

# How communities are working together to save energy





Communities across Ireland are coming together to carry out energy upgrade projects in their local areas. These pioneering communities are taking climate action into their own hands while greatly improving the comfort of buildings and saving money.

This booklet showcases some of the excellent community energy projects SEAI supported in 2019.



## 2019 COMMUNITY ENERGY PROJECTS



SEAI SUPPORT OF  
**€60m**  
TO 57 COMMUNITY ENERGY PROJECTS

OVER  
**650**  
HOME UPGRADES



**450**  
COMMUNITY BUILDING AND BUSINESS UPGRADES



## Communities at the heart of the action

Through the support of SEAI, communities are improving the energy efficiency of shared community buildings and businesses are becoming more competitive through reduced energy costs. In addition, homes are being upgraded making them more comfortable and helping alleviate the effects of energy poverty.

In 2019, SEAI offered grant support to 57 community energy projects to a value of over €60 million. This helped support the upgrade of over 650 homes and 450 community buildings and businesses right across Ireland. You can read about some of the communities that received grant support in 2019 in this booklet.

Partnership is essential for a successful community energy project. This programme has encouraged pioneering partnerships between sectors. We have seen a diverse selection of organisations working together, such as GAA clubs and other sports facilities, local authorities, retail outlets, factories, community centres, charities, hotels, public sector facilities and schools. By bringing together groups of buildings under the same retrofit programme, community-wide energy improvements can be achieved more efficiently and cost effectively than might otherwise be possible.

SEAI supports innovative approaches to achieving high quality improvements in energy efficiency within Irish communities. Projects include a mix of sustainable solutions and are ambitious in improving their Building Energy Rating. Those who have engaged with SEAI's community supports have gained confidence and experience and many are now setting more ambitious goals to secure further energy savings, more comfortable homes and buildings, and in many instances local jobs.

SEAI provides a range of additional community supports including free mentoring, technical supports and funding.

There are opportunities for all of us to take action on climate change and, importantly, no one organisation, policy or individual can address the problem in isolation – it needs urgent action across our society. Given the scale of change required, the next phase of our energy transition can only happen with citizens and communities taking the lead. I hope you can take inspiration from these energy projects and they help you in defining your own community's sustainable energy future, and making it a reality.

## The Birches Alzheimer Centre

### Louth



The Birches Alzheimer day care centre is located in Dundalk, County Louth. The respite centre is a much-needed resource for families in the community.

The Alzheimer centre faced the challenge of keeping their old building warm. An energy audit on their building before it was upgraded showed that the heating bill accounted for 70% of the centre's overall energy costs. As the centre relies heavily on donations of up to €100,000 each year, reducing this bill eases some of the financial pressure and allows them to reallocate resources to the care of patients.

The Birches centre undertook energy efficiency upgrades costing almost €80,000 with the help of almost €40,000 in SEAI funding. Upgrades included insulating the attic, roof and walls which is essential to keep heat from escaping. An air to water heat pump system was installed to provide renewable heating. And a solar photovoltaic system provides renewable electricity. The centre has seen energy savings of 82,619 kWh per annum, which is the equivalent of the energy used in four homes.



The upgrades have contributed to the quality of life experienced by patients. Eilish Clarke, a volunteer at the centre and one of the many family members who have devoted their time to caring for a loved one explained the impact of the upgrades.

***“The upgrades make a huge difference and I can see it every day I'm there. Alzheimer patients feel the cold even in summer, so we were constantly putting extra layers on them to keep warm. You don't feel the cold now and the bills should reduce massively.”***

*The lead applicant for this project was Arden Energy  
TA Energy Solutions*

## The Fair Play Café

### Dublin



The Fair Play Café is a community space in Ringsend, Dublin with a café, childcare facility and garden centre. The centre benefits the local community in a very practical sense. The net profits each year are distributed to different projects in Ireland and abroad.

The café is housed in Mission Hall which was originally built by two sisters from the Bewley's family. According to the sisters' last will and testament, it had to be kept in perpetuity and each generation had to name trustees. The trustees approached locals, Joe and Sharon Donnelly, to see if the building could be used and what facilities were most needed in the community. They had a big job to do in taking it from the 19th century to a 21st century building.

The Fairplay Café is transitioning to a zero-carbon community building and a hub for sustainability. The Ringsend Irishtown Sustainable Energy Community put together a proposal to upgrade the building and partnered with the Rediscovery Centre to apply for the 2019 SEAI communities grant. To determine what energy improvements were needed, they first conducted an energy audit. Based on their findings they decided to improve their heating system and install renewable electricity.



Advanced heating controls allow time and temperature control of different zones within the centre with remote access. This prevents unnecessary heating when the centre is not in use. They also put in an insulated door to reduce heat loss and draughts. As a result, they are using 25% less gas. They installed energy efficient LED lighting which has saved 20% of total electricity consumption. They also installed 3 kW of solar PV which meets 16% of total electricity consumption. The upgrades cost €16,600 and they received a grant of €8,300 from SEAI. The centre has seen energy savings of almost 12,000Wh, which is the equivalent of heating a house for a year. As a result of all the upgrades, they are making energy savings of €1,300 each year.

# The Rediscovery Centre

Dublin



**37,000**  
kWh SAVING  
PER ANNUM

**€6,300**  
ANNUAL  
SAVINGS

The Rediscovery Centre is a state-of-the-art sustainability and reuse centre based in Ballymun North Dublin. The centre hosts education workshops for all ages, and they run a shop and café. They work with people on community-employment schemes to recycle paint, recondition bicycles and furniture, and upcycle unwanted clothes into eco-fashion.

The Rediscovery Centre is located in the repurposed Boiler House in Ballymun. One of the buildings previously held the water for the 1960's district heating system. The building has undergone a major green revamp achieving an A-rating, which is rare for a retrofitted building. They used as much salvaged materials as possible and renewable technologies have been incorporated into the design.

The Rediscovery Centre partnered with Ringsend Irishtown Sustainable Energy Community for the 2019 SEAI communities grant application.

As part of the energy upgrade, the reservoir was fitted with high levels of internal insulation to reduce heat loss. An air source heat pump was installed to provide a renewable source of heating. Energy efficient LED lights were put in to reduce electricity consumption. In addition, 6 kW of solar PV

was installed to increase the level of onsite renewable electricity generation at the centre. The work cost €75,000 and as a community-based, not for profit organisation they received a 50% grant from SEAI.

The centre has seen energy savings of over 37,000 kWh per annum, which is the equivalent of heating two homes for a year. It is also making energy savings of €6,300 each year.

The usability and comfort of the space has improved significantly and resulted in the creation of an entirely new, flexible community building. The retrofit has allowed them to run more workshops and deliver events for larger numbers. They have increased visitor numbers, enhanced the visitor experience and expanded their target audience.



The lead applicant for this project was Arden Energy  
TA Energy Solutions

# Herlihy's Centra

Cork

Herlihy's Centra began identifying energy upgrade opportunities to reduce costs and fossil fuel usage within their own store as well as in their local community in Fermoy. They implemented energy upgrades in their HQ store in Fermoy, County Cork with the support of the SEAI Communities grant programme.



**196,000**  
kWh SAVING  
PER ANNUM

**€25,000**  
ANNUAL  
SAVINGS

The focus of this renovation was on refrigeration and installing all new energy efficient refrigeration units. The work cost almost €160,000 and they received a grant of €47,000. They have seen electrical savings of 196,000 kWh per annum. As a result of all the upgrades they are making energy savings of €1,300 each year.

Herlihy's donated funds towards upgrading the facilities for Fermoy Rowing Club and Fermoy Community Centre. Together they received in excess of €43,000 towards their own energy upgrades. Both of these community buildings installed new LED

lighting, resulting in Fermoy Rowing Club saving over €1,100 year on year from their energy bill and Fermoy Community Centre generating energy savings of over €5,600 per year. The combined savings is the equivalent to powering over six houses for a year.

Herlihy's Centra Fermoy was one of 13 Centra and SuperValu stores across Ireland who rolled out the 'Building Sustainable Communities' initiative. Musgraves donated in excess of €325,000 to national charities, local clubs and community groups, resulting in a total savings of almost €32,000 on yearly energy bills across the chosen organisations.

The lead applicant for this project was Musgraves

## Avoncore Estate Cork



*"Having hot water at the tip of your finger at all times is great help and the insulation and heat in house is brilliant. 10/10, no problem at all!"*  
Avoncore resident.



Avoncore estate in Co. Cork is home to 35 families living in state supported accommodation. In 2018, the local County Council applied for funding through SEAI's Community grant programme to upgrade these homes. The houses in Avoncore had a very low Building Energy Rating of E1. They were damp, cold and expensive to run.

Each house received an external wall insulation upgrade to help keep the heat in, one of the first essential steps to a warmer home. Old oil and gas boilers were replaced with air to water heat pumps, providing renewable space heating and hot water that is available all day. In addition, stoves replaced open fireplaces. All houses had their old light bulbs replaced with energy-saving LED lights. The project cost over €2.4 million and SEAI provided a grant of €800,000.

After the upgrades, each house received an average BER Rating of a B1 making them very energy efficient, extremely comfortable and cheaper to heat. It cost households €1,000 less to heat their home annually on average. In fact, in winter heating and hot water costs were reduced to €25 per month. The annual energy savings are 600,000 kWh, which is equivalent to the energy used in 33 homes.



**600,000**  
kWh SAVING  
PER ANNUM



**€1,000**  
ANNUAL SAVINGS  
PER HOUSEHOLD

*The lead applicant for this project was NCE*

## The Links Apartment Complex Portmarnock



The Links in Portmarnock is an apartment complex with 287 apartments, divided over thirty blocks. To reduce costs, the facilities team looked into the benefits of converting from traditional lighting sources to LEDs, which are much cheaper to run and use less energy. The complex has a strong environmental policy and aims to keep management fees low for the residents.

Getting buy-in from management before beginning the lighting retrofit was key to the successful delivery of the project. They carried out an energy audit and drafted a lighting upgrade proposal.

A total of 568 lamps throughout the complex were upgraded to highly efficient LEDs. This included lighting in the apartment blocks, street lighting and carpark lighting. They monitored energy use before and after the upgrades and have seen energy savings of 45% result in cost savings of €12,000 annually.



**45%**  
ENERGY  
SAVING



**€12,000**  
ANNUAL  
SAVINGS

*The lead applicant for this project was NCE*

LEDs have a longer lifespan than the traditional lightbulb so by upgrading to LEDs, maintenance staff no longer need to change lamps and ballasts as often. The apartment owners enjoy the brighter lights and greater sense of safety at night. There are also less harmful carbon emissions.

## Harbour View Road Cork



Harbour View Road in Cork city has 72 houses, with a mix of privately owned and council housing. There were 46 fuel poor homes. The houses were upgraded as part of a regeneration project with an aim to bring the homes up to a B2 rating or better.

The residents had a wide variety of needs. For example, several elderly residents had oxygen tanks and slept in the downstairs living rooms of their homes. Stoves could not be fitted in these homes as it would be a huge health and safety issue. Wheelchair access was needed in many cases and the presence of a carer was required for residents with dementia or Alzheimers. Several occupants required personal attention to feel at ease with the impending works.

An initial survey was completed to figure out what measures were needed to improve the energy efficiency of each house. Each home was insulated to prevent heat from escaping. This included external wall insulation, dry lining sloped ceilings, attic insulation, and window and door replacements.



The next step was to provide renewable sources of energy. Air to water heat pumps were installed to provide heating and solar PV panels provide electricity. Lightbulbs were replaced with energy efficient LED bulbs. Additional measures, for example, fixing electrical issues, further asbestos removal, and upgrading old steel water tanks, were also needed. The houses went from an average E2 rating to between a B1 and A3 rating after works. The upgrades cost €2.7 million in total and SEAI supported with €1.3 million. The homes have seen energy savings of 1,436,455 kWh.

The residents were delighted with the results, with lower heating bills and marked improvement to their standard of living and the comfort in their homes. Many residents saw improved mental and physical health as a result of cosier homes, free from damp and mould. Post-works residents were re-inspired to invest in the maintenance of their homes. The care and attention to the upkeep of the homes was visible as the residents some of whom lived there for over 40 years expressed a huge amount of house and community pride.

*The lead applicant for this project was NCE*



## COMMUNITY ENERGY PROJECTS CUMULATIVE FIGURES FROM 2015–2019



TOTAL SEAI GRANT  
SUPPORT

**€93.2m**



VALUE OF PROJECTS  
SUPPORTED

**€200m**



TOTAL HOMES  
UPGRADED

**6,646**



Total non-domestic projects  
(businesses, community  
buildings and public facilities)

**2,097**



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