



Part of the 100+
strong pilot in
County Mayo.
Greenloan Home Energy
Saving Scheme

Help thy neighbour... and yourself



A new green retrofitting trend could save you up to 20% on construction costs.
Astrid Madsen

There's a new model gaining ground in Ireland and that is clustering, or the pooling of neighbour purchasing power. This system, which allows homeowners to bid for work collectively and get a group discount from a contractor, was tested out in ROI last year when Sustainable Energy Ireland (SEI) was piloting the Home Energy Saving (HES) scheme in association with the local energy agencies. In ROI, cluster projects go hand in hand with the HES scheme, which is expected to fund energy upgrades in 30,000 homes this year alone. In NI, such schemes haven't emerged as of yet although a notable number of retrofitting initiatives on a

community-wide level do exist. Some say the cluster model is fraught with basic issues, such as the individualistic nature of human beings, but their popularity is growing. Could the idea catch on in your area?

What is a cluster?

A "cluster" is similar to a buyer's club whereby neighbours come together to carry out renovations, resulting in economies of scale for individual homeowners. There are a number of cluster projects in existence, most of which are run by not-for-profit local energy agencies such as the City of Dublin Energy Management Agency (Codema) Energy Smart Community scheme. There's even an EU-funded project called Regional Clusters in Energy Planning (RegCep), which Shannon Development and the Limerick Clare Energy Agency are spearheading. Then in the private realm there is the Greenloan Home Energy Saving scheme, best known under its web acronym www.greenloan.ie. The approved installers vetted by the scheme do

not pay for inclusion, finance comes from manufacturers under a sponsorship arrangement. As for size, a cluster can consist of anywhere between 10 to 120 households - for the Greenloan scheme the average size is of 20 (one installer assigned to every 20 homes) while the Codema project says it envisions 50 to 60 homes per cluster.

What can you save?

In ROI, the HES covers about a third of the construction costs while in NI the Warm Homes Grant provides financial assistance of up to £850 for insulation measures and up to £4,300 for heating. Cluster project organisers say that through clustering, between 10% and 20% can be saved on construction costs. Codema's cut is in the order of 6% to 10%, leaving each homeowner with a cluster saving of 10% to 14%. If we take the example of the Greenloan Home Energy Saving scheme's pilot phase in 2008, which was conducted in County Mayo with 115 homes to the one cluster, the discounts recorded were of the same order, showing cluster savings of about 15% on construction costs. Also, there's the advantage of no surprise "extras" which builders can be known to add when dealing with individual homeowners.

Looking at utility bills, in ROI the Tipperary Energy Agency says that on average, savings in heating bills for a 140 m² bungalow can be as high as €1,000 per year and €600 per year for a 120 m² semi-detached house. In NI the Energy Saving Trust says you can save up to £600 per year if you insulate and glaze your home to energy efficient standards.

Things to consider before you sign up

It all sounds well and good in theory, but before you start knocking on your neighbour's door to discuss a partnership there's a few things to bear in mind. Although it may sound obvious, make sure you're committed to the project. The idea is still being developed so if you're going to get involved remember that, as with any new initiative, you're bound to run into teething problems.

1. Do the 'Jevons Paradox' test: Ask yourself: are you an energy hog to begin with? Think of the savings you could make by turning the thermostats down and using appliances more sparingly and sustainably. "The Jevons Paradox is very much at play when it comes to home energy improvements," says Connaught's former energy chief Michael Layden. "Usually the savings made are eaten up by increased comfort levels which raise energy consumption." The rule of thumb of sustainable living always starts with the free options, and it may be worth your while to consider what you can do that's free before you commit to such an expense. Layden goes so far as to argue that the easiest way to make houses more energy efficient is to increase the occupancy rate per square metre. "When I used to do consultancy it used to amaze me that people could think of 2,500 ft² to 5,000 ft² homes and a thousand miles-a-month commute as eco," he adds.

2. Know what you need to budget for: The first step in any of the schemes is to get a Building Energy Rating (BER) in ROI or an Energy



Performance Certificate (EPC) in NI for your home, which consists of a "before and after" audit of it as well as recommendations for upgrades. This is the first expense you'll incur. In the case of the Smart Community Programme the BER costs €299, an indicative price of what you can expect to be paying at the higher end of the scale. In ROI if you spend €500 or more in upgrades, SEI will reimburse €200 towards the cost of the BER. At this point, if you decide against carrying out the works, you can pull out of the programme but the cost of the BER will not be refunded.

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With regard to the construction work, there typically is no minimum or maximum spending required but in ROI you do need to invest in at least two upgrades to qualify for the HES. Since cluster projects in ROI are dependent on the HES, you're looking at a significant initial investment even if you do get about 30% of it back. Codema's organisers say that this will be a minimum of about €2,000 for two simple upgrades such as attic insulation and a basic heating control system. If you look at the Tipperary Energy Agency SERVE project, a cross-community energy programme that also offers EU grants, retrofits within their programme typically came to €4,500 to €5,000 for an average 120 m² three-bedroom semi-detached house and about €6,500 to €7,000 for a 140 m² bungalow in a ►

Efficient heating controls are essential.
Smartfit from
Honeywell €200



Above: There are a number of cluster projects in existence.

rural setting. Of the 115 homes that participated in the pilot phase of the Greenloan Home Energy Saving scheme, each household spent an average of €7,500 on upgrades.

3. Get your pre-cluster financing in order:

You'll need to get your finances in order before you apply to any one of these schemes. But not to worry. Nowadays there are a range of options that weren't even conceivable just a few years ago. Government grants are being advertised both in ROI and NI, while preferential loans to carry out upgrades are more than likely to be available from your local bank. Some credit unions have also voiced interest in such schemes, so don't hesitate to drop in to your financial advisor.

Below: Retrofitted solar panels



What's the catch?

The benefits are clear: you can get some long-term energy-saving work carried out in your home and you'll save yourself a few bob in the construction process. You're even likely to meet some nice neighbours you may have otherwise never got to know! So surely, you ask, there must be a catch. There actually isn't one per se, as most of the people behind such schemes do it on a not-for-profit basis. That said, you may indeed hit a couple of snags along the way.

Contractual Issues: Commitment is one - we spoke of yours, but what if someone else in the group decides to pull out? If all the participants don't go into it equally, a preferential discount negotiated with a builder could potentially be rendered void. "We envisage there will be an agreed margin of error, plus and minus the cluster size, as presented in the tender. Should the cluster size radically shift outside this margin of error (either way plus or minus), then the tender may need to be revised," says Gavin Harte, the man behind the Codema scheme. "While this example might pose a worst-case scenario, it's also important to consider the reverse. For example, the cluster might actually get bigger after the tender has been issued as a result of more people finding out and wishing to be involved. In this case the benefit would accrue to the contractor." It's important to bear in mind the cluster model does protect the homeowner in that if the works aren't completed to a high standard, the organisers will make sure they are remedied at no extra cost. With regard to the Green Loan scheme, John Quinn, of one of the sponsoring manufacturers who saw the project grow from its inception, says that installers have in fact gone the extra mile when fitting out the projects. "We ►

Creagh Concrete



Above: 350mm - blown fibre attic insulation. Average cost €7 per m².
SERVE

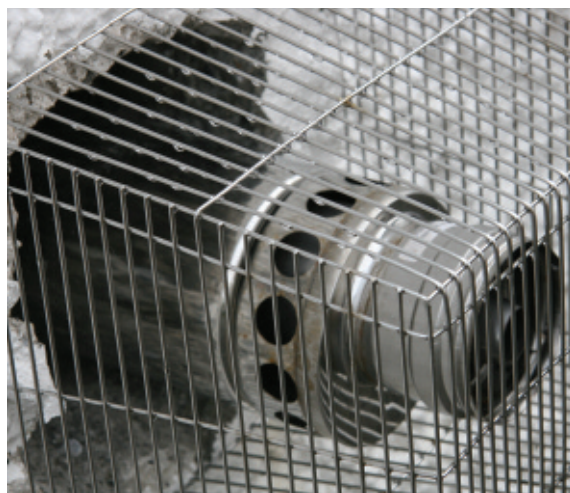
actually found that they were scared that if they didn't do it 100% correct they wouldn't get any more work," he says. "We thought quality would be an issue in the pilot project, but that turned out to be exactly wrong! The installers were so paranoid about quality that they cultivated a great relationship with the customers. So much so that customers would call them first, and not the scheme, if anything went wrong. The installers would easily go back four or five times to talk to homeowners to put them at ease over something or to conduct remedial works."

Extent of savings: Builders will give you a preferential rate only if they can afford to do so and this is most likely to be the case when tendering for ten or more homes. If your cluster partners live too far away, you may not reap attractive savings in the construction cost or be

left out of a particular cluster. The cluster organiser will advise you.

Choosing the construction professionals: In the case of Codema, the BER must be done by them and no one else. With the Greenloan scheme, clusters are often set up by BER assessors who then carry out the assessment. Also, you may not always be able to choose who does the work for you. Under the Codema project, a tender is put out for "one stop shop" contractors who provide services in all of the categories covered under the HES scheme. It may not be the cheapest way to go about getting a quotation, but it takes the headache away from coordinating different contractors. In the case of the Greenloan scheme, a handful of contractors are vetted by the programme for the quality of their work and the business is exclusively tendered out to them.

Right: The boiler balanced flue. It pulls in the fresh air along the outside of the boiler exhaust to preheat the fresh air for the boiler (hence increase efficiency).
SERVE



Can I set up my own cluster?

There's nothing to stop you from initiating a cluster within your own neighbourhood. However, having a facilitator there to support both the administrative/organisational and marketing/interpersonal side of things will undoubtedly help you avoid the pitfalls of DIY project management. Indeed, if you do go ahead and set one up you'll have to micromanage the project, which will take a considerable amount of time. If someone in your neighbourhood is ready to commit to the project, make sure they are happy - and qualified - to do so. Indeed, contacting neighbours, getting quotes and liaising with contractors can all be tricky without any previous experience. That's not to say it can't be done, but going down this route could raise the issue of both

the organiser(s) and the neighbourhood group feeling taken advantage of. Think about it - are you paying this person for their time?

If you're close to your neighbours and a reasonable relationship already exists then it may not be such a bad option as you'll be cutting out the project management fee. However, convincing people to get involved may not be as easy as you'd imagine. Paul Kenny of the Tipperary Energy Agency tried to do just that when he called over to his four or five neighbours to offer them a deal he thought they couldn't refuse. "I know my neighbours, some relatively well, some not so well, but I thought if we went at it together we could get 80 to 90% of the cost subsidised through grants and the contractor's group discount," he says. But he hit a brick wall. He points out that it's especially difficult to convince people whose home has been built in the 1990's or early 2000's. "Because they can heat their houses with a boiler they don't tend to think about the fact they're spending €1,200 a year on keeping it warm," he argues. "People equate the money spent on energy efficiency to spending a lot of money - there's a whole mindset change that needs to happen across the country." So Kenny is doing up his home without them and intends to show them the savings he made on the cost of the upgrades. "I'm going to go around and show them the bill and say 'look at how much it cost me in the end, you should really do this.'"

Kenny says there's a need to upgrade about 1.5 million homes in ROI, which is close to 80% of the housing stock. "I think we're going to need every model of convincing people that they should invest in insulation and in their heating systems to address this," he adds.

The future of cluster projects

When a number of energy agencies in ROI conducted pilot HES schemes with clusters in mind they got mixed results as well. "We did partake in the pilot cluster scheme, but I wasn't very pleased with the coordination and management of the project by SEI," says Cork City



Solar panels on a gable for maximum solar gain, Co. Mayo pilot project.

Greenloan Home Energy Saving Scheme

Energy Agency's John Walsh. "It would have been better for us if we had full control similar to what they have in Dublin." In fact, the Greenloan scheme is the only successful HES pilot to have gone on to be fully rolled out in 2009. The issue is further highlighted by Wexford Energy agency's energy officer Jim Owens, who says that his experience under the HES pilot scheme showed it was difficult to implement. "I was involved in the Pilot HES cluster scheme and it was difficult to organise in the time available," he says. Some argue that financing will become an issue for not-for-profit networks, as highlighted by Codema's need to cluster at least 50 households on every project to cover their management costs. All in all there seems to be little doubt that if this model is to survive, the impetus will have to come from individual homeowners. ■

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