



## 2015 Project Snapshot

LEAD APPLICANT

**Camphill Community Mountshannon**

PROJECT CO-ORDINATOR

**Colm Byrne, DaysE**

PROJECT

**Upgrade of over 90 buildings nationally including insulation, replacement boilers and renewable measures**

FINAL PROJECT COST

**€1,992,948**

BEC GRANT

**€821,237**

ENERGY SAVINGS

**6,489,817 kWh**

## Background

The idea for this project was developed by Colm Byrne, of Glás Energy, a supplier of energy-saving technologies with a keen passion for social enterprises. Motivated by personal awareness of the large amounts of energy we waste today and the challenges of high energy costs for non-profit organisations, Colm developed DaysE - 'Donate As You Save Energy' – a social enterprise with innovative fundraising mechanisms. Through [DaysE](#), organisations carrying out energy efficiency measures can donate their energy credits or a portion of their energy savings to social enterprises and charities ("beneficiaries") to help them take action to reduce their energy costs. These beneficiaries benefit from reduced energy costs as a result of the donations allowing them to prioritise their spending on maximising their social impact. After registering DaysE as a business in January 2015, the next step was to pilot it. As he had previous experience of working with SEAI through the BEC Programme, Colm identified the programme as a suitable platform to test DaysE. He then set about developing a network of participants across public, private, utility and NGO sectors.

Identifying suitable beneficiaries was fundamental to the success of the DaysE concept. Camphill Communities of Ireland is part of a broader international charitable trust that works with people with intellectual disabilities and special needs in 18 dedicated sites across Ireland. Given their existing strong connections with Colm and other DaysE board members, who had an appreciation of their valuable work, they were quickly identified as potential partners. Following a presentation by DaysE,

eight Camphill Communities agreed to participate in the project. They were keen to be involved because of their own limited financial capabilities to invest in improving their inefficient housing stock and were also attracted by the possibility of broader sustainability impacts for their community. Ultimately Camphill Communities Mountshannon acted as Lead Applicant for the BEC grant. DaysE were Project Coordinators which meant they were responsible for overseeing the entire project, bringing together the team and putting in place the management and operational structures for the project's successful delivery. Independent [energy agency CKEA](#) acted as Project Administrators, managing the extensive workbooks, handling paperwork for tax clearance certificates, grant payments and communications with SEAI. The project team also included six other organisations for technical and project management services including Enviroye Engineering, Ecoworks, Passive House Solutions along with SSE Airtricity as [Participating Energy Supplier](#) (PES). Airtricity were keen to support the project due to their strong interest in the DAYSE model and its social objectives and desire to see the model prototyped.

Another six non-profit beneficiaries were also recruited in addition to the eight separate Camphill Communities; Kare, Speedpak, ReCreate, Kingsriver Community, Kilkenny Golf Club and the Curragh Golf Club. These were identified through targeted networking activity amongst the project team. Some had participated in previous BEC projects and all faced significant energy challenges and

budgetary constraints. In order to match the investment needs of the beneficiaries, networking activities led to the recruitment of eleven commercial participants from the hotel, food, retail, manufacturing and agricultural industries. Around 70% of commercial participants had been involved in previous BEC projects and were keen to be involved again to pursue a pathway of ongoing energy efficiency improvements. Rather than confine the project to one geographical area, commercial participants and community beneficiaries were spread across Leinster and beyond. One reason for this was due to the geographical spread of the Camphill Communities which meant that organisations in their vicinity also came on board. In addition, while this was a national test, the ultimate goal for DaysE is to scale the model internationally so that commercial participants and social enterprises can be located anywhere in the world, yet connected through the donate-as-you-save model.

## Project Overview

Across the participating organisations, initial energy audits led to over 90 facilities being targeted for energy upgrades and priority measures were identified for each. Detailed energy audits were then conducted for each commercial and community property prior to submission of the BEC Application in order to get an accurate picture of each building's unique energy profile and investment needs. Retrofit measures installed included insulation upgrades (roof, walls and windows), boiler upgrades, new heating and cooling technologies and solar power. The most ambitious and large-scale project

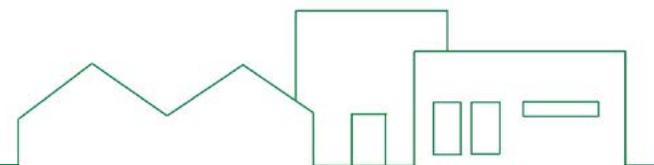
was the development of a biogas fuelled combined heat and power plant to meet the energy requirements of 80 residents in the Ballytobin Camphill Community. Ballytobin Camphill is now one of the few places in Ireland being both heated and electrified by gas generated locally through anaerobic digestion. This coincided with building insulation upgrades at Ballytobin and was the largest community energy investment initiative within the BEC project at €320,000 while the average project cost was €71,000. For example, Kilkenny Golf Club replaced their 30 year old boiler with a condensing boiler with advanced controls, installed a solar thermal array to contribute to hot water heating, added cavity wall insulation and replaced their lighting with new LED bulbs. The cost of these upgrades were €65,000 (ex VAT) and expected energy savings are €11,000 per year with a projected payback of 5 years.

## Innovation

### Donate As You Save Energy funding model

A unique dimension of this project was its innovative Donate-As-You-Save-Energy (DaysE) model of fund raising to improve conditions for those most in need yet least able to afford energy upgrades. The model was tested for the first time in this BEC project and required collaboration across a wide range of public, private, utility and NGO partners. DaysE operates by recruiting private companies or homeowners to carry out energy upgrades. Each unit of energy they save is converted into verifiable 'energy credits' which the participant agrees to 'donate' to DaysE. The participating energy supplier (in this case SSE

Airtricity), obliged to reach energy credit targets, agrees to purchase these energy credits. These funds are then added to the grant that beneficiaries receive from SEAI, further lowering their investment costs and enabling them to redirect money once spent on high energy bills to fund their vital services. DaysE also encouraged all energy companies involved to donate part of their profits towards the project. Key to the success of this model was the recruitment of high energy using companies, such as Irish Country Meats Navan, who can carry out large energy reduction projects and make a significant contribution to beneficiaries. This combined approach raised an additional €200,000 in funding for DaysE beneficiaries, covering around 10% of their final costs. This was in addition to the BEC grant which covered 50% of their investment costs while commercial participants received a 25-30% grant through the scheme. For this system to work, a detailed picture of the upgrade works, costs and associated projected savings was required for the BEC funding application. The cost of these pre-application energy audits was covered by DaysE who considered it an investment in the success of their application. Extensive data is now being collected through detailed monitoring of electrical and thermal energy consumption using a combination of bills and smart energy monitoring and meter data.



## Spotlight on... Camphill Community, Mountshannon, Co. Clare

As with other Camphill Communities in Ireland, Mountshannon is a *“life-sharing”* community where those with intellectual disabilities or special needs live together with families and dedicated care volunteers. Recognising the potential for positive impact that involvement in DaysE could have across the Camphill Communities, Pearse O’Sheil, coordinator of Camphill Mountshannon, agreed to be the Lead Applicant for the BEC application. In preparation for a previous LEADER funding application, Mountshannon had already conducted energy audits that had identified the need to upgrade the heating system in one of their houses in particular. DaysE gave them the opportunity to complete this upgrade whilst aligning with their strong sustainability ethos.

In keeping with their desire for self-sufficiency and the use of local resources, it was decided to harness the large supply of local wood as a fuel source and to install an innovative wood gasification boiler combined with a solar thermal solution. The cost of this system was €29,150 and grant aid of €21,250 was received. In addition, Mountshannon constructed a new shed to stock their wood supply. This boiler is now powering a large, nine-bedroom residential building and the new technology will save the community about €2,300 per year on energy costs.

Along with projected financial benefits, strong social benefits have already been realised. As Pearse comments; *“Camphill like to involve disabled people in activities, so they help with the processing of the timber and there’s multiple benefits - social and environmental”*. Through their engagement in log processing, members learn new skills and get actively engaged in running of their community and promoting sustainability. To spread the benefits beyond Mountshannon Camphill, they now plan to develop their timber processing capacity to offer processed timber to others in the wider area who wish to use timber as a fuel.

***“There are two bottom lines here that the project is addressing, one economic but more important is the social benefit.”***

Pearse O’Sheil,  
Mountshannon Camphill

## Where to Next?

The BEC funding provided an opportunity to pilot the Donate-As-You-Save-Energy concept. The project served as ‘proof of concept’ and has given the DaysE team the necessary experience to refine their operational model. They are now rolling out further DaysE projects, partnering with a wider set of companies both nationally and internationally and piloting a staff behaviour change initiative. One hotel in particular, The Abbeyleix Manor Hotel, has agreed to donate 50% of the financial savings on a monthly basis that arise from behaviour-based energy savings. The staff are encouraged to save energy by raising funds for charity and DaysE hopes to pilot this on a larger scale with a commercial entity that has 55 branch offices around Ireland. Each branch will compete on a national DaysE platform to raise money through behaviour change, an initiative which is not dependant on energy credits to raise funding. Camphill are keen to work with DAYSE again to spread the benefits to more of their communities across Ireland and will be considering another BEC funding application for 2017. DaysE is also continuing to support social enterprises, outside of the BEC program and is presently involved in raising funds through Irish energy savings to bring energy to a school and village in remote Tanzania.



**Insider's Tips...** Below are some tips and advice from the DaysE project leaders for preparing and carrying out a BEC project:

**1. Get organised for extensive energy auditing prior to submitting your application:**

The time from funding announcement to application submission is short and it is necessary to have completed extensive audits and surveys of the facilities you intend to include in your project in advance. This is particularly the case when there is a large variance in the building stock within your community. In the DaysE project, no two buildings were the same. This posed a challenge as each building needed a separate energy audit. This cost approximately €150-€250 for a residential BER however the costs of auditing larger facilities ranged between €500 and €2,000.

**2. Ensure provision is made for strong technical support throughout the project:**

Technical expertise is required for the application submission and evaluation stage, right through to the process of procurement, project delivery and follow-up inspections. You should expect that following receipt of your application, SEAI will get in touch to query any details of the project that they feel are not adequately backed up (e.g. in relation to how proposed savings were calculated, technical specifications or further information on the project costs).

**3. Allocate adequate resources to project management and administration:**

Significant time is required for project design, tracking bills, administration, coordinating contractors and managing grants. It is important not to underestimate the time required for project management and you should seek to develop centralised administration and file-sharing systems (such as Dropbox).

**4. Clear communication is required between participants:**

Ensure consistent and clear communication amongst all parties regarding timelines, rules of engagement, paper work requirements, quality of workmanship, and contractor responsibilities.

**5. Ensure that all beneficiaries have up to date tax clearance:**

All beneficiaries are required to provide their PPSN reference number along with their Tax Clearance Access Number (TCAN) at application stage so that SEAI can check their tax clearance status at each payment stage.

*“The only way that these projects can happen is through somebody administering it, driving it and really being a champion for the project which is a full time role for the length of the project.”*

– Colm Byrne, DAYSE