

ANNUAL REPORT 2023





Contents



| | |
|-----------------------|----------------|
| Introduction | 3 |
| CEO Statement | 4 |
| Highlights | 5 |
| EU Projects | 6, 7, 8 |
| Commercial | 9 |
| Public Sector | 10, 11 |
| Residential | 12 |
| Community | 13 |
| Transport | 14 |
| Accreditations | 15 |
| Partners | 15 |
| Case Study | 16 |

Introduction

This is the second annual report prepared by the executive of the Energy Agency. This report highlights our progress and achievements over the past year in our mission to promote sustainable energy practices and support the transition to a low-carbon future.

In the past year we have seen a rapid increase in extreme weather events at a global and local level, the need for renewable energy solutions and sustainable practices has never been more urgent. At South East Energy Agency, we are committed to leading the way in the South East region of Ireland by providing expert guidance, support, and resources to individuals, businesses, and organizations seeking to adopt more sustainable energy practices.

Over the past year, we have worked tirelessly to advance our mission through a variety of initiatives and partnerships. We have continued to provide education and outreach to the public on the benefits of renewable energy, while also engaging with local governments and businesses to develop and implement sustainable energy policies and practices.

While we are proud of the progress we have made over the past year, we recognize that there is still much work to be done. As we look to the future, we remain committed to our mission and are dedicated to continuing our efforts to create a more sustainable and equitable energy future for all.



CEO's Statement

I am pleased to present the annual report for South East Energy Agency, highlighting our achievements and initiatives in 2023. This year, we have aligned our efforts with local and regional sustainability initiatives, contributing to the Local Authority Climate Action Plan. Our commitment to environmental stewardship is evident in our contributions to the DZ Zone Emissions Baseline Inventory and the Countywide Baseline Emissions Inventory for Carlow, Kilkenny, Wexford, and Waterford.

As part of our strategic vision, we have undertaken an Interim Strategic Review set for launch in 2024, guiding our executive through the next three years. Our executive management has successfully overseen the functioning of the four board subcommittees, fostering collaboration and efficiency. Throughout the year, we have provided unwavering support from our chairman and continued our fruitful partnerships with multiple stakeholders.

The dedication and diligence of our executive team have been remarkable, particularly in the face of challenges in attracting new talent to the Energy Agency. Despite this, we have successfully added five new employees, filling critical roles within the company. Our commitment to excellence is underscored by the retention of our ISO 9001 certification and the renewal of our creditor employer status with Engineers Ireland for an additional two years.

In line with our regional commitment, we have significantly ramped up policy intervention and advisory work for both the regional authority and each local authority within the southeast region of Ireland. Our engagement with the SME community, industry, and homeowners on the retrofit journey has progressed steadily, with almost 100 energy assessment reports for businesses and 15 deep retrofit homes for private homeowners, and 45 for the fuel-poor sector.



The appointment of John Carley as Vice President of FEDARENE, focusing on the circular economy, highlights our leadership in sustainable practices at the European level. Our European project base and expertise have grown by almost 15%. Furthermore, we have achieved a significant milestone by delivering the first virtual gas pipeline for renewable gas for space heating at two public buildings in the region.

Our commitment to sustainable construction is evident in the completion of 12 new build social houses with a remarkable 63% reduction in embodied carbon. This achievement reflects our dedication to environmentally conscious building practices.

Notably, our staff has grown to 21 full-time members, a remarkable increase from the three members in 2013, showcasing our steady growth and impact in the energy sector. As we reflect on the accomplishments of 2023, we look forward to continuing our mission to deliver innovative energy solutions and contribute to the evolving low-carbon energy transition in our region.

- Paddy Phelan / CEO South East Energy Agency

Highlights

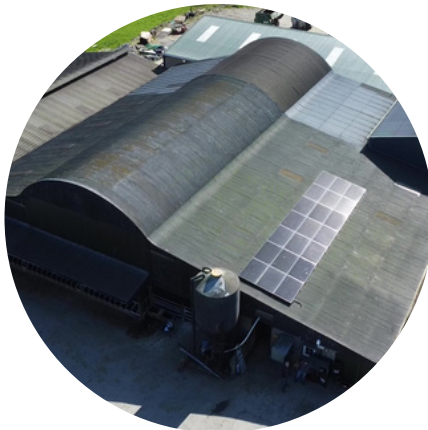


2023 FEDARENE General Assembly

South East Energy Agency, was honoured to host the 2023 FEDARENE General Assembly in Kilkenny on June 13th, 2023. Policy makers from all over Europe, gathered at the Parade Tower, Kilkenny Castle, June 13, 2023, to participate in an engaging workshop organised by the Covenant of Mayors Europe, a key European initiative with 9000+ signatories, including many Irish local authorities, entitled 'Multi-level Governance Dialogue in Times of Crisis'. The event featured insightful discussions and practical examples that highlighted the crucial role of multilevel governance in effectively addressing the energy crisis. [Read more](#)

Game Changer: O'Loughlin Gaels

O'Loughlin Gaels were facing the challenge of limited training time during those dark autumn and winter evenings due to inadequate pitch side lighting. Their commitment to energy efficiency and our previous collaborations with South East Energy Agency inspired them to take their journey to the next level. Our team of experts completed an energy audit, guided the grant application process from start to finish, and project managed the installation of state-of-the-art LED pitch side lighting, installation of new attic insulation and new heating controls. [View the video case study here](#)



SEAI Energy Awards 2023 Shortlist

At the 2023 SEAI Awards, South East Energy Agency was shortlisted in the Innovative Deployment of Renewable Energy category for its STEPSNWE Battery Energy Storage System project with James Dairy Farm and Zhyphen. Sun Harvester (Zhyphen) installed their battery solution into James Dairy, a dairy farm with an automated milking machine. This battery will increase the consumption of the solar PV generated on the farm by storing it until times when needed.

Women in STEM Awards 2023: Alexandra Hamilton

We were delighted for our Senior Energy Engineer Alexandra Hamilton to be named as a finalist in the Women in STEM Awards 2023 in the Energy category. Inspiring the next generation of female innovators and leaders across Ireland.



EU Projects



South East Energy Agency continues to use EU projects to add value to the work that we are already doing. The projects provide us with the opportunity to work with other agencies and partners across Europe to develop innovative projects. Many regions of Europe have similar issues and these projects provide us with a source of technical and policy advice that allows us to learn from best practice across Europe. We have this year completed four EU Projects, across a range of topics including energy poverty, biogas production, energy storage and building new energy efficient houses. We have developed a new “follow-on” system to ensure that the learnings and benefits can continue to be delivered, even though the project itself has ceased. This includes new Stakeholder and Policy Groups to promote Renewable Energy, Bioenergy, Electricity Grid development, and Energy Poverty initiatives.

We have now started work on four new projects, two of which are specifically focussed on policy development. Policy is a relatively new area of focus for SEEA, as we believe that we have the skills and the capacity to work at a Regional and National level to feed into the strategic decisions that need to be made in Ireland.

Active Projects



DeCarb-Pro

SEEA assess the situation relating to carbon pricing activities in Ireland and analyse the transfer potential of existing tools used by project partners in the Netherlands and France to Irish needs. The agency will transfer learnings from more sophisticated and advanced carbon pricing systems used in other partner regions to Ireland. SEEA will also help to develop a carbon pricing strategy and action plan appropriate to the circumstances of the Southeast Local Authorities (Kilkenny, Carlow, Wexford, Waterford). Finally, SEEA will provide training on carbon pricing which will describe the application of Carbon Pricing and Procurement including the experiences from the NWE partnership on Carbon Pricing.



The European Climate Pact is a movement of people united around a common cause, each taking steps in their own worlds to build a more sustainable Europe. Launched by the European Commission, the Pact is part of the European Green Deal and is helping the EU to meet its goal to become climate-neutral by 2050. SEEA is the Climate Pact Coordinator for Ireland and our activities will begin in 2024.



EUPeers aims to support the development of Integrated Home Renovation Services (IHRS) which are part of the enabling framework breaking down barriers to renovation. The overall objective of EU Peers is to support the development of IHRS as key instruments to accelerating residential energy renovation in the EU.

EU Projects



SCEPA

Instead of reinventing the wheel, SCEPA gathers and enhances existing effective energy poverty approaches in order to be able to upscale initiatives. SCEPA consists of three pilot groups, namely: awareness and behavioural change (1), energy communities (2), and technical measures (3).

SCEPA is short for ‘Scaling up the Energy Poverty Approach’ and the main objective of this project is to reduce and alleviate energy poverty by engaging and empowering vulnerable households. The project duration is 4 years, and the total project budget is € 6,3 million. SCEPA launched in April 2023.



The REGIO1st Planning Framework provides a comprehensive, structured approach for regional energy planners in Europe to develop and implement sustainable, cost-effective energy strategies in line with the Energy Efficiency First (EE1st) principle. [Learn More](#)

Highlights



REGIO1ST Launch Event



Report Energy efficiency in regional planning



EXPRESS

The EXPRESS project objectives are to increase the share of renewable energy in the participating regions, increase the energy self-sufficiency of the participating regions, and improve regional strategies to better consider the new energy sector operational environment to enable a rapid transition to locally produced renewable energy for heating, electricity and transportation.

The South East Energy Agency (SEEA) will aim to change the management of the policy instrument. SEEA will intend to influence the Regional Spatial and Economic Strategy (RSES). SEEA will work with the Southern Regional Assembly to:

- Revise and develop a methodology for evaluating and delivering the policy instrument.
- Introduce new criteria for selecting the projects supported by the policy instrument.
- Publicise/advertise proposals associated with the policy instrument.
- Assist the managing committee, the Southern Regional Assembly, to implement the policy instrument.

Highlights



EXPRESS in Southeast Ireland



EXPRESS Workshop

EU Projects



EU
Energy Poverty
Advisory Hub

- South East Energy joined the EPAH Annual Conference to host a workshop based on the SCEPA project . [Read More](#)
- South East Energy welcomed those combating energy poverty across Ireland to Kilkenny to discuss the key issues faced.
- South East Energy Agency joined the EUSEW2023 policy session - Social reskilling: measures to combat local energy poverty to discuss energy poverty in Europe.



- SEEA begins its role as the Irish Country Expert for the EUCF Life with the fifth call which has one successful applicant from Ireland.



- Non-EU funded. Funded by EPA.
- Hosted two GAPS Stakeholder Events.
- Joined the EPA for their GPP event on November 30th.
- Produced GAPS promotional video

Completed Projects



- Tenants move into the H4.0E houses.
- H4.0E Guidebook completed.
- H4.0E house nominated for Irish Construction Excellency Award.



- ENERGee Watch Final Conference hosted alongside the Fedarene General Assembly in Kilkenny. [Read More](#)
- ENERGee Watch project ends with extra funding secured to fund updates to the Energy Hub website. [View Energy Hub](#)



- Final Conference held in Kilkenny. [Read More](#)
- Battery installed in O'Shea Farms. [Watch the video](#)
- Battery in James' Dairy Farm nominated in the SEAI Energy Awards for Innovative Development of Renewable Energy. [Watch the Video](#)








South East Energy Agency plays an important role in supporting Local Authorities in the Southeast in their efforts to transition to more sustainable and energy-efficient practices. The agency offers a range of services and support to local authorities, including energy audits, renewable energy feasibility studies, and training and education programs. By providing these services, we are helping local authorities identify areas for improvement in their energy use and develop strategies for reducing their carbon footprint. In doing so, the agency supports local authorities in meeting their climate targets, improving energy efficiency in public buildings, and promoting sustainable practices within their communities.

South East Energy Agency works the 4 Local Authorities to help them monitor and achieve their public sector targets. As set out in the Government's Climate Action Plan, new targets of a 50% improvement in energy efficiency and a 51% reduction in CO2 by 2030 have been set for the public sector. In addition to this, 50% of thermal demand in buildings must be met by renewable sources by 2030. As part of the Sustainable Energy Authority of Ireland (SEAI)'s new 2030 Monitoring and Reporting (M&R) system, a statutory greenhouse gas (GHG) emissions target must now be met in addition to

the pre-existing energy efficiency target. These new targets will demand continued and increased focus on the energy performance of the Councils' buildings and operations over the coming decade. South East Energy Agency will continue to work with the four Local Authorities Climate and Environmental Teams to help them to identify and implement the best energy-saving opportunities in their organisations and develop a pathway towards achieving their new 2030 targets.

The Climate Action Plan 2021 & Ireland's Long Term Renovation Strategy sets out 2030 targets for the public sector which the Local Authorities must meet:

-  **Reduce CO2 equivalent emissions from the sector by 51%**
-  **Improve energy efficiency by 50%**
-  **Minimum of 50% of its thermal demand is produced by renewable sources**
-  **No fossil fuel heating systems to be installed in local authority buildings from 2023 onwards**
-  **Upgrade all public buildings to BER B energy rating**



Community Energy Hub Library Events



Climate Heroes Challenge



School Workshops 2023



Climate Action Plans

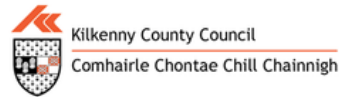
In 2023 South East Energy Agency supported our 4 core Local Authorities in the development of their Local Authority Climate Action Plans. South East Energy Agency produced Baseline Emissions Inventory (BEI) reports for each of the county areas.

This BEI reports aims to raise awareness of climate change and the impact that different sectors in each council area have on Ireland's overall carbon emissions and energy use. It provides County Councils with the necessary information to develop their Local Authority Climate Action Plans (LACAP) to make decisions on climate change actions to lower the carbon emissions in their own direct emissions, which is the emissions they have responsibility and accountability for. The Climate Action Plans set out how local authorities can promote a range of mitigation, adaptation and other climate action measures, to help deliver the Government's National Climate Objective, to achieve, by no later than the end of 2050, a transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

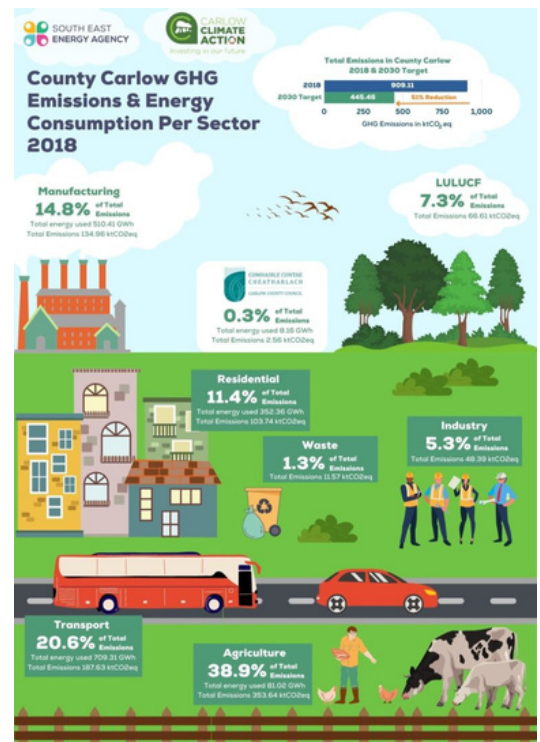
Additionally, as part of the LACAP, South East Energy Agency produced Decarbonisation Zone reports for Carlow County Council, Wexford County Council & Waterford City and County Council. The decarbonisation Zones are smaller areas within the local authority areas which act as a test bed for a range of climate mitigation, adaptation, and biodiversity measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.

Discover Climate Action Plans in your area

[Click your Local Authority to find out more](#)



BEI Overview Infographic



[Click to view more](#)



2023 was a busy year for the Auditing team, a large amount off type 1 (basic) audits were carried out with help from the Can-Cap EU grant funding stream , this allowed businesses and communities to look at their buildings and see where energy upgrade recommendations could reduce their annual energy bills and help combat the rising energy costs. All audits recommend a fabric first approach and recommend a move away from fossil fuels to more sustainable energy source.

Some audits then went forward to form projects for the Community Energy Grant which is funded by SEAI to support their energy upgrades. The range of projects was diverse and included PV panels for the Watershed leisure centre, Bio Methane boilers in Wexford Fire Station and Kilkenny Machinery yard, heat pump installations in Dungarvan Fire Station. Another interesting project was the installation of LED lighting in O Loughlin Gaels GAA club which allowed them to reach Class 1 GAA standard and facilitated the playing of matches outside daylight hours.

Results



Carbon Savings
4.25 Tonnes
CO₂



Energy Savings
883 mWh



Capital Expenditure
€1,798,236



Total Grants
€547,684



**Pembroke Hotel
Case Study**



**Game Changer:
O'Loughlin Gaels**



**Wexford LEO Funding
Pathways**

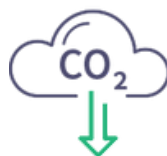
[Click on the images to find out more](#)



In 2023 there was a great emphasis placed on addressing energy poverty within the residential sector. Energy poverty refers to a situation where certain individuals or communities face challenges in accessing affordable, reliable, and modern energy services. While Ireland is a developed country with a well-established energy infrastructure, energy poverty can still be an issue, particularly for certain demographic groups. We completed deep retrofit of 15 properties at the Holy Ghost Residential Home in Waterford City as part of the SEAI Community Energy Grant scheme. The centre provides a 60 bedded residential centre for older adults, providing a service of supported self-care. A fabric first approach was used, firstly upgrading walls, roof, windows and doors. Airtightness was improved to reduce draughts, then mechanical ventilation was installed to remove stale air and provide fresh air. Renewable energy incorporated in the project included heat pumps, Air to Water heating systems with controls and solar PV. All units had a Pre BER rating of C, E, G or F. Following the deep retrofit all units have received an A BER rating.

Furthermore, in 2023 we also completed 15 non-fuel poor deep retrofits for private homeowners. The 15 homes BER ratings varied from C to G. Post works all home were BER rated A. All 30 residential properties successfully delivered in 2023 were completed under the SEAI Community Energy Grant scheme, receiving 30% funding towards the works.

Results



Carbon Savings
180.1 Tonnes
CO₂



Energy Savings
660 mWh



Capital Expenditure
€1,666,500



Total Grants
€758,400



**Grant Information
Webinar**

[Click on the images to find out more](#)



Throughout 2023 South East Energy Agency were busy supporting community groups across the four Counties. From information events, workshops, supporting grant applications, community outreach and further developing the SEAI Sustainable Energy Communities Programme across the Southeast. We look forward to supporting communities through their local energy transition and climate action efforts in 2024.

We could not be more proud of the 99 Sustainable Energy Communities (SEC) we work with across the South East with our delivery partner SEAI. Each with their own journey to become energy efficient and energy independent, these communities are working through the learn, plan and do steps of the programme to become more knowledgeable about energy and more confident when it comes delivering projects that will benefit their communities. 11 communities have carried out a comprehensive study into their energy use and devised an Energy Master Plan for saving energy and we hope to have many more communities go through this process in 2024.

Sustainable Energy Communities

99 SEC's in the South East



16

**New SEC's
in 2023**

11

**Energy Master
Plans completed**

**SEC Funding &
Support Webinar**



**Waterford PPN
AWARDS**



**Wexford
Grid Study**



Greener HGV Project

A collaborative effort between the South East Energy Agency and Cubo Ltd has launched an initiative aimed at equipping 1,000 heavy goods vehicles (HGVs) in Ireland with smart technology. The objective is to aid drivers reduce carbon emissions by 10% and realize fuel cost savings of up to 10%. The Greener HGV Programme project secured €1.4 million in funding from the Climate Action Fund, part of Project Ireland 2040, dedicated to enhancing the country's infrastructure and supporting initiatives focused on carbon emission reduction.

In 2023, the South East Energy Agency successfully oversaw the delivery of 296 trucks through this program, bringing the total contracted trucks to 924. Among these, 835 trucks had the required equipment installed, and 671 drivers underwent comprehensive training. Ongoing Measurement and Verification (M&V) efforts for 302 trucks have demonstrated an average savings of 11.96% across all fleets. This achievement translates to conserving 196,480 litres of diesel, corresponding to 527.28 tonnes of CO₂ saved and an estimated cost savings of approximately €342,911 across the fleets.

Results



Carbon Savings

527.28 Tonnes
CO₂



Diesel Saved

196,480 Litres



Cost Savings

€342,911



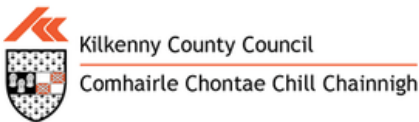
Accreditations



In 2023, South East Energy Agency retained the much sought after CPD Accredited Employer Status by Engineers Ireland in recognition of continuous professional development (CPD) of 23-strong staff which includes Engineers, Technicians, Marketing and Administrative employees. The Engineers Ireland CPD Accredited Employer standard is a strategic framework, which improves the competency levels of engineers and engineering employers to deliver tangible business benefits by investing in employees through CPD.

South East Energy Agency is ISO 9001 certified, an internationally recognised standard that ensures our services meet the needs of our clients and partners through an effective quality management system. The ISO 9001 certification clearly demonstrates that we have robust and defined procedures in place in all our business areas. So, we can proudly state that South East Energy Agency's services are delivered with quality and transparency in mind.

Partners



Case Study



O'Loughlin Gaels GAA Club

Kilkenny City based club

About the Client

O'Loughlin Gaels GAA club were founded in 1969. The club's grounds have a footprint 14 acres. They serve as a very large hurling club, camogie club, and handball club. And in addition to that, they provide facilities for basketball players, volleyball players, indoor soccer, Irish dancing, and are a real community facility.

O'Loughlin Gaels approached South East Energy Agency looking to reduce both their carbon footprint and energy costs, in addition to needing new pitch lighting to allow their teams to train 12 months of the year, particularly during the dark winter months. The team at South East Energy Agency coordinated the entire Community Energy Grant application from the initial energy audit, procurement to warranty checks and all required paperwork. South East Energy Agency have previously worked with O'Loughlin's on two previous energy upgrade projects in which the club house was insulated, a boiler was upgraded, PV solar panels were installed and pumped wall insulation.

Project Overview

| | |
|----------------------------|---|
| Company name: | O'Loughlin Gaels GAA Club |
| Project actions: | LED Pitch Lighting upgrade, Heating controls installed, attic insulation. |
| Finance source: | Internal |
| Additional funding: | SEAI Community Energy Grant 2022 programme |
| % funding: | 30 % |
| Grant amount: | € 31,831.90 |
| Total project cost: | € 106,106.32 |

The Challenge

As a club O'Loughlin's Gaels were unable to allow their 35 different teams to train during dark evenings in autumn and winter due to a lack of pitch side lighting. Additionally, the club also wished to continue their energy efficiency journey, building on their two previous projects and further reduce their electricity use and environmental impact.

The Approach

The South East Energy Agency team analysed their electricity consumption and current usage. As part of the project, our team of experts conducted an in depth energy audit, managed the application from start to finish and coordinated the installation of new highly efficient pitch side LED lighting, further upgrading of the insulation in the clubhouse attic and the installation of new heating controls.

Results

The successful installation of highly efficient LED pitch side lighting has transformed the club's pitch to a class 1 GAA pitch suitable for senior hurling and football matches 12 months of the year. Furthermore, the additional attic insulation has increased comfort in the club house and reduced the club's heating demand. The new heating controls now give the club more control over their heating and further improving the club's energy efficiency. [Watch our video case study of O'Loughlin's energy upgrade journey here.](#)



Get in contact

We expect other sports clubs to follow in the footsteps of O'Loughlin Gaels and invest in energy efficiency measures on-site to reduce energy usage under the SEAI Community Energy Grant Program. Send a brief overview of the project to: contact@southeastenergy.ie or call **056 779 0856**.



**Driving Sustainability
Today and Tomorrow**