

# ENERGISE

EUROPEAN NETWORK FOR RESEARCH, GOOD PRACTICE  
AND INNOVATION FOR SUSTAINABLE ENERGY 

**Project acronym:** ENERGISE  
**Title:** European Network for Research, Good Practice and Innovation for Sustainable Energy  
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## COUNTRY REPORT:

### IRELAND

#### EXTRACTED FROM D2.5: PRODUCTION OF 30 NATIONAL SUMMARY BRIEFS

**Deliverable 2.5 description:** 30 national summary briefs of national energy supply and demand.

**Lead parties for deliverable:** AAU

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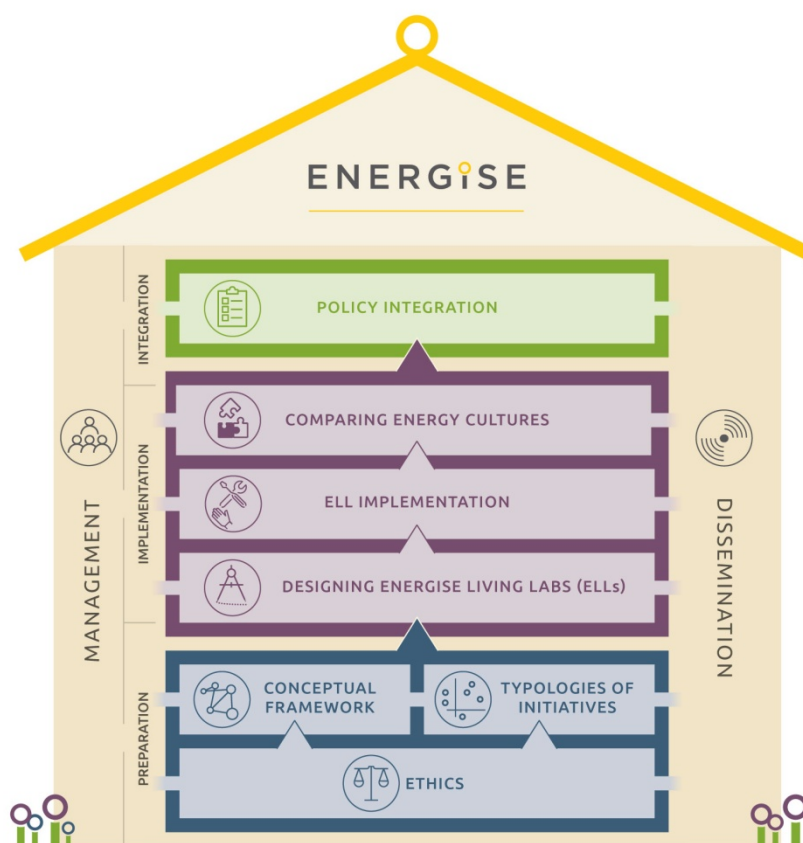
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## ENERGISE PROJECT

ENERGISE is an innovative pan-European research initiative to achieve a greater scientific understanding of the social and cultural influences on energy consumption. Funded under the EU Horizon 2020 programme for three years (2016-2019), ENERGISE develops, tests and assesses options for a bottom-up transformation of energy use in households and communities across Europe. ENERGISE's primary objectives are to:

- **Develop an innovative framework** to evaluate energy initiatives, taking into account existing social practices and cultures that affect energy consumption.
- **Assess and compare the impact** of European energy consumption reduction initiatives.
- **Advance the use of Living Lab approaches** for researching and transforming energy-related practice cultures.
- **Produce new research-led insights** into the role of household routines and changes to those routines towards more sustainable energy.
- **Encourage positive interaction** between actors from society, the policy arena and industry.
- **Effectively transfer** project outputs towards the implementation of the European Energy Union.



## INTRODUCTION

This document is one of 30 national briefs, demonstrating key aspects of national energy supply and demand dynamics. Each brief is comprised of five sections:

**Section 1** summarises the energy profile of the country. The section provides basic quantitative information of demand demographics and usage profiles, market trends and energy supply profiles, as well as qualitative reflections on current national energy policy. ***For all the briefs, the quantitative information is derived from ec.europa.eu/eurostat (2015 data), eea.europa.eu (2015 data), and climate-zone.com, unless otherwise stated.***<sup>1</sup> The qualitative reflections are based on a literature reviews and desk-research. References for the literature review and the desk-research are provided in footnotes or in section five.

**Section 2** summarises the nationally based sustainable energy consumption initiatives (SECI) that have been identified as part of ENERGISE WP2 framework (Jensen, 2017). Each SECI has been coded according to the Problem Framing Typology developed in ENERGISE WP2 (Jensen et al, 2017b).

**Section 3** provides a *good practice* example of a national SECI that corresponds to category 3: “Changes in Everyday Life” or 4: “Changes in Complex Interactions” in the Problem Framing Typology. Please refer to Jensen (2017) and Jensen et al (2017b) for more information on the way the data for the good practice SECIs has been researched and documented.

**Section 4** provides a brief summary of major nationally specific trends and their implication for energy consumption policies.

**Section 5** provides an overview of sources used for qualitative assessments, and can be used as inspiration for further reading.

The national briefs provide contextual socio-material information for the further work to be carried out in Work Package 4, Work Package 5 and Work Package 6 in ENERGISE.

### 1.1 WP2: TYPOLOGIES OF ENERGY INITIATIVES

ENERGISE WP2 is a systematic criteria-guided review and classification of existing sustainable energy consumption initiatives from 30 European countries (EU-28, Switzerland, and Norway), which provides a comprehensive European database of energy initiatives involving households, and related typologies of sustainable energy consumption initiatives. This extensive synthesizing work guides the selection of Living Lab design elements for ENERGISE and future energy consumption research, policy and practice.

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<sup>1</sup> Some piecharts will be empty, as no information is available.

This is done in order to

- Construct innovative typologies of sustainable energy consumption initiatives that can inform further research and action.
- Identify key success factors and related indicators, focusing on individual-level, collective, organizational, institutional and societal aspects of energy consumption, which will inform subsequent WP 3 (Designing Living Labs), WP 4 (ENERGISE Living Labs) and WP 5 (Capturing Energy Cultures).
- Progress the goals of the European Energy Union by creating a publicly archived open access dataset of sustainable energy initiatives across 30 countries in Europe.

Suggested further reading:

Jensen (2017) *Identification of key success factors and related indicators*. ENERGISE – European Network for Research, Good Practice and Innovation for Sustainable Energy, Grant Agreement No. 727642, Deliverable 2.2.

Jensen et al. (2017a) *Establishment of a comprehensive open access dataset of sustainable energy consumption programmes and Interventions*. ENERGISE – European Network for Research, Good Practice and Innovation for Sustainable Energy, Grant Agreement No. 727642, Deliverable 2.3.

Jensen et al. (2017b) *Constructions of typologies of sustainable energy consumption initiatives (SECIs)*. ENERGISE – European Network for Research, Good Practice and Innovation for Sustainable Energy, Grant Agreement No. 727642, Deliverable 2.4.

Sources of quantitative statistics (unless otherwise stated):

Climate data:

<http://www.climate-zone.com/continent/europe/>

Demography data:

[http://ec.europa.eu/eurostat/statistics-explained/index.php/Population\\_structure\\_and\\_ageing](http://ec.europa.eu/eurostat/statistics-explained/index.php/Population_structure_and_ageing)

[http://ec.europa.eu/eurostat/statistics-explained/index.php/Educational\\_attainment\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Educational_attainment_statistics)

Dwelling type data:

[http://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Distribution\\_of\\_population\\_by\\_dwelling\\_type\\_2015\\_\(%25\\_of\\_population\)\\_YB\\_17.png](http://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Distribution_of_population_by_dwelling_type_2015_(%25_of_population)_YB_17.png)

Energy demand and supply quantitative data:

[http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy\\_consumption\\_in\\_households](http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_consumption_in_households)

Final energy consumption of households per capita data: <https://www.eea.europa.eu/airs/2017/resource-efficiency-and-low-carbon-economy/household-energy-consumption>

MWh conversion data:

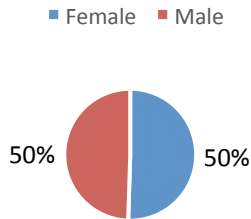
<https://www.unitjuggler.com/convert-energy-from-toe-to-MWh.html?val=893.9>

## IRELAND

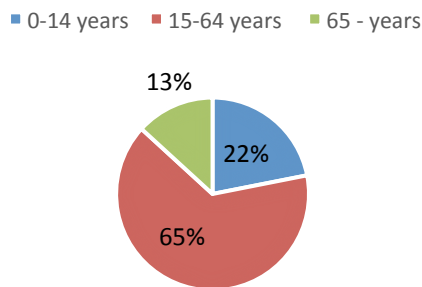
Authors: Gary Goggins, Eimear Heaslip, Frances Fahy

### DEMOGRAPHY, ENERGY CONSUMPTION AND ENERGY SUPPLY

#### GENDER PROFILE



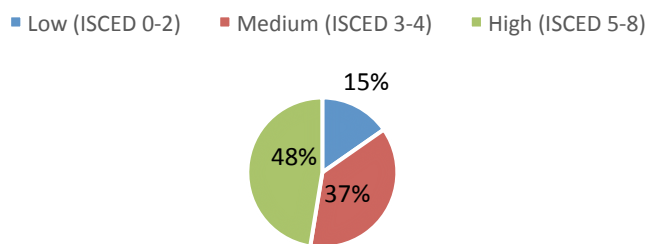
#### AGE PROFILE (2016)



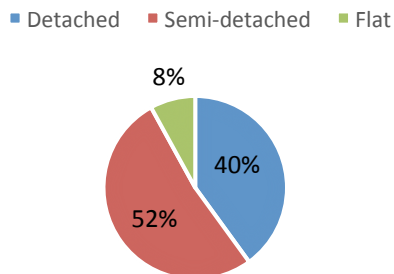
#### CLIMATE:

Ireland's location on the northwestern periphery of Europe lends itself to a temperate oceanic climate, modified by the North Atlantic Current. The country experiences relatively mild winters and cool moist summers, with abundant rainfall year round. Average temperature is 10°C.

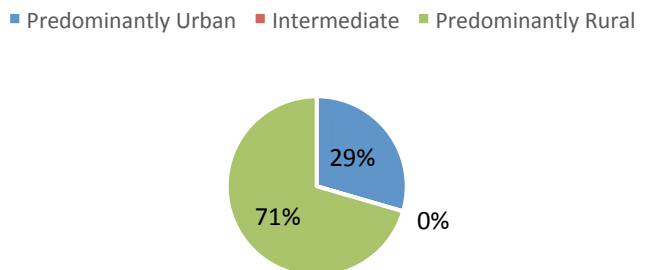
#### EDUCATIONAL PROFILE (25-54 Y, 2016)



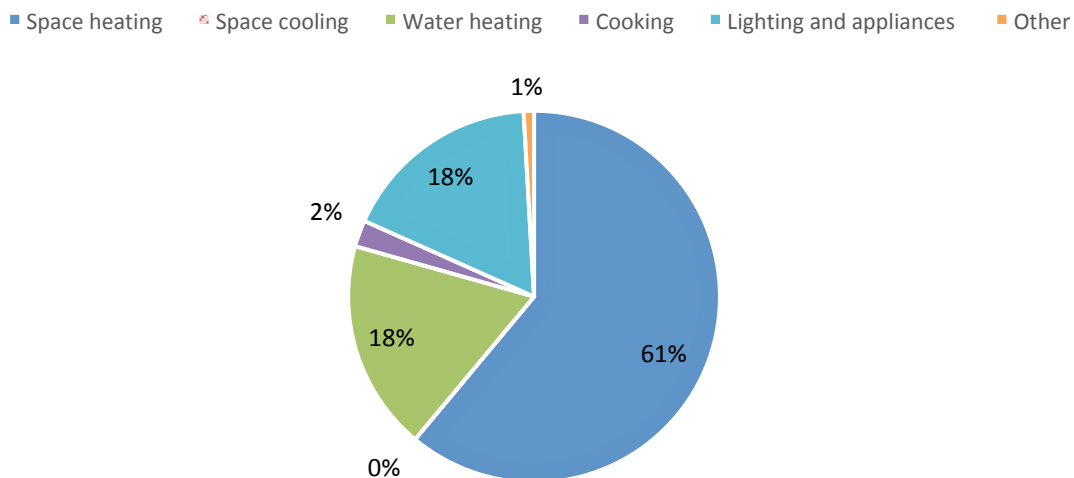
#### COMMON DWELLING TYPES (2015)



#### URBAN - RURAL DISTRIBUTION (OECD)

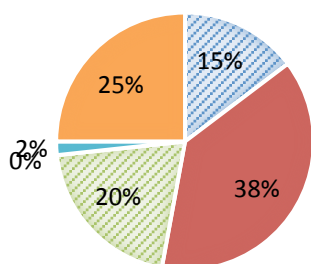


### RESIDENTIAL FINAL ENERGY CONSUMPTION BY TYPE OF END-USE (2015)



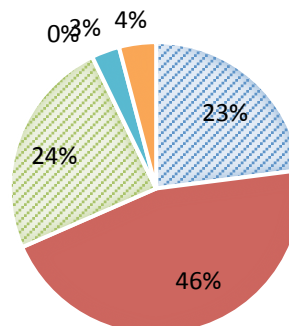
### SHARE OF FUELS IN THE FINAL ENERGY CONSUMP. IN THE RESIDENT. SECTOR (2015)

- ▣ Solid fuels
- ▣ Petroleum products
- ▣ Gas
- ▣ Derived heat
- ▣ Renewable energies
- ▣ Electrical energy



### SHARE OF FUELS IN FINAL ENERGY CONSUMP. - RESIDENT. SPACE HEATING (2015)

- ▣ Solid fuels
- ▣ Petroleum products
- ▣ Gas
- ▣ Derived heat
- ▣ Renewable energies and waste
- ▣ Electricity



### FINAL ENERGY CONSUMPTION FOR HOUSEHOLDS, PR CAPITA (2015)

6.788 MWh



## ENERGY SYSTEM AND ENERGY POLICY TRENDS

### Energy system

Ireland's energy system is heavily reliant on fossil fuels, which accounted for 91% of all energy used in Ireland in 2015. Ireland's energy system is also largely dependent on imports, accounting for 88% of total primary energy requirement (TPER) in 2015, at a cost of €4.6 billion. Imported oil and gas are particularly dominant sources of energy, together accounting for 77% of TPER in 2015 (SEAI, 2016). The contribution of renewables at 9% share of energy is significantly behind Ireland's target under EU Directive 2009/28/EC of 16% renewable energy by 2020. According to a report by the Sustainable Energy Authority of Ireland, Ireland is projected to miss this target under several scenarios modelled (SEAI, 2017). Moreover, a recent EPA report has found that Ireland will also fail to meet its binding 2020 target to achieve a 20% reduction of non-Emission Trading Scheme sector emissions (i.e. emissions associated with energy use in buildings and in transport, and emissions from agriculture) on 2005 levels. In this case, recent projections estimate that emissions reduction will be in the region of 4-6%, a figure that is significantly short of the 20% target (EPA, 2017).

### Particular socio-material aspects that influence energy consumption

Transport accounts for the largest proportion of energy use in Ireland at 42%, followed by the residential sector at 25% (SEAI, 2016). The residential sector is also responsible for a quarter of Ireland's energy-related CO<sub>2</sub> emissions. In 2015, the average household in Ireland used 7% more energy than the EU average, and emitted 5.5 tonnes of CO<sub>2</sub>, almost 60% more than the average EU home (SEAI, 2018). Continuing dependency on high-carbon fuels (e.g. oil, coal, peat), falling oil prices and higher incomes are some of the factors that contribute to recent increases in CO<sub>2</sub> emissions across the residential sector. In addition, Ireland has experienced a growth in population of 25% over the period 2000-2016. To accommodate an expanding population, the number of dwellings has also increased to currently stand at 1.7 million households. Current trends also show that households are getting bigger, with an average 15% increase in floor area across all homes between 2000-2016 (SEAI, 2018). Despite the number of new homes built to ever increasing energy performance standards, the Irish housing stock is among the poorest in Europe in terms of energy efficiency (Goggins et al., 2016). Over 40% of occupied houses in Ireland were built before 1980, and hence before the introduction of thermal performance standards in national building regulations (SEAI, 2018). By the end of 2013, only 0.6% of dwellings achieved the top energy rating of A1 status, calculated using the Building Energy Rating (BER) system introduced in response to the requirements set out in the Energy Performance Building Directive (EPBD) 2002/91/EC. In contrast, 12% of houses were rated F/G, with a G rating up to 18 times less efficient than the highest standard (Goggins et al., 2016). Home ownership rates in Ireland are almost 70%, or close to the European average (Eurostat, 2015). 42% of all dwellings in Ireland are detached houses, with just 7% of people living in apartments. Household size is the second highest in Europe at 2.7 persons per dwelling (SEAI, 2018).

### Current Trends in Energy Policy

The most recent government long-term energy policy paper is a White Paper called "Ireland's Transition to a Low Carbon Energy Future 2015–2030" (DCENR, 2015). The paper outlines the

country's ambition to transition towards a low carbon energy system, while maintaining the three core objectives of sustainability, security of supply, and competitiveness. The focus of the paper is on achieving the optimal benefits at least cost to consumers through new frameworks and pathways, consumer interaction and by promoting innovation and enterprise opportunities. Ireland's energy policy is largely techno-centric, with a strong emphasis on technological change and innovation. However, the government perceive that, in time, Ireland's energy system will become more decentralised, altering many traditional assumptions about demand and supply, and requiring deep change in the mindsets of individual consumers, businesses, agencies, and utility companies (DCENR, 2015). For example, the White Paper proposes that citizens move from being "Passive Consumers" to "Active Citizens", and that every citizen has a role to play in the energy transition. In this regard, consumer choice – in the home, in the community, at work and when travelling – is an important aspect of the energy citizen's role and responsibilities. The White Paper also proposes that landowners, neighbours and communities will be able to engage with infrastructure providers and local government to ensure acceptable outcomes for all energy users and become more engaged in the energy landscape in Ireland, although it is not explicitly clear how this may happen.













Improving energy efficiency in the residential sector is considered a critical element of energy policy and of a sustainable energy transition, with the SEAI estimating a capital investment of the order of €35 billion over 35 years would be required to make the existing housing stock low carbon by 2050 (SEAI, 2017). At present, grant aid for households to engage in energy efficiency improvements (e.g. cavity insulation; solar photovoltaic systems) is offered through one of several schemes run by the Sustainable Energy Authority of Ireland (SEAI). Applications can be made by individual households or as part of a community scheme, with various funding rates available depending on a number of predefined socio-economic and other criteria. Most recently, the government are supporting 'deep' retrofit programmes, where projects generally comprise a whole house solution, which includes a fabric first approach, and deployment of renewable solutions supporting a transition from fossil fuels. In total, over 375,000 homes received government grants for energy efficiency improvements between 2000-2016.










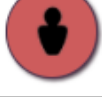
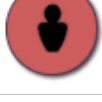
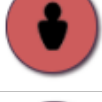



### Trends in national campaigns
















National campaigns are reflective of Ireland's energy policy and focus on two main areas, encouraging retrofitting of homes and increasing energy awareness. Recent energy awareness campaigns are focused on the main areas of residential energy use including space heating (61% of energy use), hot water (18%), lighting and appliances (17%) and cooking (Eurostat, 2016). For example, the SEAI are currently running a "Tips and Advice Campaign" and the "Be your own energy manager" campaign focused on providing householders with a series of steps on how to reduce their energy consumption. Recommendations include using timers with hot water and heating systems and ensuring heating and hot water systems are only switched on as required. Further examples include turning off lights when not in use and aiming for a common cooking time for everyone's main meal. Retrofitting is also encouraged and information campaigns are on going aimed at encouraging householders to avail of the significant grants for energy efficiency and renewable energy upgrades.










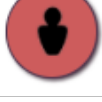



## OVERVIEW OF NATIONAL SECIS

Below please find a list of Irish SECIs that have been researched and documented through WP2 of ENERGISE. The SECIs are researched, selected and documented based on a set of requirements and research interests (please see Jensen 2017 for details). *The list should not be regarded as exhaustive or representative of all kinds of energy initiatives carried out in the country.*

SEAI's "Better Energy Communities" (BEC) Scheme		Changes in Technology
SEAI's "Power of One Street"		Changes in Everyday Life Situations
Drombane/ Upperchurch Community Retrofitting Project – Tipperary		Changes in Technology
Cloughjordan Eco-Village - Tipperary		Changes in Complex Interactions
Think Energy Hub (CODEMA & Dublin City Council)		Changes in Individuals' Behaviour
The Home Energy Saving Kit (CODEMA & Dublin City Council)		Changes in Individuals' Behaviour
Home Energy Saving Tips (CODEMA & Dublin City Council)		Changes in Individuals' Behaviour
Dublin City Council Better Energy Communities Project - Pearse House (CODEMA)		Changes in Technology
Dublin City Council Better Energy Communities Project - Cromcastle Court (CODEMA)		Changes in Technology
Dublin City Council Better Energy Communities Project - Greendale Court (CODEMA)		Changes in Technology
Dublin City Council Better Energy Communities Project - Ballymun North-East (CODEMA & Dublin City Council)		Changes in Technology
3D Sustainable House (CODEMA & Dublin City Council)		Changes in Technology

Imagine Energy Competition (CODEMA & Dublin City Council)		Changes in Complex Interactions
Renewable Energy Dublin (CODEMA & Dublin City Council)		Changes in Technology
Emerge – Sustainable Energy Community Dublin (CODEMA & Dublin City Council)		Changes in Everyday Life Situations
Green eMotion - Electromobility (CODEMA, ESB, TCD. Cork City Council)		Changes in Complex Interactions
EPLACE - ICT solutions for personalised energy use data (CODEMA)		Changes in Individuals' Behaviour
Templederry Wind Farm, Co. Tipperary		Changes in Technology
Power of One House		Changes in Individuals' Behaviour
Be Your Own Energy Manager (under HOLISTIC)		Changes in Individuals' Behaviour
Power of One Community		Changes in Everyday Life Situations
An Taisce's Green-schools Programs		Changes in Individuals' Behaviour
Engineer's Week		Changes in Individuals' Behaviour
Meath Energy Awareness Program		Changes in Individuals' Behaviour
Aran Islands Energy Co-operative		Changes in Technology
Atlantic Coast Energy Co-operative		Changes in Technology
Bagenalstown Community Better Energy Project		Changes in Technology

Ballyleague Community Energy Project		Changes in Individuals' Behaviour
Camphill Ballytobin Energy Project		Changes in Technology
Energyhub – Carlow Kilkenny Energy Agency		Changes in Technology
Clonakilty Community Cycle Scheme		Changes in Everyday Life Situations
Sustainable Clonakilty Group - Clonergy 2020		Changes in Complex Interactions
Cultivate Cellbridge		Changes in Complex Interactions
Donate As You Save Energy (DaysE)		Changes in Individuals' Behaviour
Donegal County Council Buncrana Retrofit Scheme		Changes in Technology
Dunleer Retrofit Scheme		Changes in Technology
Eco-Unesco		Changes in Individuals' Behaviour
Energy Co-operatives of Ireland		Changes in Complex Interactions
Energy in Education		Changes in Individuals' Behaviour
SEAI Energy Award		Changes in Technology
Green Awards		Changes in Technology
Kerry Sustainable Energy Co-operative		Changes in Technology

Kilkenny Retrofit Scheme		Changes in Technology
LEAF (Laois Environmental Action Forum) Laois		Changes in Everyday Life Situations
Mohill Community		Changes in Technology
RESPOND Housing Scheme		Changes in Technology
Tidy Towns		Changes in Individuals' Behaviour
Transition Towns		Changes in Complex Interactions
RESTART (Renewable Energy Strategies and Technology Applications for Regenerating Towns)		Changes in Technology
SEAI Better Energy Homes		Changes in Technology
SEAI House of Tomorrow		Changes in Everyday Life Situations
SEAI Schools		Changes in Individuals' Behaviour
SERVE Region		Changes in Complex Interactions
Social Housing Action to Reduce Energy Consumption (SHARE)		Changes in Complex Interactions
National Association of Building Co-operatives		Changes in Technology

## **‘GOOD PRACTICE’ EXAMPLE OF IRISH SECI**

### **SHARE (Social Housing Action to Reduce Energy consumption)**



#### **Brief Description**

The SHARE project is a partnership between sustainable energy organisations working with social housing providers and residents in eight European regions in the UK, Bulgaria, Estonia, France, Germany, Ireland, Slovenia and Sweden. Within an overall context of reducing carbon emissions and reducing the risk of fuel poverty, the project focused on existing housing and aims to increase awareness of the opportunities and practical options for sustainable energy retrofit and behavioural change. The project targeted low-income groups and ran from January 2006 to June 2008. It was coordinated by the Severn Wye energy agency in the UK, and included the Irish-based Tipperary Energy Agency (TEA) as a partner organisation. The role of the TEA was to apply the methodologies developed by the project consortium in the Irish context, with a focus on social housing. The TEA examined social and voluntary housing in Ireland, and explored approaches that would provide people with tailored information on energy efficiency and actions to reduce energy bills.

#### **Contextualization**

At the time of the project, a behavioural change and energy awareness campaign called ‘The Power of One’ was running in Ireland. The Power of One was a national mass advertising campaign that aimed to encourage people to reduce their energy use. The SHARE project aligned itself with the information and message of the Power of One campaign, but was administered at a local level. The project involved house-to-house visits and individualized and tailored information provision and supports, rather than the universal approach to information provision as had been the norm at the time. The TEA engaged with both the public and the voluntary sector, including local authorities that are responsible for management of social housing in Ireland. In total, there were 10 different communities of different scales and sizes included in the project. The householders involved the project were living in social housing provided by government or by other private sector providers, and were in receipt of a welfare allowance towards the cost of their energy bills.

#### **Aims and objectives**

This project aimed to increase the sustainability of energy use, minimize carbon emissions, limit uncomfortable temperatures and reduce fuel bills in social housing. To achieve these goals, it attempted to raise awareness of economic benefits of energy efficiency, develop retrofitting methods that address energy concerns, examine possible changes in behaviour, maximize financial and technical resources, promote good practices and encourage the sharing of experiences. From an Irish perspective, the project also aimed to influence designers and implementers of social housing on how they can improve their technical design, and to encourage them to provide energy efficiency information to the residents in the future.



## Methods for intervention

SHARE Forums were set up for each of the eight countries involved. Forums include social housing providers, residents, local authorities, energy providers, building and services contractors, and a variety of specialists working within the sector. Training sessions were undertaken with both the householders and those that are responsible for managing, designing and building social housing. Awareness and advice plans on existing materials and good practices for each participating country were produced. A series of case studies covering the forums training and awareness campaigns were made available on the project website. The TEA were responsible for the training sessions in Ireland and concentrated on providing information related to insulation, more energy efficient central heating systems, suitable and easier to use heating controls, more intelligent metering or monitoring equipment and renewable technologies where appropriate.

## Steps of implementation

The initiative began with the scoping out of the scale and levels of social housing within the partner countries and identifying the key stakeholders. The next step was the setting up of the social housing forums and getting the public sector, voluntary sector and other relevant bodies involved in a think tank around implementation of the project. Forums ran throughout the duration of the project and met 4 times over the life of the project to facilitate knowledge exchange between stakeholders. The intervention phase involved delivering tailored training sessions with the householders and other target groups on a range of sustainable energy topics. The training sessions were delivered as a shared workshop experience and were inspired by both Irish and European best practice.

The SHARE training in Ireland identified some key areas that tenants typically have problems with including understanding energy bills, efficient use of heating and hot water controls, and awareness and management of energy related to electrical appliances and lighting. Other key areas particularly relevant to Ireland included ventilation and condensation, draught proofing, insulation, fuel poverty, options for home heating, renewable energy options, and grants and assistance. Other than the training sessions, information was distributed through the project website, telephone interactions, information stands in Local Authorities and site visits.

## The role of the households

Householders were required to attend the training workshops and then attempt to implement some of the recommendations and reduce their energy consumption. The initiative tailored information to align with the needs and barriers faced by the householders. The householders, in general, were not required to financially invest in the project, although at times small investments were recommended, for example to purchase a draft proofing strip for a door. Some participants felt that it was the job of the local authority to be responsible for any upgrades that needed to be done, therefore raising tensions about financial investment and responsibility. The householders were not



involved in the design of the initiative, which remained the same from the beginning until its completion.

### **Results/outcomes**

There were no studies conducted of the environmental or monetary impact of the project. Energy consumption was not measured before or after implementing the initiative. The measure of the success of the project was the householders and forum members' evaluation of the project. In this regard, 85% of participants reported the training to be 'very useful', 15% found it to be 'fairly useful', with no participant indicating that the training was 'of no use'. The average feedback rating given by 89 participants was 4.5 (out of 5). As there was no consumption data recorded, it is difficult to determine whether there were significant, or any, changes in energy consumption in the long term. However, the positive feedback from the householders revealed the perception that the information provided was of consequence to their daily lives.

### **Textual and communicative aspects of initiative**

The TEA primarily focused on framing energy in financial terms, for example "save on your energy bills", and also talked about the broader environmental implications of saving energy. Topics of comfort or health were not addressed, however they were subsequently recognised as omissions and identified as targets for future projects. For participants, energy was framed in terms of expensive energy bills. For example, the implementers found that if they spoke about trying to reduce energy consumption that the discussion might morph into a debate about the perceived failure of government to increase welfare fuel allowances or provide other financial supports.

### **The physical/technological aspects of the initiative**

In general, technologies were not provided to householders as part of the initiative. Some recommendations were made to social housing providers in relation to retrofitting, however, technologies were not offered to individual households. Householders were, however, educated on how to use specific existing technologies more efficiently.

### **Shared understandings related to initiative**

The implementers reported a lack of shared understandings between the project initiators and the householders. One of the challenges was that householders would tend to voice other issues affecting them in the community or housing estate, as they had no other platform in which to voice their concerns. Participants felt that energy was a small part of these issues. Similarly, discussion about the lack of support from government would arise from time to time in the forums. The implementers reported that trying to focus specifically on energy in social housing presents a challenge, as people have lots of other issues in their lives that they need to deal with, and energy is not often a priority.

## CONCLUDING REMARKS AND POLICY IMPLICATIONS

Ireland has a long way to go in order to meet its binding carbon emissions targets for 2020 and beyond. Responsibility for reducing carbon emissions must be shared across different sectors in society, including the residential sector, which currently accounts for a quarter of all emissions. While CO<sub>2</sub> emissions in the residential sector reduced significantly from 2006 to 2014, recent years have seen a reverse in trends with emissions increasing by 6.7% from 2014 to 2016. Irish homes on average also use more energy and emit substantially more CO<sub>2</sub> than their European counterparts. If Ireland is to meet its longer-term carbon emissions targets, household energy use and related carbon emissions will need to reduce dramatically.

This document provides examples of recent Sustainable Energy Consumption Initiatives undertaken in Ireland. As evidenced in section 2, the majority of these initiatives target changes in individual behaviour or technological changes. These approaches mirror general government policy, where technological and innovation approaches are pursued to provide 'solutions' for problems such as excessive energy use. However, recent trends suggest that technological approaches alone are insufficient to deliver the necessary reductions in residential carbon emissions.

The good practice example described in section 3 illustrates some of the complexities in achieving more sustainable energy use. The SHARE initiative brought together a range of actors from across society, including local authorities, householders and practitioners, to help people in social housing to reduce their energy use and alleviate energy poverty. The tailored approach aimed to overcome some of the contextual difficulties experienced by householders and other actors. However, it also demonstrated the myriad other difficulties facing low-income households, and showed that people are somewhat detached from their energy use. The project also identified some shortcomings in existing SECIs, such as linking energy use with related issues such as comfort, health and well-being, as well as environmental and economic concerns. This more holistic approach to energy use should be considered in designing future initiatives.

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