Irish SMEs can achieve considerable cost-savings by investing in energy efficiency initiatives while at the same time receiving financial support from the Sustainable Energy Authority of Ireland (SEAI).

As the Irish economy continues to grow, so too does the energy requirements of SMEs and the agricultural sector throughout the country. Ireland is transitioning to a low-carbon economy in an effort to meet both Government and international targets and to reduce the economy’s dependence on fossil fuels, however many challenges remain.

According to the Sustainable Energy Authority of Ireland (SEAI) the scale of these challenges is significant, and it will require a coordinated interplay of technology, infrastructure and actions by organisations and individuals to shape Ireland’s energy future.

For the past number of years, SEAI has been supporting Irish businesses, large and small, as well as the Irish agricultural industry, to shift to more sustainable energy use by providing a range of support services. This includes mentoring, training, standards development and a number of financial supports to help companies to become more energy efficient, deliver measurable savings and reduce their energy bills.

“SEAI's goal is essentially to get people and businesses to reduce greenhouse gas emissions and in doing so help them achieve savings to their energy bills,” says Brian O’Mahony of SEAI.

“The reality is that energy use is increasing for most businesses in Ireland. While they may well be generating more profit on the back of increased production and sales, businesses could be even more profitable if they managed their energy use. This is because energy savings translate to cost savings, ultimately improving the bottom line and competitiveness,” he says.
With Brexit looming on the economic horizon for Irish SMEs, he says that it’s imperative that businesses look at all their overheads with a view to becoming more efficient and ultimately more competitive.

“Brexit will be a big challenge for the Irish economy and companies will need to be as competitive as possible given the many uncertainties that come with it. When it comes to energy costs and energy savings, businesses need to act now because one thing is certain and that is energy costs will increase over time and this will have an impact on the bottom line for most businesses.”

While SEAI has met with considerable success in engaging with both large corporates and SMEs, as well as the wider agricultural community over the past few years, changes in behaviours and attitudes are still required. This includes an important educational message that needs to be imparted to the wider business community, one of the key focuses for SEAI.

“In the past, we have surveyed businesses about their energy efficiency strategies and we found that two-thirds of them believe that they have done everything they need to do or believed they don’t need to do anything. Just 3% of them said that they need to do something while the balance said they needed more information or that they simply didn’t know enough about it. This is the scale of the challenge which we are trying to overcome,” he says.

To help businesses become more energy efficient, SEAI has a number of important financial supports that are available to SMEs, farmers as well as communities.

“There are lots of simple, straightforward actions you can take that won’t cost you anything and will start saving you money straight away,” says Brian.

To support SMEs interested in undertaking energy efficiency initiatives, SEAI has a number of financial supports in place to help them.

LIGHTING

One of the most popular initiatives in recent years has been SEAI’s support for firms installing new lighting. For many SMEs, lighting is the second highest cost after staff costs but new developments in lighting technology like Light Emitting Diode (LED) mean SMEs can reduce their lighting bills by up to 60%, according to Brian.

“We have a grant programme for lighting and we will fund up to a third of the costs of fitting new lighting. The payback on this can be as little as two years, and in some businesses, we have seen the payback in less than a year. It will depend on the business, but the payback on lighting is generally very quick, he says.

Although applications for the 2018 round of funding have closed, in 2017, over 60 SMEs applied and, combined, they received almost half a million euro towards their lighting upgrade projects which resulted in cost savings of over €540,000 for those companies.

“Lighting is important and relevant to every business. For many, it is one of the most energy intensive parts of the business and can be responsible for up to 40% of a building’s electricity use. Occupancy sensors alone could cut energy use from lighting by 30%,” he adds.

RENEWABLE HEAT

Given that the Government has set firm targets to meet concerning the amount of renewable energy the economy consumes by 2020, SEAI also oversees the Support Scheme for Renewable Heat (SSRH). According to Brian, the SSRH supports the adoption of renewable heating systems by commercial, industrial, agricultural, public sector and other non-domestic heat users.

The Scheme, which is funded by the Department of Communications, Climate Action and Environment, aims to bridge the gap between the installation and operating costs of renewable heating systems and the conventional fossil fuel alternatives and covers air source heat pumps as well as ground source and water source heat pumps.

“When it comes to heating, businesses can apply to SEAI for grants towards the installation of heat pumps. If, for example, a company installed a boiler 15 years ago, the company can apply to SEAI for a grant to replace it. The second part of this scheme covers bio-energy like wood fuel and we are currently awaiting EU approval for this, hopefully next year. If companies want to install a biomass boiler, for example, we hope to be able to grant aid to them as biomass falls within the renewable energy category,” Brian says.

SEAI EXEED

The importance of renewable energy sources also underpins the SEAI EXEED certification which offers grant support of up to €500,000 per year.

According to Brian, the scheme is open to all public and private organisations planning an investment in new design projects or major energy upgrades of existing buildings and assets.

“For example, we will support a professional to work with businesses considering an expansion, a refurbishment or an extension. The requirement is that they do so with energy efficiency in mind and to make sure that they have thought about everything in terms of a checklist. There’s no stipulations about how the building or extension is designed or anything like that- it’s all about getting it designed with energy efficiency in mind,” he says.

CASE STUDY:

GERARD MOORE, GENERAL MANAGER, SLIGO PARK HOTEL.

Sligo Park Hotel has made a considerable investment in redesign and refurbishment over the last three years, with more than €3m committed to various projects across accommodation and public areas including the lobby, bar areas, restaurant and conference facilities.

This investment has been made to capitalise on increased visitor interest in Sligo as a result of the marketing of the Wild Atlantic Way explains general manager Gerard Moore.

The hotel has also made a major commitment to improving its energy efficiency over the last five years. In 2013 it implemented an energy management system which involved the installation of electricity and gas meters on the equipment used by each part of the hotel.

“This enabled us to view our consumption on a weekly, daily and even hourly basis to identify the high energy usage areas and take remedial action,” explains Gerard.

“For example, we found that about 40% of our energy usage came from the leisure centre and particularly the swimming pool and the air handling units, which we are now in the process of upgrading to more efficient units.”

The less thermally-efficient oil boilers were upgraded to LPG condensing units with cascading operation to match heat demand.

As part of the refurbishment of the bedrooms and other areas, light fittings have been replaced with energy efficient lighting. "We have also implemented a key card system that means the electrical appliances in the rooms can only be used when the card is present," he adds.

The hotel has reduced its annual energy bill by approximately 11% since 2014, he says.

Sligo Park Hotel has been a customer of AIB for 25 years and Moore says they are very satisfied with the support they have received over that time. “AIB has been an important partner during our refurbishment of the hotel,” he concludes.

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AGRICULTURE

The financial supports provided by SEAI also reach into the agricultural economy with specific energy-related grants in place for Ireland’s dairy farming sector, according to Brian. In collaboration with Teagasc, SEAI also provides financial support for the installation and retrofitting of more efficient vacuum and milk-pump technology.

By installing new energy efficient pump technology, farmers can cut costs, free up resources that can be invested in more productive activities as well as provide increased resilience to volatile milk prices, he says.

“The scheme has been popular with farmers and co-ops and it’s designed to help them become more efficient when it comes to the processing of milk. Farmers can get anything up to one third of the cost of the upgrade of their pumps. But they are also entitled to apply for grants towards upgrading their lighting too, so overall the savings for farmers could be quite considerable and we are now looking at the farming sector in greater depth,” he adds.

COMMUNITIES

The final initiatives which SMEs and the agricultural sector can tap into involves community collaboration and partnerships, called the Better Energy Communities & Sustainable Energy Communities. SEAI assists energy efficiency community projects through capital funding, partnerships, and technical support.

The Better Energy Communities is a national retrofit initiative supporting community-led and cross-sectoral initiatives that have energy efficiency at the heart of them. For its part, the Sustainable Energy Communities scheme provides funding for small to medium sized sustainable energy projects. “These schemes are all about bringing communities together including the likes of home owners, small businesses and community centres. One of the main conditions is that they come together as a community and the project reduces the collective energy consumption of that community. If they meet the criteria, we will fund up to a third of the costs,” says Brian.

TAX INCENTIVES AND FINANCING

“We will support a professional to work with businesses considering an expansion, a refurbishment or an extension. The requirement is that they do so with energy efficiency in mind and to make sure that they have thought about everything in terms of a checklist.”

“Finally, the other incentive which I think is important is the Accelerated Capital Allowance Scheme which allows a business to write off any investment in energy efficiency products against their tax bill over the course of 12 months and this can cover anything from solar panels, pumps and building energy management systems while still availing of the grants and supports that SEAI provides,” he says.

While the financial schemes SEAI oversees play a key role in incentivising SMEs to adopt more energy efficient technologies and processes, the role which a company’s day-to-day finances play is also an area of concern.

“We are trying to run some trials in the whole area of financing and look at how businesses can finance their investment in energy efficient initiatives and the reasons why they are not doing so. At the moment, the Government is concerned that businesses are using cash flow to fund expansion and in doing so, they are not protecting themselves against any large economic impacts down the line like Brexit or the possibility of a global recession. If these occur, companies may not have the cash or the balance sheet to support themselves and that is a concern. We are aware that many companies found it difficult to get credit during the downturn and now that they have emerged from the downturn and their finances are under control, they may be reluctant to borrow for things like energy efficiency. So, at a macro level there could potentially be a speed bump if businesses have used up all their cash and don’t have the money to invest,” says Brian.

“The message that we need to get across when it comes to finance is that any energy efficient investment goes to the bottom line and ultimately makes companies more competitive. We need them to think of the bigger picture and to prepare themselves for future shocks and events and the one way to do that is to invest or borrow for energy efficiency. From our dealings with the banks, it’s clear that they understand energy efficiency now and they know that it helps improve their customer’s competitiveness. We have also found that they are willing to lend for energy efficient investments and there is no need to educate them; they know it makes sense for them and their customers,” he concludes.

SEAI has worked with thousands of businesses since inception to reduce their energy consumption and introduce the concept of energy efficiency to all.

“Sometimes smaller organisations can feel that they are unable to keep up with the technological changes in the energy sector. As such SEAI is reviewing the range of supports that we offer to SMEs, with a view to launching a new, SME focussed package of supports in early 2019 (SEAI SME Support Programme). Helping all our indigenous, local and enterprising SMEs to avail of the benefits that energy efficiency can bring to their business. This suite of supports will include training and information supports, advice, online resources, grants and even collaboration opportunities for businesses and relevant organisations to work together to address the energy challenge,” concludes Brian.

For more information on energy saving advice and details on SEAI business supports, visit www.seai.ie

CASE STUDY:

Cyril Draper, Farmer, West Cork.

The third generation of his family to work the farm in west Cork, Cyril Draper took part in the Greener Dairy Farms initiative that was organised by his local co-op Carbery in association with Teagasc.

The aim of the programme was to measure, monitor and optimise the environmental impact of farms in the area and introduce best-practices that would help reduce their carbon footprint through a range of energy saving initiatives. Information on energy, water, feed and fertiliser usage was then gathered from participating farms in the west Cork area that took part in the Greener Dairy Farms initiative.

“We found that milking cows accounted for 24% of our electricity usage, while milk cooling accounted for 34% and water heating for plant washing another 20%,” says Cyril who has banked with AIB for the last 35 years. We installed a larger plate cooler to reduce milk temperature going into milk tanks and the water from the plate cooler was recycled and used for plant washing,” he adds.

He says that enlarging the milking parlour lowered the number of units of electricity required to produce each litre of milk while additional cost-savings were made when he also installed a three phase power system with LED lights around the farmyard.

The project was about more than simply reducing the carbon footprint of his farm - it was also an opportunity to improve competitiveness through sustainable farming practices and greater energy efficiencies, he says.

“I undertook this project to see how we as farmers can reduce our carbon footprint and stay in farming,” he explains. “Abolishing farming is not option, so we have to work at reducing our carbon footprint and become a lot more energy efficient in the process,” he concludes.
SUPPORTING ENERGY EFFICIENT SMEs

AIB has a number of supports for businesses and farmers looking to finance energy-saving initiatives.

The cost of doing business in Ireland is increasing. Labour, insurance and utility costs have all risen in recent times and therefore there has never been a better time for Irish SMEs and farm enterprises to examine their cost base to reduce their energy consumption with a view to becoming more efficient and ultimately more competitive.

“Given that Ireland is a small peripheral EU country, with limited energy resources, factors outside our control can have a large impact on international oil and gas prices with a knock on effect on the day-to-day costs of running a business,” he says.

“Ireland already has a relatively high cost of energy when compared to other European countries thereby putting Irish companies that export or compete in international markets at an instant disadvantage when it comes to cost of production. Brexit also drives uncertainty and poses a risk to businesses as it could have an impact on energy costs as significant amounts of our energy sources are imported from the UK via it’s ports, pipelines or refineries. However, the adoption of an energy efficiency strategy by SMEs and the farming community can reduce the impact of any volatilities that might arise from Brexit while ultimately boosting both profitability and competitiveness,” he adds.

According to Alan the case for implementing energy efficiency initiatives is compelling yet some businesses and business-owners struggle when it comes to implementing them for a variety of reasons. “Most energy efficiency projects reap benefits immediately, the payback on the projects typically range from 2-7 years while the projects can provide additional cash in your business straight away with the appropriate funding solution. Focusing on improved energy efficiencies not only reduces costs but the resulting efficiencies can also improve product quality and output, reduce risks to the business and enhance resilience. “As more large companies implement environmental, social and governance (ESG) policies, they are also assessing the sustainability credentials of their suppliers and supply chain partners. A key consideration for many of them is choosing partners that adhere to best environmental and sustainable practices and energy efficiency has a large role to play in this,” says Alan.

In addition, the cost-savings generated from energy efficiency will free up cash within the business for investment in growth and the creation of new business opportunities. Despite these very clear
SEAN BOHANE, BROOKFIELD ENERGY, YOUGHAL, CORK.

With customers operating in the leisure, educational and nursing home sector, Brookfield Energy provides a range of heating and hot water systems. Based in Youghal, the company has been in business since 2011 and works with a range of clients including schools, hotels, leisure centres and care homes.

The company recently participated in a Sustainable Energy Authority of Ireland ‘Better Energy Communities’ project lead by Retrofit Energy Ireland to support housing associations, private energy-poor housing and voluntary groups to increase energy efficiency and create awareness in counties Cork, Sligo, Tipperary, Mayo, Clare and Donegal.

One of Brookfield Energy’s first installations was at Brookfield Care Centre, a purpose-built facility situated on the outskirts of the village of Leamlara comprising of 62 beds across three units.

The decision to implement the new energy system was made for two main reasons explains Sean Bohane, who is a director of Brookfield Energy as well as director of support services at Brookfield Care Centre. “Firstly, the cost of oil was increasing and secondly, we wanted to become more environmentally friendly.”

At the time of the installation, Brookfield Care Centre was spending approximately €45,000 per annum on heating. This figure was reduced by two thirds to €15,000 following the installation of the air to water heat pump system.

As well as lowering the centre’s heating bills, the system has contributed to a more pleasant environment for its residents and visitors. “One of the upsides of the system is that it maintains a constant temperature throughout all areas,” says Sean who recommends that all care facilities regularly review their energy consumption.

AIB was the only bank willing to come on-board at the time to fund this type of technology, he adds. “Because of this we moved all our business to AIB and are extremely happy with the support and advice we have received,” he concludes.

benefits, however, the reality is that most business owners do not have the in-house expertise or resources to introduce energy efficient strategies.”

He points to a recent survey of energy users across various sectors, including hospitality, manufacturing, healthcare, retail, farming and transport. Of the respondents who have not implemented an energy efficiency plan, the main reason cited was a lack of awareness, a clear indication of the role that information plays in driving action.

Of those who took action, they did so under three categories: technology and innovation; management and behaviour; and fabric and physical infrastructure.

When it came to technology and innovation, the main actions initiated involved the introduction of sensors, meters, new lighting and lighting upgrades as well as new heating and cooling equipment. In terms of management and behavioural changes, the respondents had introduced measures like training, energy auditing and certification while new windows, better insulation were some of the measures introduced by those respondents who had introduced changes to the physical infrastructure of their premises.

“When the actions taken by respondents were analysed, the most popular category was investment in technology which accounted for 84% of actions taken, with LED lighting and lighting upgrades being the most prevalent reported action. This mirrors the type of projects AIB has supported over the last few years as we have seen a large number of SMEs undertake LED lighting retrofits.

This technology is very low risk and it is easy to accurately project the savings generated and in addition lighting projects have a very quick return on investment. With improvements in technology and reductions in price most lighting projects have a payback within 2 - 2.5 years.” says Alan.

“The willingness of the respondents to improve their energy efficiency over the coming three years was significant with 95% stating that it was likely they would invest in the coming three years with 2% saying it was unlikely while 3% didn’t know,” he adds.

The survey also asked respondents to consider likely barriers to taking energy efficiency actions with lack of time cited by 75% of respondents while a lack of expertise was cited by 64% while financing was also cited by 74%.

“AIB has been at the forefront of supporting our customers who are considering energy efficiency initiatives as we understand the benefits that can be obtained. AIB is very keen to support any SME customer to make investments that will help to optimise the potential of their business,” says Alan.

“AIB has an appetite for projects of all scales and across various technologies. We offer a suite of options to finance projects. Whilst normal lending criteria applies, the additional savings to energy costs as a result of a project are also taken into consideration. This means the project is self-financing from day one and does not impact the borrowers cash-flow. We consider energy costs and compare them with the potential savings that the project will generate. These savings are then used as part of the repayment assessment.

SMEs WILLINGNESS TO INVEST IN ENERGY EFFICIENCY

Source: Report on the Findings from the DCCAE Commercial Survey Consultation (Feb 2018)

SMEs VIEW OF ACCEPTABLE PAYBACK TIME FOLLOWING INVESTMENT

Source: Report on the Findings from the DCCAE Commercial Survey Consultation (Feb 2018)
RACHEL TWOMEY, TWOMEY’S SUPERVALU, DEANSGRANGE, DUBLIN.

With over 10,000 sq. ft. of retail and storage space, Twomey’s SuperValu in Deansgrange, Co. Dublin is already reaping substantial rewards from a 2016 investment in energy-efficient lighting throughout the premises.

The family-owned business, which employs 106 full and part-time staff, is now making average annual savings on its electricity of around €35,000 a year while the average amount of energy consumed dropped from 1.15m kwh a year to 1.09m kwh, according to Rachel Twomey.

“In 2015, for example, our monthly bills for electricity with Electric Ireland would have been anything between €12,000 and €14,000 per month. After the changeover, the average monthly bill in 2016 dropped to between €9,000 and €11,000 a month,” she says.

“The biggest thing for us was the availability of the SEAI grant which businesses can get when they switch to energy efficient lighting. We heard about the grant through Musgraves and a number of stores in the group had already tested it. After we brought in a number of energy consultants to advise us, it became clear that it was a no-brainer and we met with AIB and said this is how much it’s going to cost, and this is how much it’s going to save. What we ended up saving was much more than we actually anticipated, so it made complete sense,” she adds.

“Apart from saving us money, it also gave the store a whole new feel because lighting in general has become a lot more sophisticated and you can create different moods in different areas of the store and this is important.” With new energy regulations covering refrigeration units set to be enacted in 2020, Rachel says the next thing on the agenda is a switch to new units and she is currently exploring all the options.

“We are conscious of the new regulations that are coming in during 2020 and we have been examining everything. I went to a trade show in Germany to look at what is out there and what we could do. But it also requires a significant capital investment in the region of €400,000, so we need to be careful and consider all our options. There is a grant available, but the capital investment is still very high,” she says.

“One of the issues for us, is that doors have to be fitted to the units and I am concerned that this might impact on the business as a lot of our shoppers are convenience shoppers and very often they shop using their arms rather than using a basket or a trolley. If we have doors on all our fridges, they can’t open them if they are shopping without a basket or trolley. It might seem like a small issue but it could have a considerable impact on the convenience element of our business and shoppers might be inclined to buy whatever it was they wanted when they do a bigger weekly shop elsewhere,” she adds.

“At the moment, we are watching to see what happens and we are trying to gauge the impact it has had on other stores within the Musgrave group. Some stores at a regional level have already invested in new refrigeration but they are more traditional and larger stores where customers tend to use trolleys. So, I am in two minds about it at the moment. There are new fridges in the market that don’t have doors but meet the required standards, but the savings are not as high and might not justify the capital investment,” she says.

“The other area we are looking at is our freezers and we have already costed them. They don’t require the same level of investment as the fridges but when we do replace them, we will be able to make additional savings and, in our business, that’s important,” she concludes.

"The case for implementing energy efficiency initiatives are compelling yet some businesses and business-owners struggle when it comes to implementing them and for a variety of reasons."

Accelerated Capital Allowances, grants and any reduction in maintenance costs can also be taken into consideration. In addition to our appetite to support SMEs undertaking energy efficiency projects AIB also has a focus on funding large scale energy generation and has demonstrated a commitment to the sector by putting in place the largest energy and infrastructure team in the Irish market. This team has the experience, technical expertise and market and regulatory understanding to deliver a range of funding solutions required to enable Ireland transition to a low carbon economy,” he concludes.

Survey quoted; ‘Report on the Finding from the DCCAE Commercial Survey Consultation’ published in February 2018. It was carried out by the Department of Communication, Climate Change and the Environment, Energy Efficiency & Affordability Division.