, new target content and series of posts



**Table 28. Estimated household engagement numbers adjusted to Covid-19 (PNEC revised February 2022)**

<i><b>Total of households</b></i>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>			-	-	-
<b>2022</b>	140	230	30	-	400
<b>2023</b>	0 <sup>9</sup>	-	-	-	-
					<b>400</b>

## 7. United Kingdom

In 2019 an estimated 24.6% (around 613,000 households) of all households in Scotland were in fuel poverty. Between 2018 and 2019, rates of fuel poverty increased in remote rural areas (from 33% to 43%), widening the gap between urban (24%) and rural areas (29%). Similarly, levels of extreme fuel poverty increased in remote rural areas (from 23% to 33%), so extreme fuel poverty rates in rural areas (19%) were higher than in urban areas (11%). Overall rates of fuel poverty differed between the social (37%) and private sector (20%) although rates of extreme fuel poverty were similar (14% and 12%, respectively) in 2019. Levels of fuel poverty among households using electricity as their primary heating fuel have remained the highest, at 43%, compared to households using gas (22%), oil (28%) and other fuel types (31%) as their primary heating fuel in 2019.

Tighean Innse Gall (TIG) was founded in 1991 to help make homes affordably warm, safe to live in and adapted for those with disabilities or who are frail. The primary focus of engagement of TIG will be the Outer Hebrides of Scotland, targeting mainly private owner-occupiers suffering from energy poverty, living in remote communities on the islands, with a focus on the elderly (65+).

TIG's household recruitment strategy has focused on creating public awareness and involving service agencies. Raising public awareness about the project has been done through placing adverts in local newspapers, social media, local radio stations (one in Gaelic) and word of mouth. TIG has also involved agencies that provide services for people throughout the islands so that they can promote EnergyMEASURES and refer households. These agencies include Western Isles National Health Service (WINHS), Western Isles Association for Mental Health (WIAMH), Western Isles Citizens Advice Service (WICAS), The Shed (works with people with drug and alcohol addiction issues) and The Foyer which works with vulnerable young people. In addition to these, the Financial Inclusion Team of Comhairle nan Eilean Siar and other local community-based organisations have also been contacted to reach target households.

These ranging outreach activities have resulted in successful recruitment of households. However, this has meant some households recruited who are not eligible for support from the project. Nonetheless those not eligible have been given advice, as well as signposted to other agencies such as Home Energy Scotland who deliver interest free loans for efficiency measures

<sup>9</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.



**Table 29. Recruitment activities to date (TIG as of February 2022)**

Recruitment activity	Activity description	Target group
<i>Outreach work with community groups</i>	We have made contact with a wide range of community groups to extend the profile of the project. These have resulted in talks to citizens via groups; which have included Western Isles Library Service, community groups and events such as Carloway Community Association, Breasclete Community 'Shout Out' and West Harris Trust coffee morning.	Users of community group services from which we can identify fuel poor households.
<i>Referrals from trained social organisations</i>	We have trained social groups to understand about EnergyMEASURES and our work and these have included the financial inclusion team at the local authority, Western Isles Citizens Advice Bureau and Macmillan cancer relief.	Households who receive one service will need others help.
<i>Contacts from publicity campaign</i>	We have placed numerous social media recruitment posts; adverts in all local newspapers and newsletters (Guth, Am Paipear, Dè tha dol?, Spotlight); and online news welovestornoway.com; Hebrides-news.com Each advert or news item has a bespoke code which where possible is quoted when responding.	Energy vulnerable households and those in remote areas.

**Table 30. Households engaged to date (TIG as of February 2022)**

Total of households	Q1	Q2	Q3	Q4	Total
<b>2021</b>	148	49	64	120	383
<b>2022</b>	45	-	-	-	45
					<b>428</b>

**Table 31. Overview of planned recruitment activities (TIG Q1-Q4 2022)**

Recruitment activity	Activity description	Target group	Estimated #households	Preparation plans
<i>Outreach work with community groups</i>	We will continue to provide briefings for community groups who have members that will benefit from our project, including talks	Users of community group services from which we can identify fuel poor households.	100	We have drawn up a contact list of community organisations and planned public events.
<i>Referrals from trained social organisations</i>	We will encourage groups that support their own vulnerable cliental to refer to us for project support.	Households who receive one service will need others help.	90	We are continuing training for such groups
<i>Contacts from publicity campaign</i>	We will continue to place adverts in all the media which we have used so far.	Energy vulnerable households.	150	We have contracts in place for multiple ad discount rates.

**Table 32. Estimated household engagement numbers adjusted to Covid-19 (TIG revised February 2022)**

Total of households	Q1	Q2	Q3	Q4	Total
<b>2021</b>	148	49	64	120	383
<b>2022</b>	80	10	10	17	117
<b>2023</b>	0 <sup>10</sup>	-	-	-	-
					<b>500</b>

<sup>10</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.

## Conclusion

Based on the knowledge developed in T2.2, the household engagement process of task T2.3 has entailed project staff and volunteers working with householders to get an overview of their dwelling, ascertain their energy consumption and understand their energy-related practices and behaviours. As part of this process, householders are agreeing on a tailored range of low-cost energy measures and behaviour changes. These are selected from a portfolio of possible measures which include energy efficient devices e.g., LED lighting, water saving faucets, shower timers, meters etc.; energy conservation measures e.g., draught proofing, hot water lagging, radiator foil, device standby killer, etc. energy services e.g., servicing heating systems, etc.

Based on this assessment, and with the support of a behaviour change plan checklist the energy advisors and householders are co-designing a bespoke energy behaviour change plan and a package of low-cost energy measures that fits their lived experiences around energy using (an example of the plan is included in Appendix 2). In doing this we use the information gathered in T2.2 to deconstruct habitual patterns of energy use to help households become conscious of the factors which underpin their choices and adopt new patterns of energy use. In the case of multi-family dwellings, some of this work is being routed through homeowner associations, which are providing an additional collective dimension to the project, with individual behaviour change supported and reinforced by the actions of peers.

To support household engagement activities, the partners have developed country-specific implementation plans which detail (i) how energy poor householders will be identified and recruited, and (ii) the step-by-step approach that will be taken in engaging householders. The Covid-19 pandemic has however impacted on the partners' ability to recruit and engage householders as programmed. Engagement of households was due to start in March 2021, however, this was not possible in most countries due to the pandemic. Nonetheless, the improving situation with respect to Covid-19 and successful roll-out of the vaccination programme across Europe has provided hope for the re-opening of society in the beginning of 2022 allowing for engagements to be ongoing in all countries.

In this context, and to remedy the impacts of the pandemic on the project, household engagement activities will proceed until month 42 of the project. This change has been coupled with a rescheduling of tasks, modification of recruitment strategies and associated deadlines. This will hopefully enable the project partners to make up for the recruitment and engagement which they have been unable to do over the past year. The country-level updated implementation plans presented as part of this deliverable will continue to be monitored on a quarterly basis, discussed on plenary project meetings, and as require remedial measures put in place where necessary to ensure targets are met.

## Appendix 1: Household Engagement Plan Ireland



# EnergyMeasures

Tailored measures supporting energy vulnerable households

# Household engagement plan – Ireland



<http://www.energymeasures.eu>



@NRGMeasures

May 2021



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 894759

## Document Information

Document ID	IE.1 v2		
Document Title	Household engagement plan – Ireland		
Lead beneficiary	UCC		
Contributing beneficiaries	Energy Action		
Due date Annex I	Not applicable		
Issue date	2021.05.15		
Dissemination level	Internal working document		
Author(s)	Niall Dunphy, Charles Roarty, Paola Velasco-Herrejón		
Document checked	Niall Dunphy	Date:	2022.01.15

### Copyright

© 2022 EnergyMeasures Consortium

The EnergyMeasures Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 894759. For more information on the project, its partners, and contributors please see <http://www.energymeasures.eu>.

























This report, if not confidential, is licensed under a Creative Commons Attribution 4.0 International Licence (CC BY 4.0); a copy is available here: <https://creativecommons.org/licenses/by/4.0/>. You are free to Share – copy and redistribute the material in any medium or format, and Adapt – (remix, transform, and build upon the material for any purpose, even commercially). Licence Terms: (i) attribution (you must give appropriate credit, provide a link to the licence, and indicate if changes were made; you may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use); (ii) no additional restrictions (you may not apply legal terms or technological measures that legally restrict others from doing anything the license permits).

### Disclaimer

The information contained in this document represents the views of EnergyMeasures consortium as of the date they are published. The EnergyMeasures consortium does not guarantee that any information contained herein is error-free, or up to date, nor makes warranties, express, implied, or statutory, by publishing this document. The information in this document is provided as is and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and liability.

The content of this report represents the authors' views only and it is their sole responsibility. It cannot be considered to reflect the views of the European Commission and/or the European Climate Infrastructure and Environment Executive Agency (CINEA). The European Commission and the Agency do not accept responsibility for the use that may be made of the information it contains.

## EnergyMeasures Consortium

	University College Cork – National University of Ireland, Cork		IE
	Energy Action CLG		IE
	DuneWorks BV		NL
	Het PON & Telos		NL
	Gemeente Eindhoven		NL
	APB Kamp C		BE
	SAAMO Provincie Antwerpen vzw		BE
	Stowarzyszenie Gmin Polska Sieć Energie Cités		PL
	Residential Building Management Company Habidom DOOEL		MK
	Association Municipal Energy Efficiency Network EcoEnergy		BG
	Tighean Innse Gall		UK
	Oikoplus GmbH		AT

### Project Coordinator:

Dr Niall Dunphy, Director, Cleaner Production Promotion Unit, University College Cork, Ireland

e: [n.dunphy@ucc.ie](mailto:n.dunphy@ucc.ie) | w: [www.ucc.ie/cppu](http://www.ucc.ie/cppu)

## Table of Contents

About EnergyMeasures .....	5
1 Introduction .....	6
2 Household recruitment process.....	9
2.1 Introduction .....	9
2.2 Recruitment by Energy Action .....	10
2.3 Recruitment by UCC .....	12
3 Household engagement procedures .....	14
3.1 Registration and initial data gathering.....	15
3.2 First household visitation .....	15
3.3 Data analysis and evaluation .....	15
3.4 Second household visitation.....	16
3.5 Follow-up support for householders.....	17
3.6 Timeline for recruitment and engagement – Ireland.....	17
References .....	21
Appendix 1: Eligibility Self-Assessment.....	22
Appendix 2: Registration form.....	23
Appendix 3: Covid-19 aware engagement guidelines .....	24
Appendix 4: Note on alternative approaches to direct contact .....	25

## About EnergyMeasures

EnergyMEASURES is working to address energy poverty in seven European countries, namely: Belgium, Bulgaria, Ireland, Netherlands, North Macedonia, Poland and the United Kingdom. The project comprises two complementary and synergistic strands of work.

The first strand involves working with energy poor households to improve their energy efficiency through a combination of low-cost measures, and changes in energy-related behaviours and practices. Recruited householders will be provided with low-cost energy measures and empowered to change their energy-related behaviours and practices through an approach that takes account of existing housing conditions and is reflective of their lived experience.

The second strand comprises working with municipalities, energy authorities, housing associations and other relevant actors to assess how current multi-level institutional contexts affect efforts to alleviate energy vulnerability in the participating countries. This knowledge will be used to develop and support the implementation of policy and practice measures which will address structural issues that combine to trap households in energy poverty.

Through this work the project contributes to reducing participants' vulnerability to energy poverty, while at the same time cutting household energy consumption and associated GHG emissions.

For more information see <http://www.energymeasures.eu>

# 1 Introduction

This document is intended to describe how the engagement of energy poor households, planned within the context of the EnergyMeasures project will be implemented in Ireland. It draws upon two preparatory reports previously prepared, which outline the project's approach to: identifying energy poor households<sup>1</sup> and to integrating behaviour change approaches in household engagement<sup>2</sup>. This version of the document is the second iteration of the implementation plan.

This initial introductory section presents a brief overview of the country-specific context of energy poverty, short profiles of the organisations involved, and an overview of the target socio-demographic groups. The second section describes how the energy poor household will be recruited from the target groups leveraging the work outlined in Deliverable 1.1<sup>1</sup>, and reflecting the knowledge, contacts and existing practices of the participating organisations. Section three presents the process to be taken, and procedures to be adopted in the actual household visitations (or remote contacts as appropriate) both at the start of the process (what might be called the assessment stage) and in subsequent visitations or contacts (the support stage). This final section will also cover the selection of appropriate low-cost measures, and the devising of behaviour change plans suitable for different households.

## Country context – Ireland

The issue of energy poverty in Ireland has been recognised (at least to some extent) for some time *e.g.*, social supports for energy costs were made available as early as 1942 (DCENR, 2016). Under recently, Ireland was one of the few only EU countries considered to have energy poverty on the political agenda. This is perhaps not surprising when one considers that Ireland has seasonal mortality rates which are amongst the highest in Northern Europe despite its relatively mild winters – a fact attributed to poor energy efficiency and relatively high energy costs (Thomson, Snell and Bouzarovski, 2017). Depending on the metric used, the Irish government's Energy Poverty Strategy suggests that the rate of households experiencing energy poverty in Ireland is between 8.8% based on self-reported inability to heat, and 28% derived from modelled expenditure and building energy rating data (DCENR, 2016, pp. 33–35).

The traditional response to energy poverty in Ireland has been social transfers, with Kerr *et al.* (2019) for instance observing that '*fuel allowances*' comprised about a quarter of all income supplement expenditure' (*ibid.*, p. 196). The 2016 Energy Poverty Strategy, changed this focus somewhat and highlighted the central role of energy efficiency (DCENR, 2016, p. 11). As reflected by increased funding for schemes such as:

- Better Energy Warmer Homes Scheme – free-of-charge energy efficiency measures for households who meet certain eligibility criteria;
- Better Energy Communities Scheme – grant support for community-based energy projects, which must include energy poor households;

---

<sup>1</sup> D1.1 Review of methods of identifying energy poor households

<sup>2</sup> D1.2 Guidelines for integrating behaviour change approaches while engaging energy poor



- Warmth and Wellbeing – pilot scheme<sup>3</sup> to improve the living conditions of vulnerable people living with chronic respiratory conditions.

### Organisation(s) profile

*Energy Action CLG* was founded in 1988. One of its main aims is to help alleviate fuel poverty in Ireland by addressing the thermal needs of disadvantaged householders. As a result, they have been at the forefront of driving change at a political level to improve energy efficiency of older housing stock in Ireland via local and national programmes. Energy Action CLG has a proud record as a leading research organisation in the field of residential building energy use, including building energy assessment, analysis of building refurbishment, development of energy plans both local and national, building energy monitoring, development of building energy-related training both for professionals and schools, software solutions and energy advice programmes. They have worked closely with municipalities in Ireland on energy efficiency programmes for more than 26 years. Energy Action CLG are work package leaders (WP2) for the realisation of household energy engagement programmes within EnergyMeasures. Their engagement of energy poor household will focus on the Dublin city area.

The Cleaner Production Promotion Unit, based in *University College Cork*, is an innovative multi-disciplinary research group operating at the intersection of the social sciences with science and engineering. The research group conducts engaged research focused on the theme of society, sustainability and energy. It comprises a multidisciplinary and interdisciplinary team comprising researchers with diverse backgrounds including sociology, human geography, gender theory, political science, environmental science and engineering. The research group has an exemplar track record in developing novel transdisciplinary research approach and deploying them to realise large scale research projects relating to people's lived experience of energy, their relationship with the energy system, and their role in the energy transition. University College Cork will engage energy poor households in the Cork city area<sup>4</sup>.

**Overview of target group** While this group will be the focus of the engagement programmes, in order to maximise the reach of the project and ensure best value for money other energy poor households in the area will also be recruited. Energy Action CLG will build on their existing activities and use their networks and community contacts to reach energy poor older people living in single-family, owner-occupied housing within the Dublin city region (c. 330k households). As with their successful current activities, they will identify and recruit energy poor households through referrals from charity organisations such as AWARE, St Vincent de Paul, Threshold, MABS etc. Older persons have a high risk of energy poverty and also suffer most from its effects. Older consumers may be financially vulnerable, and have specific needs in terms of home heating and comfort that need to be addressed. However, they may also be more accessible, and have more time on their hands than working-age households, creating opportunities for engaging them around behaviour change. Energy Action CLG aims to recruit 500 households from local authorities/municipalities in Dublin city region. Energy Action will engage with senior citizen complexes and with the support of Dublin City senior

---

<sup>3</sup> Joint initiative between Department of Communication, Climate Action and Environment and Department of Health

<sup>4</sup> Within the context of Task 3.3 Staff volunteer programme

citizen wardens, caretakers who will be trained in energy advice. This approach will ensure that there are trusted, trained employees engaging with their tenants.

In addition, Energy Action will follow up on energy poor households, where we are insulating their homes either through the Sustainable Energy Authority of Ireland (SEAI), also through other private contractors and national Housing Associations including Threshold, Clúid, ALONE, St. Vincent De Paul, Money Advice Budgeting Services (MABS) etc. In Addition to insulating, we shall offer and undertake low-cost measures for energy poor households in Dublin City, where households agree to participate in our research. Currently, Dublin City Council are working with Climote to fit remote access controls to tenant households, Energy Action may become engaged with householder to advice on how the energy saving device operates and how to answer any questions on how to set the monitors, also where best to fit those and to offer our phone number to support if they have difficulties. We believe this will be attractive to both the householder and also working in partnership with Dublin City Council and Climote.

Additionally, a secondary focus in Ireland is a number of disadvantaged communities in Cork City (c. 70k households), which University College Cork have traditionally engaged in educational and social outreach programmes. It is intended to build on these existing contacts to implement an outreach programme, involving university staff (e.g., maintenance and technical personnel) volunteering to undertake low-cost measures for energy poor households in Cork City. The potentially highly impactful community good project is quite novel and aims to leverage the desires of large organisations and their staff to give back to the communities in which they are based. University College Cork aim to engage 150 energy poor households in this initiative over the course of the project<sup>5</sup>. While this is a real and tangible action in its own right, the creation and realisation of this programme is of immense value both as a demonstration case study, and as a legacy community outreach initiative at the university.

---

<sup>5</sup> The envisaged staff volunteer programme (within the context of task 3.3) was originally planned to run from M6 to M36. The launch of this programme will be impacted by the Covid-19 related travel & social interaction restrictions expected to remain in place for at least the first half of 2021. The novelty of programme nature, particularly in its use of volunteers, makes it especially vulnerable to such risks, it is therefore envisaged that this particular engagement will not commence until these public health concerns are substantially reduced, expected in the second half of 2021.

## 2 Household recruitment process

### 2.1 Introduction

Deliverable 1.1<sup>6</sup>, explored various approaches to identifying energy poor households. An important component of which is the definition of energy poverty. It identified a gap between the macro- and meso-level analysis of energy poverty and the identification of specific energy poor households.

Observing that '*Energy poverty is a culturally sensitive, multi-dimensional concept that varies over time and by place and is thus not easily captured by a single indicator*', Bouzarovski *et al.* (2020, p. 41) advise using a suite of consensual and expenditure-based indicators, which they consider should be used in combination. The two consensual indicators they suggest are easy to translate to the individual household level. However, the two expenditure-based measures<sup>7</sup> forwarded, while usable are perhaps less suited for identifying individual households both in terms of data availability, and householder comprehension. Accordingly, in assessing eligibility for participation in the project, three primary indicators will be used:

1. Household energy expenditure in excess of 10% of disposal income;
2. Inability to keep home adequately warm;
3. Arrears on utility bills.

Meeting two of these criteria will be interpreted as indicating an energy poor household and mean eligibility for participation. Meeting one criterion will be interpreted as energy vulnerable; the project team will decide on energy poverty status considering secondary indicators including *e.g.*, age of occupants, health conditions<sup>8</sup>, single occupancy, reliance on social transfers, *etc.*

In considering approaches to identifying and reaching out to individual households in energy poverty, the deliverable considered practices reported in literature, methods used by cognate projects, and the experiences of some practitioners active 'in-the-field'. The review observed that there are a number of potential approaches that could prove beneficial in finding individual households, depending on local context, these are discussed below.

Traditional **marketing and advertising** including *e.g.*, Press releases, articles, articles in local newspapers, radio interviews, community bulletin boards, church newsletters, *etc.* will be used to raise (and subsequently to maintain) awareness of the project and its offerings. These traditional approaches are particularly important for reaching older people. These conventional media approaches will be supplemented and complemented by a **social media presence** (of both the project itself, but also importantly local partners), which will reach younger people that traditional media may not.

**Direct outreach** to communities is often an effective and efficient means of spreading a message about a project like EnergyMeasures. Publicity material will be disseminated by 'piggybacking' on existing activities of partners and other local organisations. This will include through drop-in centres (*e.g.*, social and health

<sup>6</sup> D1.1 Review of Methods of Identifying Energy Poor Households

<sup>7</sup> (1) High share of energy expenditure in income (2M) – those households with share of energy expenditure in income >2x the national median; and (2) Low share of energy expenditure in income (M/2) – those households whose absolute energy expenditure is <1/2 the national median.

<sup>8</sup> Including but not limited to cardiovascular, pulmonary, and respiratory illnesses

organisations<sup>9</sup>), by means of targeted door-to-door drops using local knowledge and contacts, or through holding events such as energy cafés. This work will be complemented by an *ad hoc* **word-of-mouth campaign** where team members and ‘friends of the project’ will inform their networks of the project and its activities.

**Collaborations with NGOs, public bodies, etc.** can be effective in reaching out to communities, in that it leverages the resources of multiple organisations involved in complementary work. Where appropriate partnerships will be developed (and existing relationships utilised) to work with local government and social organisations to provide information about project to prospective participants. Additionally, EnergyMeasures will liaise with social bodies to make **referrals**. Such referrals enable organisation to assist their services used with a problem, which would ordinarily be outside of their remit.

The specific recruitment process to be used by the organisations involved are described over the following pages.

## 2.2 Recruitment by Energy Action

*Energy Action CLG* will tap into our existing networks including Sustainable Energy Authority of Ireland (SEAI), Dublin City Council (DCC), Housing Associations and non-governmental organisations (NGOs) including the Money Advice and Budgeting Service (MABS), and the Society of St Vincent de Paul (SVdP) to engage with target householders, through a process as described below.

1. Dublin City wardens and caretakers who are in charge of supporting tenants living in senior citizen housing complexes, will be trained on energy advice and encouraged to recognise the merits and savings that they can achieve in their own complexes as well as their own homes. We shall do this by engaging their own bosses to ensure that they embrace their responsibility to become proud of their achievements. Caretakers will be key stakeholders because they will help to attain the trust needed to access households and maintain their engagement throughout the EnergyMeasures programme.
2. We shall introduce a small energy efficient competition with the different senior citizens complexes, culminating in a presentation in Dublin City Hall with residents of the winning Senior Citizen Complex being presented with an award. This will be measured through the savings garnered from the EnergyMeasures research. (We shall identify main sponsor with DCC supplying Dublin City Hall).
3. Energy Advice training package will be developed for stakeholders that engage with the programme. This will demonstrate where to go for free insulation, grants, advice. It also includes lighting, ventilation identify mould and dangers of a damp, cold house and health implications. This will also include ten simple energy saving tips to keep warm and becoming more energy efficient. New remote-control devices will be demonstrated and on how to understand your electricity/gas bill. This will include how to switch suppliers.
4. Leaflets will be distributed in key locations like Senior Citizen Complexes, and via relevant stakeholders such as MABS, SVdP, Senior Citizen Groups, Friends of the Elderly, Age Action, Third Age Ireland, ALONE, Irish Environmental Network, Environmental Protection Agency. The leaflets will include the value proposition of the project, answers to potential questions and initial energy advice.

---

<sup>9</sup> Focusing of course on organisations whose services are more likely to be used by those at risk of energy poverty

5. In conjunction with this, Energy Action will distribute relevant leaflets of other support organisations that can *e.g.*, MABS advice on budgets, income support *etc.* Word of mouth and referrals will also be part of our recruitment.
6. Other media outlets will be contacted and encouraged to promote the project, including benefits of energy efficiency, environment and savings.
7. SEAI will be encouraged to promote and support the project through identifying possible householders. Surveys would follow.
8. Local Authorities will identify tenants and apartments that would participate. Likewise, NGOs will identify households that require support by insulating their home and we shall follow up with phone call and survey the house if appropriate.
9. Initial contact has been made with Electric Ireland, an Irish utility that is a partner in SocialWatt, a cognate project of EnergyMeasures addressing energy poverty. There are possible synergies between the project in reaching households and Energy Action will work with Electric Ireland to explore possible collaboration.
10. Households contacting the team will be asked in the first instance to conduct a self-assessment exercise (see Appendix 1) to assess their eligibility *i.e.*, confirm that they meet the energy poverty criteria.
11. Eligible householders will be invited to register with the project and arrangements made for initial engagement.

**Table 1: Overview of recruitment activities planning (Dublin)**

Recruitment activity	Activity description	Target group	Estimated # households	Preparation plans
<i>Dublin City Council Wardens and Caretakers recruitment activities</i>	Training of city wardens (caretakers) on energy efficiency so that they support with the household recruitment within their complexes	Elderly residents living in housing complexes in disadvantaged areas	100	Contact Dublin City Council so that they grant permission to access housing complexes Caretakers' training preparation
<i>Distribution of leaflets in household complexes</i>	Distribute leaflets in Senior Citizen Complexes, MABS, SVdP, Senior Citizen Groups, Friends of the Elderly, Age Action, Third Age Ireland, ALONE, Irish Environmental Network, Environmental Protection Agency	Elderly residents living in housing complexes in disadvantaged areas	50	Design and printing of leaflets
<i>Referrals from social organisations</i>	Liaise with social organisations such as SVdP or MABS as well as household associations so that they can support in identifying and referring energy poor households	Householders assisted by social organisations	50	Engage with organisations to establish strategies for collaboration
<i>Referrals from public bodies</i>	Liaise with local authorities and SEAI so that they can support in identifying and referring energy poor households	Tenants and service users of the public bodies	300	Engage with public bodies to establish strategies for collaboration

## 2.3 Recruitment by UCC

University College Cork will leverage its existing educational and social outreach programmes to engage with householders in disadvantaged communities in Cork City. The EnergyMeasures offering for energy poor households will be publicised in the target areas through a variety of means as detailed below.

1. UCC will directly liaise with local organisations, including, Carbery Housing Association and NCE Energy Hub, to engage them as gatekeepers<sup>10</sup> for the project in their localities. These organisations will contribute local knowledge, provide introductions and assist in awareness raising<sup>11</sup>.
2. Gatekeeper organisations will be encouraged not just to publicise the offering of the project, but also as appropriate directly refer energy poor households to the project team.
3. Leaflets will be distributed in target areas through: door-to-door drops; direct mailing (via gatekeeper organisations); medical and welfare offices; local shops; *etc.* These leaflets will explain the ‘value proposition’ of the project – answering the questions householders will always ask: what’s in it for me? – and invite eligible householders to contact the project.
4. As appropriate, University student societies will also be used to canvass, leaflet drop and otherwise publicise the project offering for energy poor households<sup>12</sup>.
5. The UCC Media and Communications Office will be used<sup>13</sup> to publicise the initiative on local radio and newspapers, through its substantial web and social media presence
6. UCC staff (especially those volunteering) and students will be encouraged to engage in an *ad hoc* word of mouth campaign to promote the project and encourage prospective participant to contact the team.
7. Households contacting the team will be asked in the first instance to conduct a self-assessment exercise (see Appendix 1) to assess their eligibility *i.e.*, confirm that they meet the energy poverty criteria.
8. Eligible householders will be invited to register with the project and arrangements made for initial engagement.

---

<sup>10</sup> We note Dünhoff, Eisenmann and Schäferbarthold’s (2010) observation that associating certain service organisations with the engagement may be counterproductive – if for example householders fear sharing of personal information (while of course it is also true that the involvement of others may provide reassurance) – this will be taken in account when in publicising the engagement.

<sup>11</sup> This could include *e.g.*, through church newsletters, hosting events, assistance in door-to-door canvassing, direct referrals, *etc.*

<sup>12</sup> *e.g.*, St. Vincent de Paul (student charitable society); Environmental Society; Engineering Society

<sup>13</sup> Given the importance the university will attach to this novel outreach initiative in which its staff will volunteer their time and skills to assist energy poor households.

**Table 2: Overview of recruitment activities planning (Cork)**

Recruitment activity	Activity description	Target group	Estimated # households	Preparation plans
<i>Engage gatekeeper organisations to facilitate referrals</i>	Contact organisations such as Carbery Housing Association, NCE Energy Hub to publicise the offering of the project and refer energy poor households to the project team at UCC	Tenants and clients of the gatekeeper organisations	50	Engage with organisations to establish strategies for collaboration
<i>Referrals from social organisations</i>	Liaise with social organisations such as St Vincent de Paul so that they can support in identifying and referring energy poor households	Householders assisted by social organisations	25	Engage with organisations to establish strategies for collaboration
<i>Referrals from public bodies</i>	Liaise with Cork City Council (and other relevant public bodies) so that they can support in identifying and referring energy poor households	Tenants and service users of the public bodies	25	Engage with public bodies to establish strategies for collaboration
<i>Contacts arising from publicity campaign</i>	Distribution of leaflets in target communities Publicise EnergyMeasures offering on local radio, newspapers, web and social media	Energy vulnerable residents in target areas	50	Prepare content



### 3 Household engagement procedures

The procedures outlined below are based on the guidelines provided in deliverable 1.2<sup>14</sup>, and specified to reflect local circumstances and incorporate the existing practices of the partners involved.

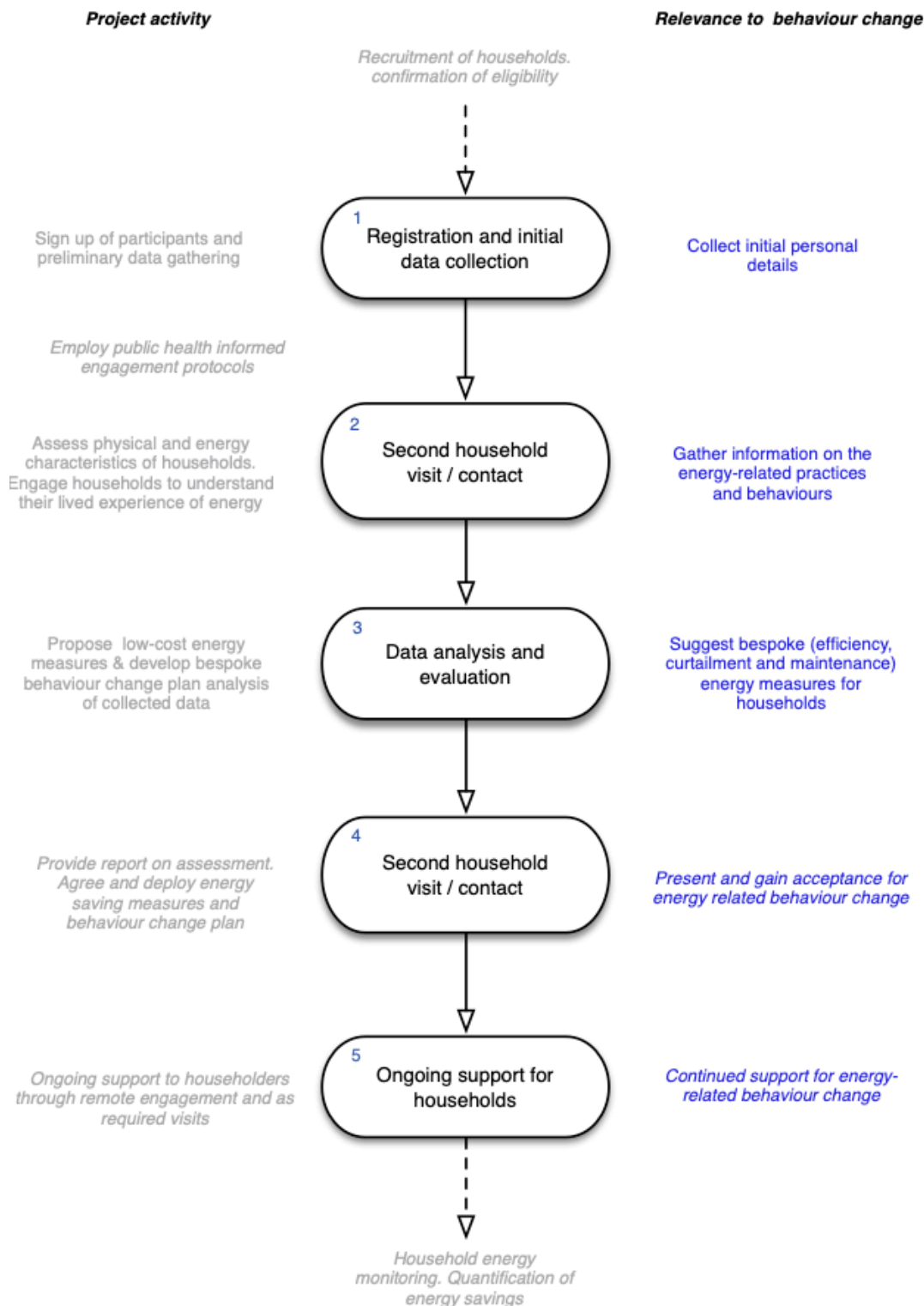


Figure 2: Overview of integration of behaviour change activities into the EnergyMeasures engagement process

<sup>14</sup> D1.2 Guidelines for integrating behaviour change approaches while engaging energy poor



### 3.1 Registration and initial data gathering

Following confirmation that a household is eligible (by going through the self-assessment form included as Appendix 1), and wishes to participate, householders will be invited to register with the project, and arrange their first visitation. Depending on circumstances, this registration may be completed in a number of ways including: returning a physical paper form; via telephone call; via email or over the internet; in person at time of recruitment (*e.g.*, at an event); *etc.* Participants will be asked to provide contact and preliminary information by completing the registration form included as Appendix 2. An appointment will be made for an initial visitation. Householders will be asked to collect energy billing data in advance of this visitation<sup>15</sup>.

### 3.2 First household visitation

During household visitations there are four key steps to be undertaken, as detailed below. (In the current pandemic public health best practice should be adopted including *e.g.*, measures included as Appendix 3.)

Step one: Energy advisors will introduce themselves to householders on arrival and outline the details of the visitation. Details collected during registration will be confirmed (including eligibility).

Step two: Using the spreadsheet templates devised for the project (and through discussion with householders), energy consumption data (both electricity and heating energy) will be collected for the household. Where records are not readily available (*e.g.*, because there is district heating or households have *ad hoc* energy purchases *e.g.*, fuel oil, solid fuels), estimates will be made taking dwelling size into account, and by using householders' recollections.

Step three: A tour will be undertaken to gather information about the physical and technical aspects of the dwelling, and to look at energy-using appliances, including measuring power consumption using energy monitoring adapters. Details will be logged in the spreadsheet template.

Step four: Householder(s) will be engaged in a discussion (using the developed interview schedule) covering their household practices, examining their use of particular appliances, discussing perceived energy-related problems, exploring potential solutions, *etc.* Detailed notes will be taken of these interviews, and if required (and with householder permission) audio-recordings.

### 3.3 Data analysis and evaluation

The information collected from the householders then be analysed in a systematic manner. This includes the interview notes / transcripts providing information daily practices, data collected on the dwelling and energy using appliances as well as the quantitative data collected on energy consumption. In achieving this the energy advisor, with appropriate support from colleagues and partners) will:

- Compare the consumption data with that of similar households to highlight elevated levels of consumption and indicate those households where there is particular scope for energy savings;

---

<sup>15</sup> Households should be requested to collect energy billing data in advance of first visitation. Such information will likely be available from energy suppliers (in many cases, customers' account information can be accessed online).

- Compare the aggregate power consumption data for appliance with the total energy consumption to indicate so-called hidden energy use within the household *i.e.*, consumption attributable to devices unaccounted for (*e.g.*, second freezer) or incorrect estimates of usage time of known devices;
- Examine individual device-level consumption data to indicate saving potentials associated with them, and so determine the relative importance of behaviour associated with each;
- Review the consumption data and analyse the information supplied by the households to develop an understanding of their household practices and what they mean for their patterns of energy use;
- Use the developed knowledge to:
  - Work with householders to, select a package of no-cost and low-cost energy conservation and efficiency measures which are most appropriate for the dwelling;
  - Devise a tailored behaviour change plan for householders to implement in their daily lives, including a relevant mix of efficiency, curtailment, and maintenance behaviours.

### **3.4 Second household visitation**

The second household visitation will take place following the abovementioned analysis, and the subsequent identification of low-cost measures, and preparation of household behaviour change plan. This will be scheduled as soon as practical after the initial visitation to maintain the householders' interest in and engagement in the initiative. During the second visitation the energy advisors will

- Provide households with a brief report (based on developed template) detailing the energy analysis undertaken for the household;
- Talk householders through the report highlighting key results and relating how they relate to the recommendations;
- Discuss with the householders the no-cost and low-cost energy conservation and efficiency measures most appropriate for them, and agree a package of measure to be deployed;
- Talk through, and as appropriate, assist the householders in deploying the energy measures;
- Present the tailored household behaviour change plan, talk through the various proposed behaviours, and discuss its adoption with householders, Identifying barriers and where possible potential supports;
- Provide energy saving information brochures relevant to both the deployed energy measures and suggested efficiency, curtailment, and maintenance energy behaviours;
- Inform householders of EnergyMeasures supports available to optimise use of their energy measures, but particular to support their changes in energy-related behaviours;
- Get householders a document where they (i) confirm completion of household visitation; (ii) acknowledge receipt of energy measures; (iii) agree to household behaviour change plan.

### **3.5 Follow-up support for householders**

Ongoing support for behaviour change will be provided to households over the course of 2-3 further household contacts<sup>16</sup>. These contacts will be scheduled at roughly equal intervals over the remaining life of the project. During these contacts, energy advisor will talk the householders through their experience of the low-costs measures and of implementing changes in their energy-related behaviours – collecting feedback from the participants, providing advice and guidance where possible, and redirecting for support if appropriate. Assistance will be also provided where needed in choosing appliances, reading energy bills, switching energy providers, and accessing grants. In addition to these direct household contact there will be regular text alerts, email bulletins and social media updates to keep people engaged.

The project will also provide a dedicated behaviour-change support section on the project web site [www.EnergyMeasures.eu](http://www.EnergyMeasures.eu). This section will include energy saving tips, household energy calculators, but moreover will work to create a 'behaviour change community' by integrating social media and inviting participants to share energy saving tips, problems and advice. Participants will be encouraged to upload their energy-saving ideas and stories of their successes, and there will be a series of competitions with energy-efficient appliances as incentives.

### **3.6 Timeline for recruitment and engagement – Ireland**

From the launch of the project in September 2020 the implications of COVID-19 and its social impacts has been a constant background to the EnergyMeasures project. Due to the pandemic and the extensive 'lock-downs' and social restrictions imposed in Ireland to mitigate its impacts, it has not been possible to commence engagement from March 2021 as originally envisaged in the description of action.

At the start of the project in September 2020 and for the initial months thereafter there was an optimism (still demonstrated to be naïve) that much of the worse impacts of the pandemic would be resolved by the early stages of 2021. As the new year commenced, it became clear that recruitment and engagement could not start when planned, and therefore would likely take a longer period than originally envisaged. As a result, in early 2021 the need for a project restructuring was considered and eventually proposed to the European Commission<sup>17</sup>.

At this time, while it was obvious that the engagement could not commence as planned, it was not at all apparent when face-to-face engagement might be possible<sup>18</sup>. For this reason, serious consideration and planning was given to (at least partially) re-orientating the project towards remote engagement. However, cognisant of the significant challenges<sup>19 20</sup> in moving to remote modes of engagement, and in the context of

---

<sup>16</sup> Including in-person visits (where circumstances permit), but emphasising telephone and video calls both for reasons of public health but also as a means of increasing the efficiency of the process

<sup>17</sup> The requested grant amendment would provide for a project extension of six months and associated time-shifting of the completion dates for tasks and outputs dealing with recruitment and engagement

<sup>18</sup> As the pandemic was still greatly impacting Europe and the roll out of vaccination programmes had been hampered by poor deliveries.

<sup>19</sup> Including e.g. time and effort involved, required upskilling, reduced effectiveness, greater turnover of households, cost implications.

<sup>20</sup> As the majority of the project duration would be post-pandemic (even in worse case scenarios), most of the engagements would in any event likely be realised using face-to-face methods – raising questions about the cost-effectiveness of a partial move.

the improving public health situation in Ireland and across Europe, a decision was made not to focus on remote engagement. However, it is acknowledged that in some circumstances there may be a need to supplement face-to-face contact with remote engagement

Thus, the engagement in Ireland has been rescheduled to fit in with the planned ‘reopening’ of society as the vaccination programme progresses and the pandemic threat lessens. Accordingly, the Irish government has commenced a staged phasing out of social restrictions, and it is expected that these will be substantially lifted by January 2022 (albeit there will likely be some low-level restrictions for the near term). As a result, the household recruitment and engagements that were originally scheduled to commence in March 2021 will now start ten months later in January 2022 (with some preliminary recruitment over November and December as circumstances allow).

### *Greater Dublin region*

Energy Action has been liaising with Dublin City Council about the recruitment and engagement of energy poor elderly households in the council’s housing complexes. Considering the context outlined above, Energy Action have selected a target date for commencing household engagement of the start of August 2021. In preparation for this, Energy Action staff plan to engage in as leaflet distribution and training of Dublin City Council Wardens (who will support the recruitment and engagement activities) during the months of June and July. Engagement will commence in August with a so-called soft launch, involving an initial 50 households, with engagement ramping up in subsequent months. During the first month of this engagement, accuracy of data collection instruments, as well as safety measures for household visitations will be assessed. Figure 2 below provides a graphical representation of the initial stages of these activities.

It is planned that household recruitment (of the target 500 households) will run for thirteen months until the end of August 2021, following which time recruitment will be limited to replacing households which have left the programme. The recruited households will then be supported in their deployment of small energy measures and energy-related behaviour change for the duration of the project<sup>21</sup>. Table 3 outlines the target household recruitment by quarter in the Dublin area over this timescale.

**Table 3. Estimated household recruitment adjusted for Covid-19 context (Dublin).**

<i><b>Total of households</b></i>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>			-	7	7
<b>2022</b>	83	120	140	150	493
<b>2023</b>	0 <sup>22</sup>	-	-	-	-
					<b>500</b>

### *Cork and environs*

The planned household engagement in Cork is somewhat different from that in the other target communities of the project – it is intended to be realised through a staff volunteer programme where technical and craft staff of the university will be recruited and organised to undertake low-cost measures for energy poor households. These households which will be recruited through gatekeeper organisations, university

<sup>21</sup> Original end date of 30 August 2023, proposed new end date of 29 February 2024

<sup>22</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.

programmes working with disadvantaged communities, and outreach of student organisations. The nature of this initiative, involving staff and student volunteers, raises certain issues for the university leadership including *e.g.*, student duty of care, staff welfare, community relationship, and of course public health. These must all be resolved before engagement can take place. Currently the Irish Government is working with universities towards a return to physical campus by the start of the next academic year in September 2021. It is planned to allow the return to campus (which is a significant operation) to be complete and embedded before starting the volunteer initiative – practicalities dictate that this must be the case. Accordingly, it is planned for the recruitment and engagement (of the target 150 households) to commence in Jan 2022 and run until the end of the calendar year. This will enable the outreach to link in with university programmes working with disadvantaged communities, and to capitalise on the timelines and planned activities of the recruited gatekeeper organisations. We envisage that most of the household engagement will be carried out during the second and fourth quarters just as householders are coming out and into ‘heating seasons’.

**Table 4. Estimated household engagement numbers adjusted to Covid-19 (Cork).**

<b>Total of households</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
<b>2021</b>			0	9	9
<b>2022</b>	51	20	20	50	141
<b>2023</b>	0 <sup>23</sup>	-	-	-	-
					<b>150</b>

## 4 Conclusion

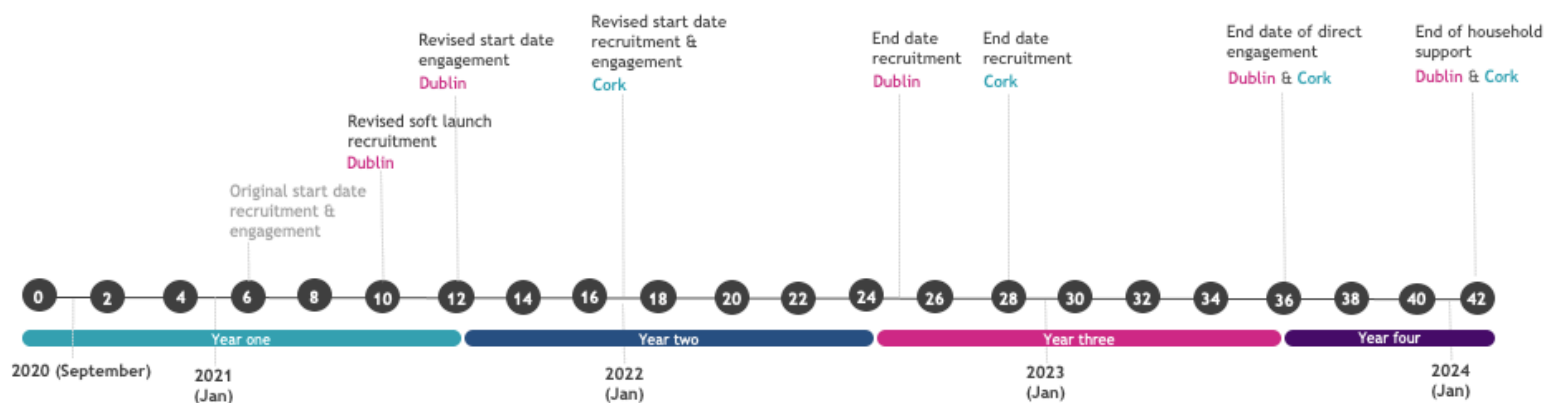
This document has outlined the revised strategy for engaging energy poor households in Ireland, in relation to the EnergyMeasures project. Drawing on deliverables 1.1 and 1.2, this document is a second iteration of the implementation plan and an updating of the project’s approach to: identifying energy poor households and to integrating behaviour change approaches in household engagement. Along with a brief overview of the country-specific context of energy poverty, it also provides short profiles of the organisations involved and an overview of the target socio-demographic groups.

Fig 2 below illustrates the revised plan for engagement in Ireland, line with the six-month extension, and demonstrates the two-track approach taken between Cork and Dublin, which reflects the specific approaches taken in each locale. Initially, it was planned that recruitment and engagement would start month 6 of the project. However, given restrictions in response to the ongoing Covid-19 crisis the planned recruitment and engagement programme has been modified. A revised soft launch recruit will commence month 10 in Dublin, with Energy Action ramping up engagement starting month 12. While in Cork the revised start date for recruitment and engagement will commence month 17, as outlined in section 3.6.2 above.

The project will provide continuous monitoring of recruitment and engagement activities with Ireland partners reporting internally within the consortium on a quarterly basis throughout the year. The project will react accordingly, modifying approaches taken and providing assistance if the specific targets are not met.

<sup>23</sup> The target is to have the full complement of households recruited by month 24, with provision made for potential household dropouts with a small level of recruitment after month 24.

Figure 2. Estimated start for recruitment and engagement activities



## References

- Bouzarovski, S. et al. (2020) Towards an inclusive energy transition in the European Union : Confronting energy poverty amidst a global crisis. Third pan-EU energy poverty report of the EU Energy Poverty Observatory. Luxembourg: Publications Office of the European Union. doi: 10.2833/103649.
- DCENR (2016) Energy Poverty Strategy. Dublin: Department of Communications, Energy & Natural Resources.
- Dünhoff, E., Eisenmann, L. and Schäferbarthold, U. (2010) Guidelines: Introducing Advisory Services on how to Save Energy for Low-income Households (translated for ACHIEVE). Heidelberg /Frankfurt am Main: Institut für Energie- und Umweltforschung Heidelberg GmbH and Caritasverband Frankfurt e.V.
- Kerr, N., Gillard, R. and Middlemiss, L. (2019) 'Politics, problematisation, and policy: A comparative analysis of energy poverty in England, Ireland and France', *Energy and Buildings*. Elsevier B.V., 194, pp. 191–200. doi: 10.1016/j.enbuild.2019.04.002.
- Soaita, A. M. and McKee, K. (2020) 'Researching Home's Tangible and Intangible Materialities by Photo-Elicitation', *Housing, Theory and Society*. Routledge, 00(00), pp. 1–21. doi: 10.1080/14036096.2020.1738543.
- Storm-Mathisen, A. (2018) 'Visual Methods in Ethnographic Fieldwork—On Learning from Participants Through their Video-accounts', *Forum for Development Studies*. Taylor & Francis, 45(2), pp. 261–286. doi: 10.1080/08039410.2018.1450287.
- Thomson, H., Snell, C. and Bouzarovski, S. (2017) 'Health, Well-Being and Energy Poverty in Europe: A Comparative Study of 32 European Countries', *International Journal of Environmental Research and Public Health*. Multidisciplinary Digital Publishing Institute, 14(6), p. 584.

## Appendix 1: Eligibility Self-Assessment


 <http://www.energymeasures.eu>
 @NRGMeasures

EnergyMeasures is intended to support households who are unable to adequately heat or provide other required energy services in their homes at affordable cost – so-called energy poverty. To determine your eligibility for support through the project please complete the following self-assessment exercise.

### Primary indicators

Do you spend more than 10% of your disposable income on energy	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Are you unable to keep your home adequately warm?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Were you unable to pay utility bills on time within the last 12 months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

### Secondary indicators

Occupants over 70 years <input type="checkbox"/>	Health issues (esp. respiratory issues) <input type="checkbox"/>
Young children <input type="checkbox"/>	Living alone <input type="checkbox"/>
Fuel allowance recipient <input type="checkbox"/>	Old building <input type="checkbox"/>
No central heating <input type="checkbox"/>	Limited choice of energy suppliers <input type="checkbox"/>

- If you answered yes to two or more of the primary indicators, you are eligible to participate
- If you answered yes to one of the primary indicators, you may still be eligible. Talk to local project contact (details are on the information leaflet)
- The responses to the secondary indicators will help in determining eligibility



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 894759



## Appendix 2: Registration form



# EnergyMeasures

Tailored measures supporting energy vulnerable households



<http://www.energymeasures.eu>



@NRGMeasures

Note: Confirm household meets eligibility criteria before registration ☐

Contact details	Name	Telephone	Email
<i>Primary</i>			
<i>Other</i>			

Property Address			
Access details or other notes			

Dwelling size (m <sup>2</sup> )		Energy sources used:			
No. of rooms					
No. of occupants					
<i>Initial visit/contact</i> <table border="1"> <tr> <td>Date</td> <td></td> </tr> <tr> <td>Time</td> <td></td> </tr> </table>			Date		Time
Date					
Time					

Notes re visit	
----------------	--

Note: Request households to collect energy billing data in advance of first visitation. Such information will likely be available from energy suppliers (in many cases, account information can be accessed online).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 894759

## Appendix 3: Covid-19 aware engagement guidelines

Where household visits are permitted, and householders agree to visits, project energy advisors should adhere to public health advice and best practice. Such measures include:

1. A pre-visitation check should be conducted to ensure that both householders and energy advisors are symptom free, have not had close contact with someone who tested positive or suspected of having Covid-19, and have not travelled to a country (or region) with high prevalence of Covid-19 within the last 14 days.
2. The duration of visits will be kept to a minimum. As much of the visit as possible will take place outside the home, including introductions and check-ins;
3. Social distancing will be practiced, where rooms are too small to allow for this, householders will be asked to observe from adjacent rooms during inspections, to ensure adequate distance is kept;
4. Householders will be requested to ensure good ventilation throughout the duration of the visit, with doors and windows open where possible;
5. Facemasks or a face covering will be worn by the energy advisor and householder during the visit;
6. Energy Advisors will wash their hands and sanitize before entering and leaving the homes<sup>24</sup>;
7. Before leaving, Energy Advisors will wipe down all surfaces with which they may have come in contact, using appropriate cleaning wipes or similar, which they will bring with them and dispose appropriately;
8. Householders will be asked to notify the team if they discover subsequent to the visit that a close contact has tested positive for Covid-19 (this will be verified via a follow-up call by the project team).

---

<sup>24</sup> Advisors will carry their own personal hygiene materials. Gloves will not be used due to the risk of contamination

## Appendix 4: Note on alternative approaches to direct contact

The current progress in terms of both Covid-19 infections and vaccinations is promising in Ireland (and indeed most of the other participating countries), and society is increasingly opening up. Full so-called herd immunity (defined by many as a vaccination rate of > 70%) is expected in Europe by July or August<sup>25</sup>. As a result, it does appear that a reorientation of the project towards remote engagement will not be required, as society is increasingly opening up.

However, notwithstanding the prospect of a return to (a form of) normality the ever-changing nature of the Covid-19 pandemic, could mean that in-person visitations will not (always) be possible even with safeguards – if for examples there was be a reimposition of restrictions on travel and inter-personal contact.

For this reason, alternative modes of engagement and data collection may be required for some aspects of the engagement which includes: (i) the initial engagement (develop understandings on both the physical aspects of their home and the people's day-to-day lives), (ii) deployment of low-cost measures, (iii) presentation of behaviour change plan, and (iv) post intervention follow-up.

These alternative modes could include for example participating householders being asked to take photos and videos of their homes and daily lives *i.e.*, photo-elicitation, and video-elicitation. To keep diaries and voice memos about their everyday energy practices, *etc.* The project team providing prompts and questions to direct the householders in these activities. Video calls could be particularly useful to support households in the deployment of their chosen cost and low-cost energy conservation and efficiency measures. (In this scenario, technical exclusion could be overcome by the project lending equipment to households if, and as required.)

---

<sup>25</sup> COVID: BioNTech chief says Europe could achieve herd immunity in summer (28 April 2021). *Deutsche Welle* retrieved from <https://www.dw.com/en/covid-biontech-chief-says-europe-could-achieve-herd-immunity-in-summer/a-57365510>

## Appendix 2: Behaviour Change Plan Example



# EnergyMeasures

Tailored measures supporting energy vulnerable households

# Recommendations and Measures Report

 <http://www.energymeasures.eu>

 @NRGMeasures

**September 2021**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 894759

**Dear Ms. XXX,**

We recently visited your home where we discussed your energy consumption in your household. This report contains a number of recommendations and a description of low-cost measures that will be provided to you for saving energy in key areas in your home. The aim of this report is to help you make your home more comfortable while saving money on your energy bills. Remember that every change, not matter how small, can make a difference.

If implemented adequately, the measures that apply to you and your home can result in possible savings of:

**€163 per year, or €13.58 per month!**



Please note that there is a chance for your energy bill to increase due to fluctuating energy prices or a change in the composition of your household. The savings are explained in more detail on the following pages.

## Heating

Total potential savings €51



### 1. Use radiator foil – Potential savings €12

You can use radiator foil behind your radiators to ensure the heat is not escaping through the wall (especially when they are external walls). The foil will reflect heat back into the room. With this measure you will save approximately €12 per year.

### 2. Use draught excluders, window seals or gap fillers to prevent draughts around doors (including attic) and windows – Potential savings €6.50 per m<sup>2</sup>

Check windows, keyholes and doors for draughts of cold air and plug them. Placing an insulating window film around windows and doors to stop heat escaping could result in a saving of €6.50 per m<sup>2</sup>.

## Washing and bathing

Total potential savings €37



3. Use a shower timer to reduce the amount of water you must heat for your daily shower. Try to aim for an 8-minute shower – Potential savings: €37 per year

The average shower is about 8 minutes and can sometimes use an equal (or greater) amount of water than having a bath, making having a shower less cost-effective. Aiming for a 5-minute shower (electric) vs an 8-minute shower (electric) will save approximately €37 per year.

## Lighting

Total potential savings €75



4. Replace old inefficient lights with CFL or LED lights - €15 per light replaced per year

## Package of low-cost energy measures for your household

Please find below a list of low-cost measures that have been selected for you according to your domestic heating system, electrical appliances and lighting in your home. To achieve the energy savings in your household you will need to apply the measures provided and change your behaviour based on the recommendations above. You will be responsible for installing these measures in your household. If you would like additional information on how to install the measures, this can be provided upon request to your energy advisor.

LOW-COST MEASURE RECOMMENDED	AVERAGE COST PER MEASURE	NUMBER OF UNITS PROVIDED
RADIATOR FOIL	€ 40.00	4
RUBBER SEALS FOR DOORS	€ 14.00	2
DRAUGHT STRIPS/EXCLUDER	€ 20.00	4
SHOWER TIMER	€ 14.00	1
LED LIGHTS	€ 17.50	5
TOTAL	€ 105.50	16

## What happens next?

Six and twelve months from today we will be sending you a short online follow up questionnaire to learn whether the measures and recommendations have been useful for saving energy and/or helping you live more comfortably. We can also arrange for a phone call to fill out the questionnaire. We will contact you in advance to know your preference for following up.

If you have found the EnergyMeasures useful, please share information about the programme with neighbours and family so that they can start saving energy too!

Yours sincerely,

Your Energy Advisor