



COMHAIRLE CONTAE  
CHEATHARLACH  
CARLOW COUNTY COUNCIL



CARLOW  
CLIMATE  
ACTION

Investing in our future

# CARLOW LOCAL AUTHORITY CLIMATE ACTION PLAN 2024-2029



## Implementation Report for Elected Members & Stakeholders Year 1 Review 2024

CARLOW COUNTY COUNCIL WILL BE A CLIMATE RESILIENT AND LOW CARBON ORGANISATION THAT INSPIRES, LEADS, AND FACILITATES AMBITIOUS AND JUST CLIMATE ACTION THROUGHOUT THE COUNTY.

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### Acknowledgments:

The Climate Action Office Team wishes to recognise the invaluable collaboration and dedication demonstrated across all departments under the leadership of the senior Management Team of Carlow Local Authority. We extend our gratitude to the Elected Members, the SPC, CPG, CARO, South East Energy Agency, stakeholders and the wider community we serve for their ongoing support and contributions.

# Introduction

Following the adoption of the Carlow Local Authority Climate Action Plan 2024-2029 in January 2024, this year 1 review outlines the implementation and progress of the plan from January to December 2024 and is presented to Elected Members of Carlow County Council and associated Stakeholders.

The Carlow Local Authority Climate Action Plan sets out how Carlow Local Authority will be responsible for enhancing climate resilience, increasing energy efficiency, and reducing greenhouse gas emissions, across its own assets, services, and infrastructure, to which it is fully accountable for, whilst also demonstrating a broader role of inspiring, leading and facilitating other sectors to meet their own climate targets and ambitions.

South East Energy Agency tier 3 baseline emissions inventory commissioned by Carlow Local Authority in 2023 established the following baselines:

Targets for all public bodies are:

- Improve Energy Efficiency by 50% by 2030 (baseline 2009 8.16GWh)
- Absolute reduction of carbon emissions by 51% by 2030 (baseline 2016-18) 2.8Kg CO<sub>2</sub>
- Electricity to match grid decarbonisation (estimated at 77% based on 80% renewable electricity in 2030)
- Thermal and Transport: to decrease by 51%

For Carlow Local Authority, the combination of 77% CO<sub>2</sub> reduction on electricity and 51% CO<sub>2</sub> reduction on transport and thermal equates to an overall CO<sub>2</sub> reduction of 70%.

Baseline 2016-2018 = 2,808,667kgCO<sub>2</sub>

Target CO<sub>2</sub> emissions 2030 = 832,670 kgCO<sub>2</sub>

This report will outline progress in reaching the mandatory reductions of

- 50% Energy reduction by 2030
- 51% GHG reduction by 2030

The format of this report will be based on the actions contained with the Strategic goals set out in the Carlow Local Authority Climate Action plan.

The 5 strategic goals of this plan include:

- Governance & Leadership.
- Built Environment & Transport.
- Natural Environment & Green Infrastructure
- Communities': Resilience & Transition
- Sustainability & Resource Management

The Carlow Local Authority Climate Action plan includes the Carlow Town Decarbonising Zone which comprises of the spatial area of the District Electoral Divisions (DED's) of Carlow Rural, Carlow Urban and Graiguecullen Urban.

# Governance & Reporting

## Carlow Climate Action Team

Carlow Local Authorities Climate Action Team is cross functional and comprises of 16 members from the following departments:

- Environment & Climate Action
- Corporate services
- Fire Services
- Information Technology
- Library & Museum
- Local Enterprise Office
- Special Projects
- Infrastructure and Transportation
- Housing
- Planning Community
- Finance

The team formally meets a minimum 6 times per year and the cross-functional composition of the Climate Action team reflects the widespread impacts of climate change across the organisation and underscores the need for a comprehensive organisational approach to the implementation of the plan.

## Climate Action Regional Offices (CAROs)

The Local Authority is supported by Climate Action Regional Offices (CAROs) who provide guidance, advice and support to Local Authorities to leverage the capability, reach and resources of the sector to effectively address climate change across Ireland. Carlow County Council are members of the Eastern & Midlands CARO who support the seventeen Local Authorities of Carlow, Cavan, Kildare, Kilkenny, Laois, Leitrim, Longford, Louth, Meath, Monaghan, Offaly, Roscommon, Tipperary, Waterford, Westmeath, Wexford and Wicklow.

## Carlow County Council Energy Team

The cross functional Carlow Local Authority Energy team are supported by South East Energy Agency and meet 4 times per year. The energy team monitor progress of energy reduction throughout the organisation and evaluate energy reduction opportunities that present throughout the year.

## Reporting Structures

### Internal Reporting

An in-house monitoring Climate Action system ensures continuous tracking of progress. The monthly Chief Executive report serves as a key internal communication tool for keeping the management team and Elected members updated. Additionally, the quarterly departmental progress reports allow the Chief Executive to engage directly with each department, fostering accountability and ensuring that challenges and achievements are discussed in detail.

Elected members receive annual updates through the SPC (Strategic Policy Committee) and full Council meetings. However, if relevant data becomes available more frequently, reporting intervals can be adjusted accordingly. This flexible approach helps ensure that decision-makers have up-to-date information to support climate-related policies and initiatives.

### Sectoral Performance

Carlow Local Authority continues to report annually on their performance on climate action by way of KPIs to inform the performance of the local government sector on climate action, as part of the local government DECA 2030 Strategy.

### National Climate Action Plan Key Performance Indicators

Carlow Local Authority in accordance with Part 3(w) of the Local Authority Climate Action Charter continue to report annually to the Department of the Environment, Climate, and Communications on progress on climate action at local level as part of the delivery of the national climate objective. Data is collated in an annual Climate Action Key Performance Indicators (KPIs) report by the Local Government Management Agency (LGMA).

Data for 2024 was collected over the period January 15th - January 31st 2025 and will be published in summer 2025 by the LGMA. A new KPI (Number 6 - Climate Action Plans) has been included for 2024, and will collect an update on the delivery of LACAP actions from every local authority

Local Government CA KPI Theme	Climate Action Theme	Data supplied by
1. Climate Action Staff	Mainstreaming	Local Authorities
2. Climate Action Teams	Mainstreaming	Local Authorities
3. Active Travel Projects	Mitigation	NTA
4. Social Housing Retrofit	Mitigation	LGMA (HDCO)
5. Greenhouse Gas Reduction	Mitigation	SEAI
6. Climate Action Plans	Adaptation / Mitigation	Local Authorities
7. Severe Weather Responses	Adaptation	Local Authorities
8. Community Climate Action Programme	Internal Behavioural Change and Capacity Building	DECC
9. Councillor & Staff Training	Internal Behavioural Change and Capacity Building	LASNTG
10. Green for Micro	Internal Behavioural Change and Capacity Building	Enterprise Ireland

Figure 1. Ten National KPI's for Climate Action

### EU Covenant of Mayors

Carlow Local Authority is a signatory to the Covenant of Mayors for Climate and Energy and therefore commits to increasing energy efficiency and the use of renewable energy sources.

## Performance Monitoring and Reporting

Annual Monitoring and Reporting (M&R) report is mandated under the Sustainable Energy Authority of Ireland (SEAI) regulations, which require public sector bodies to report their energy performance directly to SEAI – in accordance with SI 426 of 2014 (previously SI 542 of 2009).

The M&R report focuses on the following key points: analysis of energy consumption and GHG emissions; comparison with efficiency and emissions targets for 2030; data presented by Carlow Local Authority; tracking progress towards 2030 targets; focus on achieving energy efficiency goals; improvements and innovation.

Annual reporting is prepared in conjunction with our energy partners, South East Energy Agency and the M&R reporting 2023 data is now available on the Sustainable Energy Authority of Ireland (SEAI) website.

### CO2 Emission's:

The figure below provides a detailed overview of Carlow Local Authorities CO2 emissions from 2009 to 2023, along with the average emissions from 2016-18 and 2030 target:

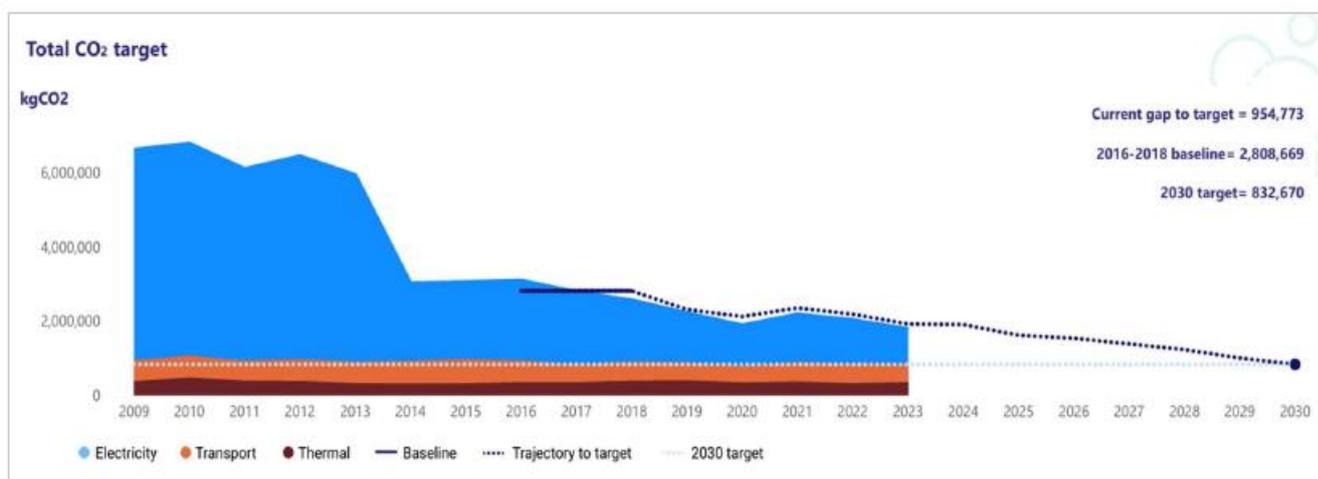


Figure 2. Glidepath for CO2 gap to 2030 target

In 2023 Carlow Local Authorities produced 1,785,037 KgsCO2 which is an overall reduction of 1,023,632 KgsCO2 from the baseline figure of 2,808,669 KgsCO2.

As the 2030 target is set at 832,670 KgsCO2 the Local Authority must achieve a further reduction of 952,367 KgsCO2 before 2030.

- Thermal: Emissions have been decreasing since 2019 but remain significantly above the 2030 target, indicating a need for more aggressive reduction strategies.
- Transport: Emissions have fluctuated with only a slight decrease from the baseline. Carlow Local Authority have made significant progress in this area in 2024.

- Electricity: Reductions have been made with further significant anticipated upon the completion of the public lighting retrofit programme.
- Overall emissions are on a declining trend, but substantial efforts are still needed to meet the 2030 CO2 mission targets.

## **Energy Efficiency**

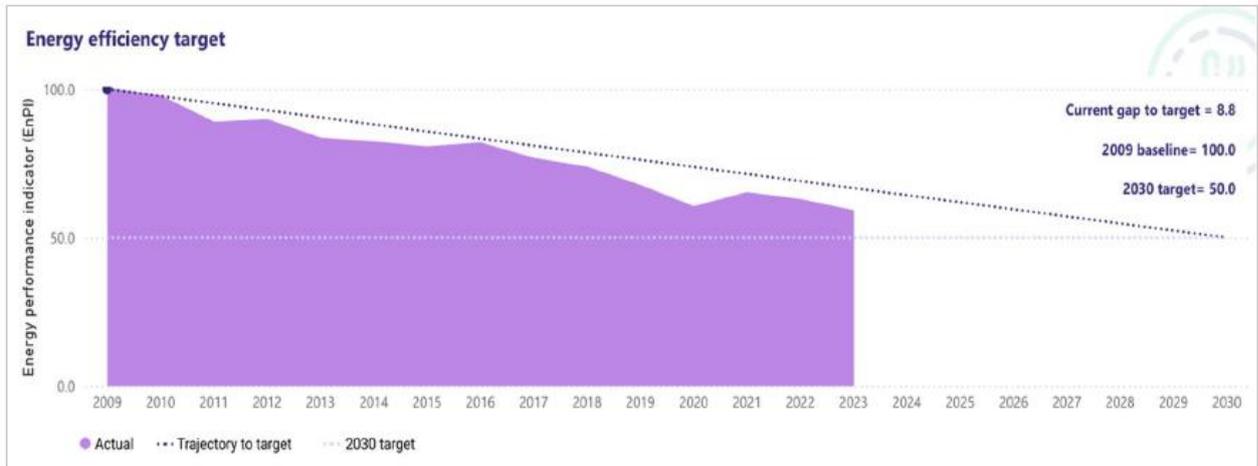


Figure 3. Glidepath for Energy gap to 2030 target

The data indicates a positive trend in energy efficiency improvements, with the Normalised Energy Performance Indicator (EnPI) steadily decreasing and closing the gap to the 2030 target. The percentage reduction since the energy efficiency baseline shows substantial progress, and the improvement required to reach the target diminishes over time, suggesting that the current trajectory is on track to achieve the 2030 goals.

The table below presents renewable energy consumption metrics (in MWh) for three activities (Thermal, Transport, Electricity) and the total renewable energy consumption from 2018 to 2023. The data highlights a gradual and positive shift towards the adoption of renewable energy in transport and electricity, with no progress to date in thermal renewables.

Activity	2023	2022	2021	2020	2019	2018
Thermal Renewables (MWh)	0	0	0	0	0	0
Transport Renewables (MWh)	122	115	95	81	76	61
Electricity Renewables (MWh)	36	30	30	30	30	30
Total (MWh)	158	145	125	111	106	91

Figure 4. renewable energy consumption metrics

## **SEAI Pathfinder Programme**

Carlow Local Authority has engaged with the SEAI pathfinder programme. The SEAI Pathfinder Programme is an initiative led by the Sustainable Energy Authority of Ireland (SEAI)

to support public sector organizations in improving energy efficiency and reducing carbon emissions. It provides technical and financial support for retrofitting and upgrading public buildings, aligning with Ireland's Climate Action Plan and 2030 energy efficiency targets.

Carlow, Kilkenny, Wexford, Waterford and Tipperary County Councils have established the South East Energy Unit and a funding application has been approved under the Pathfinder programme. Carlow Local Authority have completed a register of opportunities identifying priority retrofitting projects that will yield the greatest energy and CO<sub>2</sub> savings at the lowest cost. This structured approach ensures that resources are directed towards high-impact projects, maximizing both environmental and financial benefits.

A total of €3 million has been committed by Carlow Local Authority with 50% of same funded by the SEAI under the pathfinder programme.

### Public Lighting Energy Efficiency Project ( PLEEP)

The Tier 2 baseline emissions inventory carried out by South East Energy Agency in 2023 identifies Public Lighting as Carlow Local Authorities highest energy consumer, accounting for 3.27 GWh of the total energy consumption (40%) and the highest contributor for CO<sub>2</sub>, accounting for 1.21ktCO<sub>2</sub>eq (40%) of these total emissions.

Carlow Local Authority is actively participating in the National Public Lighting Energy Efficiency Project (PLEEP), aiming to enhance energy efficiency and reduce costs associated with public lighting. Completion of this project will see significant reduction in our energy use and CO<sub>2</sub> emissions contributing greatly to achieving our 2030 targets.

31/ 12 /2024 survey of Lights in Carlow is substantially complete.

Total assets surveyed = 7146 to date. (This includes Luminaires and micro pillars.)

Location	Numbers
Carlow L.A	7146
Carlow Town M.D.	3757
Muinebheag M.D.	1545
Tullow M.D.	1844

### Retro fit progress to date 31/12/2024

Location	Number (20 <sup>th</sup> December 2024)
Carlow L.A.	1179
Carlow Town M.D.	644
Muinebheag M.D.	149
Tullow M.D.	386

KLS work programme. Municipal District	Current programmed completion date
Carlow Town	Q4 2025
Muinebheag	Q4 2025
Tullow	Q4 2025

Figure 5. Public Lighting Energy Efficiency Project progress statistics

The National Public Lighting Energy Efficiency Project (PLEEP) aligns with Carlow Local Authority commitment to sustainability and energy efficiency, contributing to the reduction of carbon emissions and operational costs.

### **Carlow Local Authority Fleet.**

The Tier 2 baseline emissions inventory carried out by South East Energy Agency in 2023 establishes that Transport is responsible for Transport 0.47ktCO<sub>2</sub>eq (23%) of Carlow Local Authorities CO<sub>2</sub>eq emissions and 1.9 GWh (24%) of energy use respectively.

In 2024, an assessment of current fleet and future needs was carried out which resulted in the removal of 3 vehicles from the Local Authority fleet.

Carlow Local Authority currently have a total Fleet of 99 vehicles and have commenced decarbonation of this fleet to the use of low carbon alternatives.

During 2024 alternative fuels were trialed and at the end of 2024 the following low carbon vehicles had replaced fossil fuel dependent vehicles in our fleet.

- Electric Vehicles 2
- HVO Vehicles 4

It is anticipated that further transitions will occur over the next 2 years as leasing arrangements for current vehicles expires.

In 2024, a New Fuel Card Policy was introduced and a new GPS fleet tracking system from Mobil Information Systems was implemented across the Local Authority Fleet. These changes will allow efficient monitoring of driver practice and fuel usage in order to determine future fleet requirements.

A new fuel contract was negotiated in 2024, in order to streamline activities and improve reporting structures. The contract was awarded to fuel provider, Circle K.

The mandatory SEAI reporting system was expanded to include fleet reporting in 2024 and is now included in the M&R system compiled by our energy partners South East Energy Agency.

## **LACAP Actions Progress Report - 2024**

Carlow Local Authority's Climate Action Plan 2024-2029 is a comprehensive framework aimed at achieving the targets set out in the Climate Action and Low Carbon Development (Amendment) Act 2021. The suite of 73 actions contained in the plan provides a structured pathway to reduce emissions, enhance climate resilience, and support a just transition for the wider Carlow community.

Actions contained in the plan are categorised as follows:

- Mitigation - New ways of preventing climate change
- Adaptation – Working with existing structures to reduce our impact on climate change.
- Combined – combination of Mitigation and Adaptation Measures

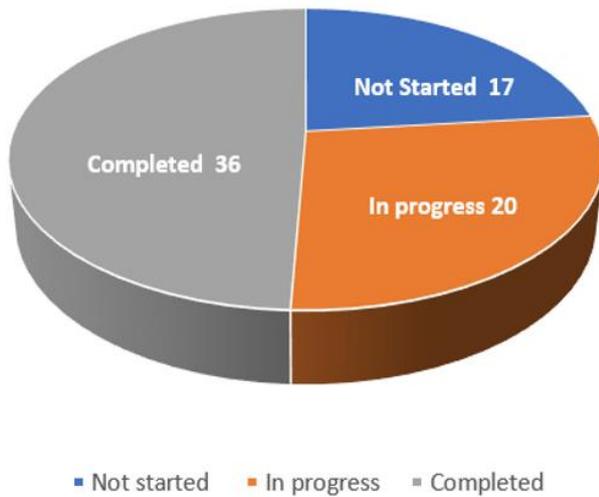


Figure 6 Breakdown of Carlow Local Authority Climate Actions per category.

As at 31<sup>st</sup> December 2024

- 36 actions have been completed
- 20 are in progress
- 17 have not started

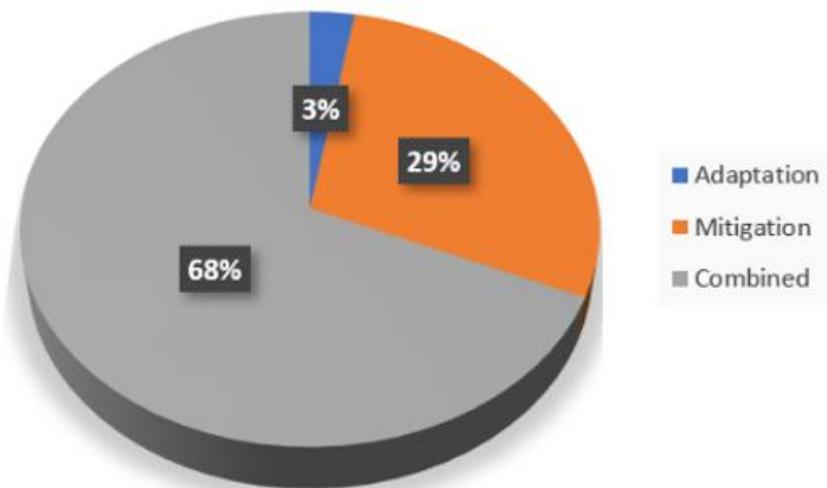


Figure 7. Status of actions 31/12/2024

Of the 73 actions contained within the Local Authority Climate Action Plan 2024-2029, 26 actions are defined as recurring. A recurring action is an action that will be implemented on more than one occasion every year or on multiple occasions during the LACAP timeframe.

Of the actions completed during 2024 period 24 actions are defined as recurring.

# Strategic Goal 1. Governance & Leadership.



**Objective:** Support the development and implementation of positive climate action across all operations of Carlow Local Authority, collaborating with others to lead, influence and assist in their endeavours to reduce their negative climate impact.



Figure 8. Progress report of Governance & leadership Actions at 31/12/2024

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 -31st Dec 24)
G 1.1	Carlow County Council will include the reduction of its carbon emissions by 51% by 2030 as mandated in the Climate Action and Low Carbon Development (Amendment) Act 2021 as a key objective of the Corporate Plan, the Annual Service Delivery plan and Municipal District Plans.	Combined	Q1	Yes	Completed
G 1.2	Resource and fund dedicated Climate Action Staff to facilitate adaptation against and mitigate for the effects of Climate Change, to include a Climate Co-Ordinator, Climate Action Officer and a Climate Community Officer.	Combined	Q1	No	Completed
G 1.3	Maintain a cross functional Climate Action Team to ensure the embedding of Climate considerations and actions across the range of services provided by Carlow County Council.	Combined	Q1	Yes	Completed
G 1.4	Implement Climate Action engagement programme in the workplace for all staff and Elected Members.	Combined	Q1	Yes	Completed
G 1.5	Implement and report on the actions in the Climate Action Plan at local and national level.	Combined	Q2	Yes	Completed
G 1.6	Mainstream climate mitigation and adaptation considerations into all new policies adopted by Carlow County Council.	Combined	Q2	Yes	Completed
G 1.7	Develop a Green Public Procurement (GPP) tracking tool to measure the use of green procurement in tenders issued by Carlow County Council.	Mitigation	Q1	No	In Progress
G 1.8	Prepare a Green Procurement Strategy for Carlow County Council to ensure GPP is considered in all tenders.	Mitigation	Q3	No	In Progress
G 1.9	Prepare Sustainable Development Goal (SDG) guidance document to support the inclusion of the global goals in all plans & strategies published by the local authority.	Combined		No	Not Started
G 1.10	Develop & implement a Financial Management resource for recording the cost of major climate/weather events	Combined	Q3	No	In Progress
G 1.11	Complete annual energy consumption reporting to the national energy Monitoring and Reporting system (M&R) operated by the Sustainable Energy Authority of Ireland (SEAI)	Mitigation	Q1	Yes	Completed
G 1.12	Provide match funding to enable climate, energy, biodiversity action projects - which promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.	Combined	Q1	Yes	Completed
G 1.13	Become a Partner in the National Transport Authority administered Smarter Travel Programme and apply for the Smarter Travel Mark which recognises employers who are committed to active & sustainable travel for their workforce	Combined	Q2	No	In Progress

## Case Study 1

**G 1.1- Carlow Local Authority will include the reduction of its carbon emissions by 51% by 2030 as mandated in the Climate Action and Low Carbon Development (Amendment) Act 2021 as a key objective of the Corporate Plan, the Annual Service Delivery plan and Municipal District Plans.**



Figure 9: Carlow Graiguecullen Joint urban Local Area Plan 2024-2030

In July 2024, the Elected Members of Carlow and Laois County Council's adopted the Carlow-Graiguecullen joint Urban Local Area Plan 2024-2030. The JULAP sets out a coordinated strategy for the proper planning and sustainable development of Carlow Town, Carlow Town Environs, and Graiguecullen, and seeks to build on the previous successful collaboration of both Council's in the preparation and adoption of the Joint Spatial Plan (JSP) for the Greater Carlow Graiguecullen Urban Area 2012-2018 (as extended). This collaborative approach acknowledges the unitary functioning of the joint urban area in terms of land use planning, climate action policy, and the day-to-day activities of the local population, moving beyond a traditional focus on local authority county boundaries, and also taking account of regional level planning policy due to the location of the joint urban in the functional area of the Eastern and Midlands Region (EMRA) and the Southern Region.

Chapter 11 is dedicated to climate action and aims to tackle the challenge of climate change in Carlow-Graiguecullen, with a focus on the role of spatial planning in contributing to the transition of the area to a low-carbon and climate resilient future, and through targeted climate change mitigation and adaptation measures aimed at reducing greenhouse gases and increasing energy efficiency and conservation.

## Case Study 2

***G 1.12- Provide match funding to enable climate, energy, biodiversity action projects - which promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.***

The Orchard (Ballynabooley Stream\_10) River and Riparian Zone Restoration (tributary of the R. Barrow).

The river had historically been dredged too wide and too deep, removing any spawning gravels, and undermining the bank in sections. Furthermore, the riparian zone contained predominantly annuals (adjacent a tillage field), which offered little protection from surface water run-off. Clean, mixed-size stones were added to the river in sections, following methodology from the 2023 LBAF-funded Powerstown river restoration project.

Mapping was undertaken to identify the sections of the river with highest potential for surface run-off, using EPA PIP maps and LiDar, to inform location for an attenuation swale and berm. This was planted with a strong rooting grass seed mix. A bespoke perennial riparian wildflower mix was developed, sourced from local populations, and sown along a 1km length (3metre width). Possible salmon redds have since been recorded, and presence will be verified by electrofishing in 2025.



*Figure 10. Restored spawning habitats at Orchard River*

## Strategic Goal 2. Built Environment & Transport.



**Objective:** Reduce Carlow Local Authority's impact on Climate Change by increasing energy efficiency, reducing reliance on fossil-based fuels, and positively influencing the actions of others within our community.

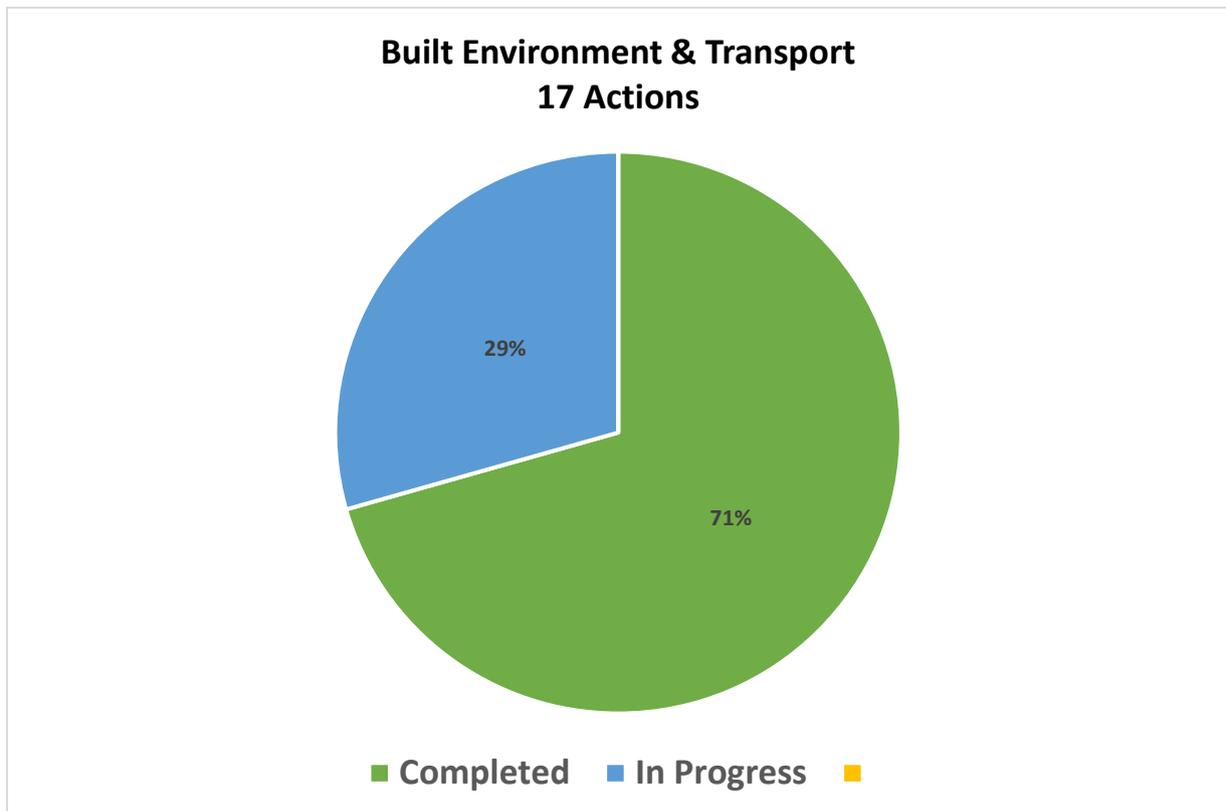


Figure 11. Progress report of Built Environment & Transport Actions at 31/12/2024

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
B 1.1	Conduct Energy Audits across Carlow County Council's Significant Energy Users (SEUs)/Facilities to create a Gap to Target (51%) analysis to inform spending on projects to reduce carbon.	Combined	Q1	Yes	Completed
B 1.2	Prepare and implement a carbon savings programme of measures for Council buildings/facilities to assist in achieving a 51% reduction in greenhouse gas emissions by 2030, having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.	Combined	Q1	Yes	Completed
B 1.3	Pursue national/regional funding programmes to attain funding for emission reduction measures for Carlow County Council, e.g. Pathfinder	Mitigation	Q1	Yes	Completed
B 1.4	Complete the National Public Lighting Energy Efficiency Project in County Carlow to reduce the GHG emissions and energy usage of public Lighting, while ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects to biodiversity.	Mitigation	Q1	No	In Progress
B 1.5	Develop planning conditions with specifications and standards to minimise energy use and light pollution from outdoor lighting in all new developments, ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects to biodiversity.	Mitigation	Q2	No	Completed
B 1.6	Ensure all new build social housing units provided by Carlow County Council meet a minimum A2 Building Energy Rating Standard to reduce GHG emissions, energy consumption and address fuel poverty for vulnerable residents.	Mitigation	Q1	Yes	Completed
B 1.7	Upgrade existing social housing units using the worst first principal to B2 or cost optimal to reduce GHG emissions, energy consumption and contribute to alleviating of fuel poverty for vulnerable residents, having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures	Mitigation	Q1	Yes	Completed
B 1.8	Facilitate the upgrade of existing vacant & derelict residential and commercial properties in Carlow Town and County through schemes such as Towns Centre First, Croí Conaithé, having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.	Mitigation	Q1	Yes	Completed
B 1.9	Identify derelict properties throughout the County and use legislative powers such as Compulsory Purchase Order and compulsory acquisition order to facilitate their reuse; having due regard to the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations, and the need to not negatively impinge on any protected species.	Mitigation	Q1	Yes	Completed
B 1.10	Target brownfield, vacancy and dereliction as part of the housing for all programme through repair and lease, buy and renew and SHIP programmes; having due regard to environmental sensitivities, the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations, and the need to not negatively impinge on any protected species.	Mitigation	Q1	Yes	Completed

Action No.	Action Details	Action Type. Adaptation, Mitigation,	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
B 1.11	Review the Major Emergency Plan & Flood Plan to ensure incorporation of climate risk	Adaptation	Q1	No	Completed
B 1.12	Prepare Carlow County Council guidelines for nature based sustainable drainage solutions, ensuring the guidelines have appropriate regard to environmental protection requirements, including requirements to protect European sites.	Combined		No	Not Started
T 1.1	Assign the role of a fleet manager and develop a sustainable fleet management policy for Carlow County Council Fleet.	Mitigation	Q1	No	In Progress
T 1.2	Investigate options for a sustainably sourced renewable fuel alternative to diesel and the electrification of Council fleet vehicles including delivery of a pilot scheme, while ensuring sustainability criteria is appropriately considered during procurement processes and appropriate end-of-life vehicle management practices are in place.	Mitigation	Q1	No	In Progress
T 1.3	Develop and Adopt Electric Vehicle Strategy to support the transition to electric vehicle use in the wider community for County Carlow and for the South East Region; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.	Mitigation	Q3	No	Completed
T 1.4	Deliver active travel projects across the County to encourage use of active travel modes such as walking or cycling; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage.	Mitigation	Q1	Yes	In Progress
T 1.5	Complete Transport Plans for Carlow Town, Tullow & Muine Bheag, having due regard to the potential to create climate action co-benefits, and environmental protection requirements, including the requirement to protect European sites.	Mitigation	Q1	No	In Progress

### Case Study 3

**B 1.6 Ensure all new build social housing units provided by Carlow Local Authority meet a minimum A2 Building Energy Rating Standard to reduce GHG emissions, energy consumption and address fuel poverty for vulnerable residents.**

In 2024 Carlow Local Authority completed 68 A2 Building Energy Rating Standard homes as follows.

Location	Number of Units
Sli na Ri, Bagenalstown	5
Ballinakillbeg	1
Ballyknockan Manor	37
Millrace Gardens Phase 2	6
Rathilly	18
87 Cluain Bui	1
<b>Total A2 Rated Units</b>	<b>68</b>

Figure 12. Location and numbers of A2 BER rated new homes constructed by Carlow Local Authorities in 2024

Homes were completed on both greenfield and derelict sites.  
Figures for the Local Authority retrofit programme are not included in this action.



*Figure 13:  
Before and  
after housing  
developments  
at Cox's Lane  
and 41/42  
Dublin Street  
Carlow Town.*

## Case Study 4

**T 1.2 Investigate options for a sustainably sourced renewable fuel alternative to diesel and the electrification of Council fleet vehicles including delivery of a pilot scheme, while ensuring sustainability criteria is appropriately considered during procurement processes and appropriate end-of-life vehicle management practices are in place.**

The Tier 2 baseline emissions Inventory carried out for in 2023 outlines that Transport at 0.47ktCO<sub>2</sub>eq represents 23% of Carlow Local Authorities CO<sub>2</sub>eq emissions. Placing 3<sup>rd</sup> behind Buildings / facilities and public lighting .

Transitioning a vehicle fleet from fossil fuels to environmentally friendly alternatives is a multifaceted endeavour that requires careful planning and consideration. This process involves navigating financial, infrastructural, operational, and technological challenges to achieve a sustainable and efficient fleet.

Strategic planning for the transition of Carlow Local Authorities diverse fleet involves conducting comprehensive assessments of current and future fleet requirements, evaluating the cost and availability of alternative vehicles, and ensuring maximum service delivery.

Following a comprehensive cross departmental evaluation 3 vehicles have been removed from the current fleet. A combination of Hydrotreated vegetable oil (HVO) and electric vehicles are currently replacing existing vehicles where feasible with plans to increase numbers over the coming years. Modifications to the existing fleet combined with diver assist training has also been invested in order to reduce GHG emissions.



Figure 14: Carlow Local Authority Low Carbon ECO Fire Appliance

In August 2024 Carlow Local Authority launched the first ECO emergency service vehicle in Ireland powered by hydrotreated vegetable oil (HVO). This state-of-the-art fire appliance is powered by hydrotreated vegetable oil (HVO) and solar power, uses vehicle intelligent software and reduces its carbon footprint by 95% compared to diesel engines. Additional features in this locally designed and manufactured emergency vehicle was funded by the Department of Housing, Local Government and Heritage through the National Directorate for Fire and Emergency Management’s Fire Service Capital Programme.

### Strategic Goal 3. Natural Environment & Green Infrastructure

**Objective** Carlow Local Authority will facilitate and support protection, management and enhancement of the natural heritage, biodiversity, landscape and environment of County Carlow in recognition of its importance as a non-renewable resource, a unique identifier, and as a natural resource asset.

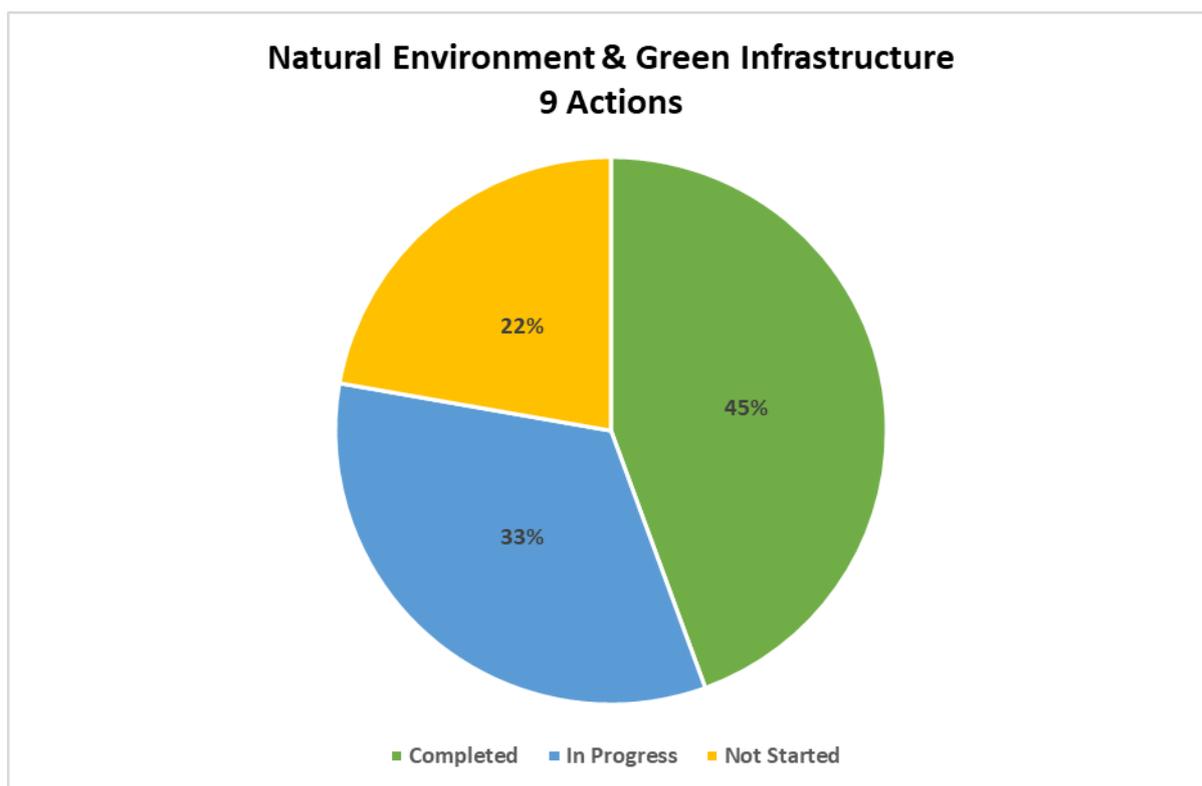


Figure 15: Progress report of Natural Environment & Green Infrastructure Actions at 31/12/2024

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
NE 1.1	Appoint a Biodiversity Officer for Carlow County Council and implement actions contained in the County Carlow Biodiversity Action Plan 2023-2025	Combined	Q1	No	Completed
NE 1.2	Implement the actions set out in the County Carlow Green Infrastructure Strategy; having due regard to environmental sensitivities such as archaeology, European sites, biodiversity and amenity value.	Combined	Q1	Yes	Completed
NE 1.3	Prepare guidelines for Invasive Alien Species Management	Combined	Q2	No	Completed
NE 1.4	Develop and implement a policy for the use of chemical pesticides and herbicides for areas managed by Carlow County Council, ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.	Combined	Q3	No	In Progress

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
NE 1.5	Prepare a Hedge and Road Verge Maintenance Strategy for Carlow County Council, having due regard to hedgerow conservation requirements.	Combined		No	Not Started
NE 1.6	Develop and implement a Heritage Plan to record, conserve, and raise awareness of all aspects of built natural and cultural heritage in County Carlow having regard to increasing challenges stemming from climate change.	Combined	Q1	Yes	Completed
NE 1.7	Undertake a planned programme of risk assessments of the Heritage and Cultural Assets under the remit of Carlow County Council to assess the vulnerability and the risk to the historical environment from the impacts of climate change and to help build resilience to these important assets.	Combined	Q4	No	In Progress
NE 1.8	Develop a Native Tree Strategy to provide the vision and direction for long-term planning, planting, protection and maintenance of native trees, hedgerows and woodlands within Carlow Town and County	Combined		No	Not Started
NE 1.9	Investigate the feasibility of developing a Carlow County Council Garden nursery facilitating self-sufficiency by providing all new plants for public realm enhancement.	Mitigation	Q4	No	In Progress

## Case Study 5

### NE 1.1 - Appoint a Biodiversity Officer for Carlow Local Authority and implement actions contained in the County Carlow Biodiversity Action Plan 2023-2025.

The Carlow Biodiversity Officer was appointed on January 6<sup>th</sup> 2024, and successfully secured €101,689 grant funding under the Local Biodiversity Action Fund (NPWS), and €20,000 grant funding under the Local Biodiversity Action Plan Fund (Heritage Council), to progress implementation of Actions under the Carlow Biodiversity Action Plan 2023-2025 (BAP Action 1.1). These included:

- Carlow Wetlands Survey (BAP Action 2.2, 3 yr project, with field survey completed in 2024)

- Carlow Hare's Corner Project (BAP Action 4.4, wildlife ponds and heritage orchards completed in 2024)
- Carlow Invasive Species Control (BAP Action 3.3, restoration of riparian habitat through the control of rhododendron and cherry laurel in 2024)
- Carlow Catchments Hedgerow and other Wooded Lands Survey (BAP Actions 3.1 and 3.2, 3 yr project, methodology developed in 2024 to integrate survey recommendations into agri-environmental schemes)
- Carlow Otter Survey (BAP Action 2.5, 2 yr project, with field survey completed in 2024)
- Carlow Riparian Habitat Gaps & Fragmentation Survey (BAP Action 4.1, with focus on R. Burren)
- Carlow River & Riparian Restoration (BAP Action 3.1, with focus on Orchard River)
- Carlow Protected and Rare Flora Survey (BAP Action 2.3, 3 yr project, with desk survey completed in 2024)
- Carlow Mayfly Recording (part of application with 27 other LA's and LAWPRO)
- Carlow Hedgehog Survey (BAP Action 2.5)
- Carlow Significant Tree Survey (BAP Action 2.4)
- Blackstairs Applied Learning Programme for High Nature Landscape Communities, including delivery of Heritage Keepers Programme, Farming for Nature conference, Plans for Nature, farm visits for young people, and on-farm walks and workshops for non-farmers (BAP Actions 6.1 and 7.3)



*Figure 16. Students from Borris Vocational School enjoying a farm walk.*

## Case Study 6

**NE 1.2 Implement the actions set out in the County Carlow Green Infrastructure Strategy; having due regard to environmental sensitivities such as archaeology, European sites, biodiversity and amenity value.**

In 2024, funding was secured to extend the Urban Pollinator Foraging Network Mapping across the 8 main towns and villages in Carlow.

Community and resident's associations were consulted and over 60 acres were mapped in total, with accompanying management guidelines. Additionally, survey results from the foregoing biodiversity projects will be added to the county-wide Green Infrastructure mapping.



Figure 17. Dr. Owen Carton Environmental Consultant delivers a Heritage keepers addendum workshop.

## Strategic Goal 4. Communities': Resilience & Transition

**Community Resilience & Transition**

13 CLIMATE ACTION   4 QUALITY EDUCATION   3 GOOD HEALTH AND WELL-BEING   7 AFFORDABLE AND CLEAN ENERGY   9 INDUSTRY, INNOVATION AND INFRASTRUCTURE   14 LIFE BELOW WATER   15 LIFE ON LAND   16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Carlow Climate Action Plan - Investing in our future

**Objective:** *Carlow Local Authority will inform, influence, and empower the community of County Carlow to develop and implement their local climate action measures.*

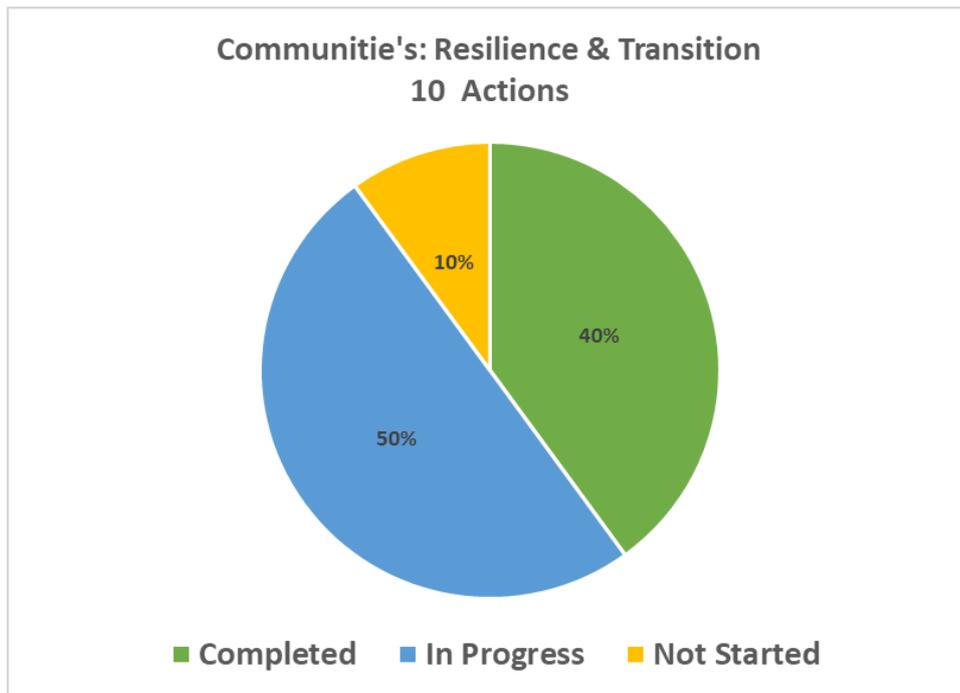


Figure 18. Progress report of Community Actions at 31/12/2024

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
C 1.1	Develop countywide climate-related educational and awareness programme to include information events, communication campaigns and guidance documentation	Combined	Q1	Yes	Completed
C 1.2	Implement the Community Climate Action Fund to engage communities in localised Climate Action Projects	Combined	Q1	No	In Progress
C 1.3	Include 'Sustainability and Climate Change' assessment on applicable grant assessments to ensure that community groups/stakeholders consider and incorporate Climate Mitigation and Adaptation in all their grant funded activities.	Combined		No	Not Started

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
C 1.4	Ensure that all residents of Carlow, young and old, have opportunities to meaningfully engage in and shape the development of climate action policies and projects delivered by Carlow County Council	Combined	Q1	No	Completed
C 1.5	Develop a Green Festivals & Events Strategy, ensuring these are carried out in accordance with sustainability guidelines, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.	Combined		No	Not Started
C 1.6	Develop Community Garden Guidelines to promote sustainable community gardening in Carlow	Combined	Q2	No	In Progress
C 1.7	Develop and adopt a community Garden & Allotment Policy for Carlow County Council	Combined	Q2	No	In Progress
C 1.8	Partner with research institutions such as SETU and Carlow College to explore innovative climate adaptation and mitigation research projects.	Combined	Q1	Yes	In Progress
C 1.9	Provide a point of contact to assist local organisations collaborating to implement projects which contribute to the objectives of a National climate initiative. E.G GAA green club programme.	Combined	Q1	Yes	Completed
C 1.10	Provide dedicated Climate Action information on Carlow County Council's website <a href="http://www.Carlow.ie">www.Carlow.ie</a>	Combined	Q2	No	Completed

## Case Study 7

### C 1.2 Implement the Community Climate Action Fund to engage communities in localised Climate Action Projects.

The Carlow Community Climate Action Fund represents a significant step towards empowering local communities to actively participate in climate action, fostering a sustainable and resilient future for the county. Designed to support local community groups in developing and implementing projects that address climate change at the grassroots level the program aims to empower communities to build low-carbon, sustainable environments and contribute to national climate and energy targets. In 2024 eight projects across County Carlow were approved, receiving a total of €371,890.

Organization	Funding Amount	Project Description
Tinryland Park	€20,000	Upgrade of public lighting to energy-efficient alternatives.
Bagenalstown Gaels	€38,690	Coordinated improvements involving Bagenalstown Gaels, Bagenalstown AFC, and the Community Garden.
St. Patrick's GAA Tullow	€39,707	Installation of solar panels and battery systems.
Carlow Town Hurling Club	€50,000	Implementation of solar panels and energy upgrades, including water heating systems and energy-efficient windows.
Tullow Men's Shed	€25,596	Building enhancements such as insulation, window and door replacements, sensor lighting, solar panels, and energy-efficient heating systems.
Drummin Bog	€93,648	Rewetting of Drummin Bog and installation of a walkway (subject to planning approval).
St. Patrick's AFC Graiguecullen	€50,930	Installation of an energy-efficient hot water system, replacement of floodlights with energy-efficient versions, building insulation, water refill station, and biodiversity planting.
Myshall Community Centre	€53,319	Insulation and window replacements, as well as the installation of bike stands.



Figure 19. Before and after picture of solar panel installation at St Patricks GAA, Tullow, Co. Carlow

## Case Study 8

### C 1.1 Develop countywide climate-related educational and awareness programme to include information events, communication campaigns and guidance documentation.

Developing a comprehensive countywide climate-related educational and awareness programme is essential for fostering environmental stewardship and promoting sustainable practices within our community.

The inaugural Carlow Climate Action Week took place from the 14th to 20th October 2024. In total, 35 events took place throughout the week. 21 events were organised/led inter-departmentally in partnership with the Climate Team.

9 Community based events were hosted by recipients of the Community Climate Action Fund, and 5 events were hosted in partnership with stakeholders including, Teagasc, SETU, Carlow College, South-East Energy Agency, Sustainable Energy Authority of Ireland (SEAI) and Carlow PPN. There was an overall attendance of circa 1,300 across the 35 events, which took place both in person and online.

**Thursday 17th October**

**Clothing Swap Shop**  
Meet Mary from *Changes Clothes*, Dublin for an exciting Swap Shop event where you can bring home some new to you fashionable pieces that don't cost the earth. Simply bring 5 items of good clothing & swap for up to 5 new pieces.  
11am - 2pm Carlow College, St. Patrick's  
Booking not required.  
Email [dsewell@carlowcoco.ie](mailto:dsewell@carlowcoco.ie) for more information.

**Friday 18th October**

**FREE Energy Clinic**  
Book an appointment with an energy expert from *South East Energy Agency* who will offer expert advice on ways to reduce energy bills in your home and advise on what funding is available.  
12:00pm to 2pm  
Carlow Central Library  
Email [library@carlowcoco.ie](mailto:library@carlowcoco.ie) to register

**Saturday 19th October**

**Storytime for under 5's**  
Meet the amazing *Wibbly Wobbly Wendy* for a climate themed story.  
10.30am Carlow Library  
Email [library@carlowcoco.ie](mailto:library@carlowcoco.ie) to book your place.

**Tree Planting workshop**  
Spend some time with *Eamonn Wall*, from *Carlow County Council* who will offer some expert advice on the what, where and how of planting trees.  
10.30am-11.30am. An Gairdin Beo, Carlow Town  
Email [byrnea@carlowcoco.ie](mailto:byrnea@carlowcoco.ie) or call 059-9136231 to book your free place.

**Carlow 14th -20th October 2024 Climate Action Week**  
Attendance at all Carlow Climate Action Week events are free but booking is advised.  
Email Carlow County Council Environment & Climate Department at [environment@carlowcoco.ie](mailto:environment@carlowcoco.ie) or phone 059-9136231 for further information.

**Carlow Climate Action Week 2024**  
14th - 20th October 2024

Logos: CARLOW CLIMATE ACTION, COMHAILE CONTAE CHEATHARLACH, CARLOW COUNTY COUNCIL

Figure 20. Programme of events for Climate Action Week 2024.

**14th October - 18th October**

**Carlow Junk Kouture exhibition**  
Visit the inspiring *Carlow Junk Kouture* exhibition at SETU Carlow Campus and see the wonderful gowns made from recycled materials by Carlow Students from post primary Schools across the County.  
Booking not required

**Monday 14th October**

**Information workshop in Community Energy Grant Funding**  
*South East Energy Agency* Invites you to an online information session on SEAI's Community Energy Grant funding for your next energy efficiency project outlines and what supports are available to achieve savings.  
11am -12pm Online  
Email [environment@carlowcoco.ie](mailto:environment@carlowcoco.ie) to register

**Visit our Low Emission fire Appliance at Carlow Fire Station**  
The doors will be open in *Carlow Fire Station* where you can visit our new Low Carbon Fire Engine. A first in the world, this state of the art appliance combines solar energy with HVO (Hydrotreated Vegetable Oil) to reduce its emissions by over 90% while still carrying out a vital service.  
2pm -4pm Carlow Central Fire Station

**Tuesday 15th October**

**What Goes Around Comes Around**  
The Beginners Guide to the Circular Economy. Everybody is talking about the Circular Economy and how it plays a vital role in tackling the climate crisis, but what does circular economy actually mean? *Dee Sewell, Environmental Awareness Officer*, will host an online session explaining the basics of the circular economy and the role it plays in protecting our planet.  
7.30pm -8.30pm Online  
Email: [carlowvppn@carlowcoco.ie](mailto:carlowvppn@carlowcoco.ie) to register

**Wednesday 16th October**

**Business Breakfast - Sustainable for Success**  
*Carlow Local Enterprise Office* are hosting an early morning breakfast workshop aimed at unlocking business success with green investment & development supports and approaches. Keynote speakers include Susan Crawford, Head of Sustainability with Bank of Ireland and Michael McCarthy, LEO advisor.  
7.30am - 8.30am Seven Oaks Hotel  
Visit [www.localenterprise.ie/carlow](http://www.localenterprise.ie/carlow) to register

**Wednesday 16th October**

**Whats Up With The Weather?**  
Join Carlow's famous *weather man Alan O'Reilly* who will explain how he monitors our weather and how it has changed due to climate change.  
7pm -7.45pm Online  
Email [environment@carlowcoco.ie](mailto:environment@carlowcoco.ie) to register

**Thursday 17th October**

**Climate Conversations for over 60's**  
The climate crisis is the most pressing issue of our time and it affects us all, no matter our age. Every day, older people around the world are using their voices, knowledge and energy to make a difference. Join *Jacinta Barris* who has developed a Climate Mentoring Programme specifically for people who are over 60 years of age.  
10.30 - 11.30am, Askea parish centre  
Email [environment@carlowcoco.ie](mailto:environment@carlowcoco.ie) to register

## Strategic Goal 5. Sustainability & Resource Management



**Objective:** Carlow Local Authority will implement and monitor a range of policies and practices to reduce our environmental impact, enhance resource efficiency, and create long term environmental, economic and social benefits .



Figure 21. Progress of Sustainability & Resource Management Actions at 31/12/2024

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
SRM 1.1	Develop and Implement an annual environmental awareness campaign incorporating the objectives of the National Waste Management Plan for a Circular Economy	Combined	Q3	Yes	Completed
SRM 1.2	Develop sustainability guidelines for corporate events supported, facilitated and organised by Carlow County Council	Combined		No	Not Started
SRM 1.3	Regulate and enforce the National Enforcement Priorities (NEPs) which focus on delivering positive environmental outcomes for air quality, water quality and waste management. This includes over 2,000 different environmental inspections in Carlow annually. Ensure sustainable transport modes are used to travel to and from	Adaptation	Q1	Yes	Completed
SRM 1.4	Develop and provide a series of green & climate-based workshops for owner managers of indigenous Carlow companies	Combined		no	Not Started
SRM 1.5	Provide assistance to Enterprises in their investment in equipment & technologies to reduce their impact on the environment	Mitigation	Q2	Yes	Completed
SRM 1.6	Provide Energy Management Training programmes to businesses in Carlow to help them reduce their carbon footprint	Combined		No	Not Started
SRM 1.7	Deliver programmes to assist businesses in Carlow improve the environmental profile of their business in the marketplace	Combined	Q2	Yes	Completed
SRM 1.8	Increase awareness and practice of regenerative tourism in our County, to enable visitors to have a positive impact on their holiday destination.	Combined	Q2	No	Completed
SRM 1.9	Increase the range of Carlow County Council services available on an online platform.	Combined	Q1	Yes	In Progress
SRM 1.10	Carry out a feasibility study to identify the logistical, financial, planning, environmental and market challenges of a proposed district heating project in Carlow; ensuring the study has appropriate regard to planning and environmental protection considerations.	Mitigation		No	Not Started
SRM 1.11	Assign the role of Energy Officer for Carlow County Council	Mitigation	Q1	No	Completed
SRM 1.12	Conduct a review of all Local Authority offices to maximise use and reduce carbon footprint	Mitigation	Q3	No	In Progress
SRM 1.13	Incorporate Climate Action in the Library Development Plan 2024-2029	Combined	Q1	No	In Progress

## Case Study 9

### **SRM 1.1 Develop and Implement an annual environmental awareness campaign incorporating the objectives of the National Waste Management Plan for a Circular Economy.**

During 2024, the Environmental Awareness Officer developed and delivered an online webinar titled *The Circular Economy for Beginners*. This initiative aimed to raise awareness, educate, and drive behavioural change in alignment with Section 10 of the Waste Action Plan for a Circular Economy.

The webinar was launched in October 2024 in partnership with Carlow PPN. The programme included an explanation about the linear, recycling and circular economies. It explained the importance of designed systems that eliminate waste and pollution, circulate products and materials, so they may regenerate natural systems.

Areas covered include:

- Waste in context – What are we wasting and where does it go?
- Waste minimisation,
- Reusing, repairing and recycling,
- The 7 Rs of zero waste - providing alternatives and solutions, empowering people to take action in their homes, workplaces and communities.

The presentation is used as a foundation for in-person talks and discussions, educating people about the principles and benefits of the circular economy.



Figure 22. The Webinar is currently being delivered to a variety of voluntary and community groups and can be viewed on the PPN website at <https://youtu.be/ryL5fQYIB6A?feature=shared>.

## Case Study 10

**SRM 1.3 Regulate and enforce the National Enforcement Priorities (NEPs) which focus on delivering positive environmental outcomes for air quality, water quality and waste management. This includes over 2,000 different environmental inspections in Carlow annually. Ensure sustainable transport modes are used to travel to and from inspection sites, where feasible.**

The Environmental Protection Agency (EPA) has established 20 National Enforcement Priorities (NEPs) across four key themes: Governance & Process, Waste, Water, and Air & Noise. These priorities guide local authorities in their environmental enforcement activities.

The Recommended Minimum Criteria for Environmental Inspections (RMCEI) is a framework established by the European Parliament in 2001 to standardize environmental inspections across EU member states. In Ireland, this framework guides local authorities in developing their annual Environmental Inspection Plans, commonly referred to as RMCEI Plans.

Each year, local authorities are required to:

- Develop and submit an RMCEI Plan to the Environmental Protection Agency (EPA) by February 1st.
- Conduct inspections of facilities and activities regulated under environmental legislation.
- Report on these inspections, detailing findings and any enforcement actions taken.

In 2024 Carlow Local Authority submitted the annual returns to the EPA. This return included the National Enforcement Priority (NEP) Progress Report for 2023 and the RMCEI Plan for 2024. In 2023, Carlow Local Authority achieved a Strong or Excellent rating in 85% of these NEPs, surpassing the national average of 70% and placing among the top performing Local Authorities in the Country. . This performance places Carlow among the top local authorities in environmental enforcement for that year



Figure 23. Checkpoints carried out with Carlow Local Authorities, An Gardai, NTFSO, WERLA, Social Protection and EPA

## Decarbonisation Zones (DZs)

In response to Action 165 of the Government's Climate Action Plan 2019, Local Authorities were required to 'identify and develop plans for one Decarbonising Zone' within their respective administrative area, for submission to the Department of Housing Local Government and Heritage (DHLGH), as action lead, in Q2 2021, Circular Letter LGSM01-2021.

The spatial area of the Decarbonising Zone comprises of the District Electoral Division's (DED's) of Carlow Rural, Carlow urban and Graiguecullen Urban.

The Baseline Emissions Inventory (BEI) for the DZ reported total greenhouse gas emissions of 108,122.86 tonnes of CO<sub>2</sub> equivalent. The transport sector was the largest contributor, accounting for 41.5% of emissions, followed by the residential sector at 30.3%, and the commercial/industrial sector at 22.8%

Total energy consumption by Carlow Local Authority within the Decarbonisation Zone use in the baseline year of 2018 was 4,420 MWh (4.4 GWh) with building & facilities the highest energy consumer, accounting for 2,236.1 MWh (51%)

Total Green House Gases for Carlow Local Authority in the Decarbonising Zone in the baseline year amounted to 1,320 tCO<sub>2</sub>eq (1.3 ktCO<sub>2</sub>eq) with building & facilities accounting for 44% at 580.3 tCO<sub>2</sub>eq.

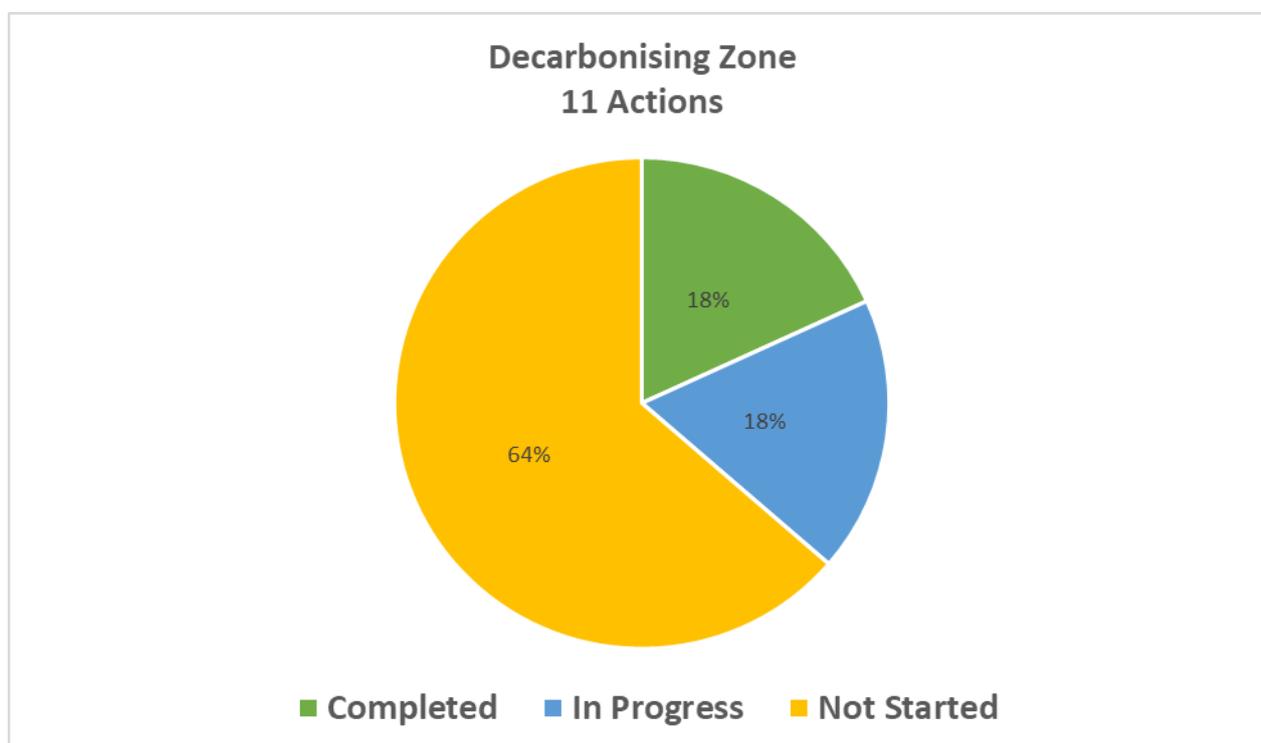


Figure 24. Progress of Decarbonising Zone Actions at 31/12/2024

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
DZ1.1	Establish a Decarbonising Zone working group comprising of representation from Public Bodies/ Government Agencies, Business, Utility/ Infrastructure providers, Transport providers, Education Facilities, Private Sector.	Combined		No	Not Started
DZ1.2	Prepare a register of opportunities outlining projects that will aid carbon reduction in the Decarbonising Zone, ensuring integrated environmental protection requirements are appropriately considered.	Combined		No	Not Started
DZ1.3	Carry out a geothermal feasibility study in Carlow Town to determine the technical, financial, planning and environmental viability of a geothermal energy project, ensuring the study has appropriate regard to planning and environmental protection considerations.	Combined		No	Not Started
DZ1.4	Provide a central location, Mobility Hub, which facilitates linkages between various low carbon transport options from Carlow Town centre; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage.	Combined	Q1	No	Completed
DZ1.5	Reduce private car dependency through the expansion of sustainable shared mobility infrastructures and schemes for Carlow Town; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage.	Combined	Q1	No	Completed
DZ1.6	Provide improved pedestrian and cycle links to Carlow Bus Park and Carlow Train Station; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage.	Combined	Q2	No	In Progress
DZ1.7	Increase spacial awareness of town centre through the development of a town map highlighting journey times using various modes of transport to include walking, cycling, bus, car and others.	Combined		No	Not Started

Action No.	Action Details	Action Type. Adaptation, Mitigation, Combined	Action Started In 2024	Is this Action Recurring?	Action Status (as between 1st Jan 24 - 31st Dec 24)
DZ1.8	Implement and monitor a pilot anti-idling campaign to enable improvement in air quality	Combined		No	Not Started
DZ1.9	Develop and execute pilot rain water harvesting scheme on Local Authority owned buildings	Combined		No	Not Started
DZ.10	Promote the awareness and understanding of the UN Sustainable Development Goals through thematic designs in public realm projects, e.g. roundabouts scheme.	Combined		No	Not Started
DZ1.11	Advance Urban Regeneration and Development Fund (URDF) projects to achieve the Carlow 2040 plan; having due regard to environmental sensitivities, the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations, and the need to not negatively impinge on any protected species.	Combined	Q1	No	In Progress

## Case Study 11

### A Nature Based Solution – Carlow Towns Urban Raingardens

The RPS Climate Risk assessment identified flooding as an increasing climate risk for County Carlow. Increasing frequency of pluvial (rain-related) flooding is a growing challenge for urban drainage systems.

Nature-based Solutions (NbS) tackle societal challenges by protecting, managing, and restoring natural and modified ecosystems in a sustainable way. These solutions benefit both people and the environment while addressing critical issues such as climate change, biodiversity loss, and public health. They play a vital role in achieving sustainable development.

Rain gardens effectively manage stormwater by reducing surface runoff, slowing water flow, preventing excess water from entering the sewer system, and naturally filtering pollutants.

Additionally, they enhance local biodiversity by incorporating a variety of plant species that support pollinators and other wildlife.

The raingardens constructed within Carlow Decarbonising Zone are the first raingardens to be retrofitted in an urban streetscape in Ireland. This innovative raingarden project was a result of collaboration between Carlow Local Authority and the Local Authority Waters Programme.

These raingardens action Strategic Goal No.3 - Natural Environment & Green Infrastructure of Carlow LACAP by protecting and enhancing Carlow Town's urban spaces to support biodiversity, mitigate climate change impacts, reduce the risk of negative impacts of climate change and enhance health and well-being for all.

In 2024, Carlow Municipal District further extended their suite of raingardens to include a large development at Station road and Dublin Road. In addition to the larger raingardens several smaller bioretention basins and tree pits in footpaths and paved areas at several locations throughout the Town. Planting in these areas ensures ongoing supporting of biodiversity in keeping with Carlow Local Authority Green Infrastructure Strategy.

In July 2024, Carlow town received the President's Prize at the Entente Florale Europe competition, a prestigious European-wide environmental award, for its efforts in greening urban spaces with these rain gardens.



*Figure 25. Carlow Town Raingardens at Dublin Road*

# UN Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) are “a blueprint to achieve a better and more sustainable future for all”<sup>[2]</sup>. They represent 17 social, economic and environmental priorities designed to combat the global challenges facing humanity by 2030. As SDG Ambassadors Carlow Local Authority has an important part to play in progress toward the UN SDGs.



Carlow Local Authority were the first Local Authority to be assigned the role of SDG Champions in the inaugural Government SDG Champions Programme and continue to hold the position of SDG Ambassadors.

A National SDG Localisation Working Group was established in 2024 who's role is to develop and oversee SDG localisation in Ireland, building on the work already underway at the local level, and as set out in the SDG National Implementation Plan, coordinate actions including: -

- Showcasing, sharing, and building on existing initiatives including increasing local authority participation in the SDG National Stakeholder Forum
- Capacity building and awareness raising including assessment of the need for SDG training and toolkits, and establishment of an SDG Local Authority network.
- Embedding the SDGs in Governance and reporting frameworks
- Incorporating the SDGs within local planning frameworks
- Preparation of Ireland's first Voluntary Local Review.
- Ensuring Local Authority Inputs to the next SDG National Implementation Plan

The membership of the Working Group is composed of senior representatives from key departments, agencies, representative organisations and Local Authorities with responsibilities for implementation of the SDGs at all levels in Ireland

Padraig O Gorman Director of Services with Carlow Local Authority represents the CCMA on this working group.

## SDGs - the Local Perspective

Ireland is committed to reducing food waste by 50% by 2030 – in line with the United Nations Sustainable Development Goal. The development of a National Food Waste Prevention Roadmap is included as a commitment in Ireland’s Waste Action Plan for a Circular Economy, Food Vision 2030 and the National Climate Action Plan 2021.

### Case Study 12

During SDG week 2024 the Environmental Awareness Officer at Carlow Local Authorities designed and delivered a webinar entitled “the Health and Wellbeing Benefits of Growing and Sourcing Local Food” directly linking the following SDGs to local food production.

- SDG Number 1: No Poverty
- SDG Number 2: Zero Hunger
- SDG Number 3: Good Health and Well-Being
- SDG Number 4: Quality Education
- SDG Number 6: Clean Water & Sanitation
- SDG Number 10: Reduced Inequalities
- SDG Number 11: Sustainable Cities and Communities
- SDG Number 12: Responsible Consumption and Production
- SDG Number 13: Climate Action
- SDG Number 15: Life on Land

The workshop was delivered in partnership with Carlow PPN and examples were provided about the importance and benefits of supporting local food systems and how they connect people and communities locally, nationally and globally.

The voluntary group Community Gardens Ireland requested the transcript of the talk which was subsequently included in a written submission by them to the Oireachtas Committee of the Environment and Climate Action entitled How do community Gardens and allotments contribute to the UN Sustainable Development Goals.

During 2024 the Environment Department in partnership with Carlow Library Services rolled out the Literacy & Food Education (LEAF) Programme throughout the County. The LEAF project empowers communities to grow their own food as a vital climate action.



Figure 26. LEAF programme launch

The Environmental Awareness Officer conducted seed workshops for secondary school students and also facilitated a series of workshops across Carlow Library branches. These sessions educated students and members of the public about seeds and their role in supporting the United Nations Sustainable Development Goals (SDGs) to promote a healthy and thriving planet.



COMHAIRLE CONTAE  
CHEATHARLACH  
CARLOW COUNTY COUNCIL



CARLOW  
**CLIMATE  
ACTION**

Investing in our future

## Carlow Local Authority Website

[www.carlow.ie/environment/climate-action](http://www.carlow.ie/environment/climate-action)

## Climate Action Office

[climate@carlowcoco.ie](mailto:climate@carlowcoco.ie)

Phone: 059-9136231