



Comhairle Contae Mhaigh Eo
Mayo County Council

**Mayo County Council Report on selecting
Mayo's Initial Decarbonising Zone**

May 2021

Introduction

Under Action 165 of the Climate Action Plan 2019 and as per Circular Letter LGSM01-2021 dated 10th February 2021 (Appendix 1), each Local Authority is required to identify a Decarbonisation Zone (DZ).

Climate Action Plan: Action 165

Action 165 specifically requires identification of one location or area in each local authority that would be subject to a plan for a Decarbonising Zone. Thereafter, follow-on steps could include:

- *Harnessing those plans to develop low carbon town projects for future calls under the Climate Action Fund; and*
- *Early progression of demonstrator projects harnessing a range of technologies and initiatives, and which would be subject to a mid-project review by the Local Authority.*

The definition of a Decarbonising Zone (DZ) is:

A Decarbonising Zone (DZ) is a spatial area identified by the local authority, in which a range of climate mitigation, adaptation and biodiversity measures and action owners are identified to address local low carbon energy, greenhouse gas emissions and climate needs to contribute to national climate action targets.

The DZ will at a minimum **reduce its greenhouse gas emissions by 7% per annum** from 2021 to 2030 (a 51% reduction over the decade) and will become a demonstrator area, either urban or rural, for other areas in the county.

- (i) urban areas and agglomerations with a population not less than 5000 persons, (Castlebar, Ballina and Westport)
- or
- (ii) rural areas with an area of not less than 4km² (can include towns/villages)

Each Local Authority was requested to identify – by 30 April 2021 - a potential area suitable for a decarbonising zone.

Once candidate decarbonising zones are identified, each local authority will be tasked with developing DZ implementation plans by the end of Q4 2021 and those plans should be included in their published Climate Action Plans, as required by the Climate Action Bill, by such date as specified by the Minister for Environment, Communications and Climate.

Mayo County Councils approach

Mayo County Councils vision for the DZ is that by 2030 it will be a resilient, vibrant, and sustainable community on a pathway to zero carbon emissions. The DZ will become an exemplar site for the rest of the county to develop pathways and learnings for other communities to decarbonize.

We believe that for a DZ to be successful a whole of community approach is required and for this reason we invited communities to apply to become Mayo's first DZ.

The approach adopted was to work with each interested community to reach this objective through;

- providing guidance and leadership
- helping identify and apply for funding eg. Climate Action Fund, Ireland 2040, Community energy grants
- developing partnerships with relevant bodies eg. Academia, Government bodies, SEAI etc.
- developing the 2030 implementation plan with the community (to be submitted to Department of Local Government, Housing and Heritage by Q4 2021)
- assisting with implementing plan over timeframe to 2030

The following process was applied to become Mayo's first Decarbonising Zone:

Step 1: Expression of interest - Deadline March 22nd

Interested communities were requested to submit an expression of interest by March 22nd.

- 20 communities expressed an interest in becoming Mayo's Initial DZ, mapped below.

Step 3: Deadline for receipt of submissions – 4pm, April 16th

- 10 applications were received. These applications covered an area of 1080km², 19% of the area of Mayo and a population of 38,726, 30% of the population of Mayo.

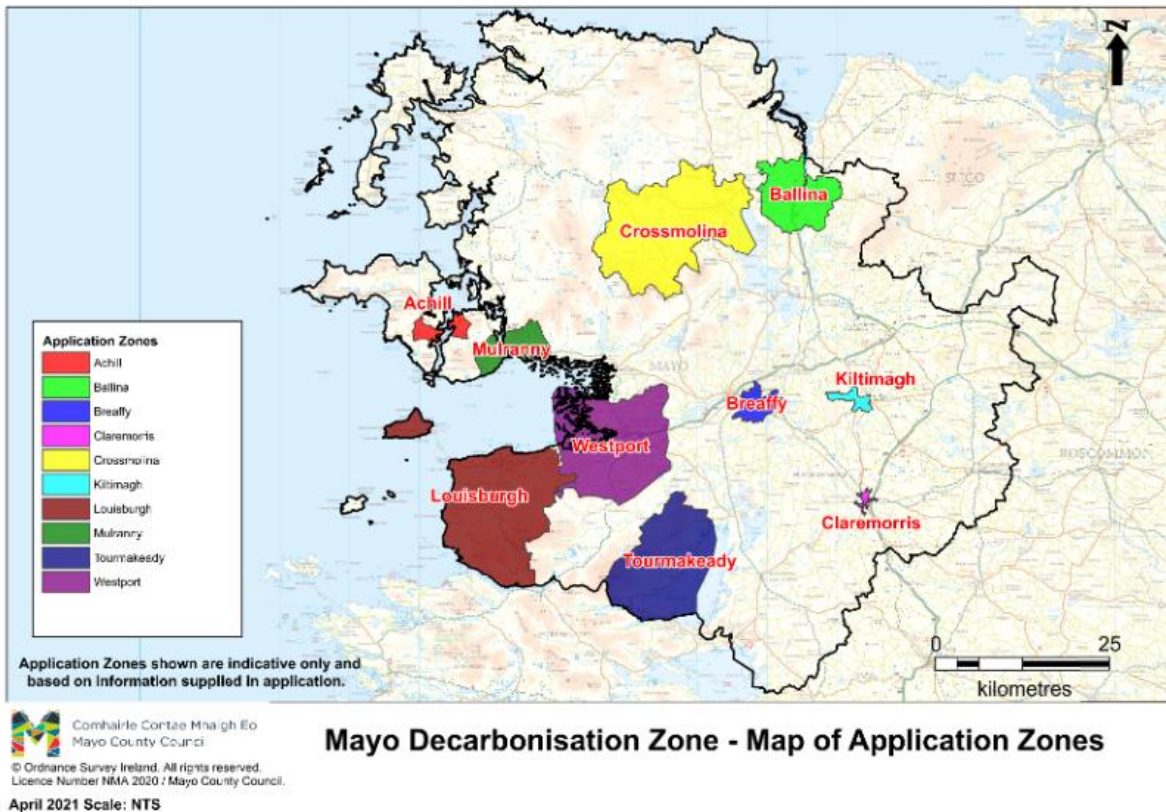


Fig 2. Map of Mayo DZ application areas

Step 4: Announcement of Mayo DZ May 10th

Applications were scored against the criteria outlined in the application form (Appendix 3) and the chosen community will be announced after ratification at the Mayo County Council meeting.

Evaluation of Submissions

To meet the ambitious targets of reducing emissions by over 50% by 2030 will require a whole of community approach. In acknowledging this Mayo County Council put together an application form and scoring sheet focused on

1. community track record,
2. an ambitious vision for 2030 and
3. proof of community structure and engagement to meet the 2030 vision.

Some figures from the submissions received.

Area and Population

10 applications were received representing an area of 1080km², 19% of the area of Mayo and a population of 38,726, 30% of the population of Mayo.

Community Track Record

All communities have won previous awards including 5 winning national awards. All communities have participated in previous Mayo County Council Campaigns and are registered with the PPN.

8 Communities are SEAI Sustainable Energy Communities (SEC) and 4 have completed SEC Energy Masterplans. Four communities have Biodiversity plans.

All communities have undertaken previous climate action projects ranging from Better Energy Community retrofits, Smarter Travel, tree planting, invasive species removal, flood alleviation, biodiversity enhancement, community energy, community engagement, awareness raising, urban realm improvement, etc.

Committees and Expertise

150 people now sit of Community Decarbonising Zone committees or have offered their expertise.

Letters of Support

327 letters of support were received. These included letters from:

- 136 local businesses
- 101 community groups
- 33 schools
- 31 National organisations
- 11 Elected Representatives
- 9 Churches
- 6 Farming organisations

Decarbonising Zone Evaluation Team Report

Decarbonising Zone Evaluation Team:

Cllr. Blackie Gavin	Chair of Mayo County Council Environment, Climate Change SPC
Brendan Munnely	Forward Planning, Mayo County Council
Laura Dixon	Climate Action Officer, Mayo County Council
Deirdre Cunningham	Heritage Officer, Mayo County Council
Dr. Margaret O Riordan	GMIT, Academic Partner

The Evaluation team met five times over a period of two weeks to evaluate the 10 Decarbonising Zone applications. Marks were assigned to each applicant according to the marking scheme outlined in the Mayo DZ community application form (Appendix 3).

Overview of marking scheme:

Section	Max marks
1. Community Track Record	40
2. Vision	30
3. DZ Team Structure	30
Total	100

Evaluation Team feedback

“All 10 DZ Community applications were of an extremely high standard. It is evident from the applications that all the applicants are committed to protecting the environment and decarbonising through the vast range of previous climate and environmental action projects both completed and underway. The applicant visions were innovative and have outlined ambitious low carbon futures for their communities.”

“We look forward to the futures you have outlined and are confident that they will become a reality judging by the committed DZ committees you have established and the community support you have received for decarbonising your community. It was a challenging task to choose the initial decarbonising zone and we would like to commend all the applicant communities. We look forward to watching your decarbonising journeys unfold.”

Applicant visions can be found in Appendix 4.

Results and Next Steps

Overall marks	Community Track Record	Vision	DZ committee	Total	Position
Mulranny	37	28	28	93	1
Ballina	30	28	29	87	2
Tourmakeady	37	26	24	87	2
Claremorris	30	25	25	80	3
LKCI	32	22	26	80	3
Westport	28	23	26	77	4
Breaffy	18	25	25	68	5
Achill	18	22	16	56	6
Crossmolina	21	20	15	56	6
Kiltimagh	18	25	13	56	6

Congratulations to Mulranny, it now goes forward as Mayo's initial decarbonizing Zone.

Mayo County Council will work together with Mulranny to develop an implementation plan to meet the goal of 51% emission reductions by 2030. This will be completed by Q4 2021 and submitted to the Department of Housing, Local Government and Heritage (Appendix 1).

We were extremely impressed with the level of engagement with this process by all communities and in particular those who submitted completed applications. The selection process has demonstrated that the resources invested at an early stage by the Council through the appointment of a Climate Action Officer together with Climate Action awareness and training events for Communities has paid dividends. The remarkably high standard of the applications together with the passion for urgent action demonstrated in the Visions submitted has convinced us of the need to also commence working with the nine runners up Communities to implement some of their ambitious plans. In this regard,

1. An allocation of €1,000 from Greener Community Awards budgets will be allocated to each of the runners up to use as match funding with potential funding opportunities such as Leader and the National Climate Action Fund for Communities to be launched by the Department in June.
2. It is proposed to allocate a full-time staff resource for 6 months to work with the Communities to assist them continue their climate action journeys.
3. We are currently applying for Creative Climate Ireland funding. If successful we will run pilot projects in Mulranny, Ballina and Tourmakeady demonstrating how creative solutions can reduce our emissions through behavioural change.

We look forward to working closely with Mulranny and all the communities on this exciting journey.

A handwritten signature in black ink on a light-colored background. The signature reads "Martin Keating" in a cursive style.

Martin Keating,

Head of Environment, Climate Change and Agriculture

Approved by:

Mayo County Council, 10/05/21

Environment, Climate Change, Agriculture and Emergency Services SPC, 05/05/21

Climate and Biodiversity subcommittee, 04/05/21

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Circular Letter LGSM01-2021

10 February 2021

To Chief Executives and Directors of Planning

Re: Local Authority Decarbonisation Zones (DZs)

Dear colleagues,

General

Ireland's Climate Action Plan sets out an ambitious whole-of-society approach designed to enable Ireland to meet its EU targets of reducing carbon emissions by 30% between 2021 and 2030, and thereafter to achieve net zero carbon emissions by 2050. Action 165 of the Plan sets Local Authorities the challenge of identifying and developing Decarbonising Zones in each local authority in Ireland and implementation of this action is being led by this Department.

The purpose of this letter is to update you on current developments in this regard and to seek your support in delivering on this very important action which will require local authorities to identify flagship low-carbon projects that can serve as pathfinders in deepening an understanding the scope and implementation challenges ahead in decarbonising our economy and society.

Climate Action Plan: Action 165

Action 165 specifically requires identification of one location or area in each local authority that would be subject to a plan for a Decarbonising Zone. Thereafter, follow-on steps could include:

- Harnessing those plans to develop low carbon town projects for future calls under the Climate Action Fund; and
- Early progression of demonstrator projects harnessing a range of technologies and initiatives and which would be subject to a mid-project review by the Local Authority

The Department of Housing, Local Government and Heritage (DHLGH) has convened a steering group with representation from the CCMA, the Climate Action Regional Offices, the SEAI, the Office of the Planning Regulator, the Regional Assemblies and the Department of the Environment, Climate and Communications in order to structure and guide the response of the local government sector to Action 165.

The steering group is agreed that this concept of decarbonising zones will provide a very important test-bed in which we can:

- a) understand the scale of the challenge in decarbonising the economy and wider society, and
- b) map out the various key stakeholders and enablers.

The practical experience and knowledge gained from demonstrator projects, such as the Portlaoise “low carbon” town, which is at an early stage of development, will accelerate learning throughout the country.

What is being asked of Local Authorities?

Local authorities are advised that:

1. An online workshop will be held this Friday 12 February 2021 to further discuss and provide guidance on the contents of this letter; each local authority is requested to send two representatives at Director of Service and Senior Engineer / SEO level.
2. Subsequent to the workshop, each Local Authority will be requested to identify – by 30 April 2021 - a potential area suitable for a decarbonising zone. Each zone should be accompanied by a broad outline of the main projects that could be implementable in the zone plus an indication as to potential outcomes deliverable in terms of reductions in carbon emissions (while recognising that precise details should be included in each authority’s Climate Action Plan). At a minimum, these outcomes must be capable of meeting the Government’s targets for carbon emissions reductions set out below, specifically an average 7% per annum reduction in overall greenhouse gas emissions from 2021 to 2030 (a 51% reduction over the decade). The details of the zone identifying the location and key measures proposed should be submitted to the DHLGH.
3. For the avoidance of doubt, in order that local authority decarbonising zones can act as effective demonstrators in varying settings, such zones can be in either urban or rural settings. However, to achieve effective learnings from the exercise, such zones should either cover (i) urban areas and agglomerations with a population not less than 5000 persons, or (ii) rural areas with an area of not less than 4km². Candidate DZs that do not meet these criteria will be considered where they show demonstrated decarbonisation at a replicable scale
4. Once candidate decarbonising zones are identified, subject to development of the attached information sources and additional guidance, as well as feedback from the Portlaoise Demonstrator Project, each local authority will be tasked with developing DZ implementation plans by the end of Q4 2021 and those plans should be included in their published Climate

Action Plans, as required by the Climate Action Bill, by such date as specified by the Minister for Environment, Communications and Climate.

5. As a practical guide and a good source of information in relation to the scope and operationalisation of decarbonising zones, SEAI will publish an updated supporting guidance document for Sustainable Energy Communities in H1 2021.
6. Decarbonising zones should, subsequent to initial baseline analysis and stakeholder mapping, set the chosen zones on a path to achieving the greenhouse gas emissions reductions required by Government over by 2030 years, and, learning from that experience, to advance a wider roll-out of the decarbonising zone concept across wider local authority system, in line with evolving climate policy and legislative requirements.

The implementation of this action will be led by the DHLGH, in close cooperation with the Department of Environment, Climate and Communications together with the Sustainable Energy Authority of Ireland (SEAI) and local authorities supported by the Climate Action Regional Offices.

Decarbonising Zones in the context of National Climate Policy

Under current legislative proposals contained in the draft Climate Action (Amendment) Bill, all local authorities will be tasked with preparing individual climate action plans outlining the mitigation and adaptation measures the authority intends to adopt and to link across such plans to other relevant statutory functions they perform, such as the preparation of their development plans.

As explained at the outset, the context for such plans is the Government's Climate Action Plan which represents an all of society approach to meeting our legally binding EU targets to reduce our carbon emissions by 30% between 2021 and 2030, and lay the foundations for achieving net zero carbon emissions by 2050. The Plan contains a range of multi-stakeholder actions across the electricity, buildings, transport, agriculture, enterprise and waste and circular economy sectors. The Climate Action Plan also advocates the need for a just transition and improving the climate resilience of all communities and citizens.

The 2020 Programme for Government sets out a clear political and societal consensus on achieving a just transition to a sustainable future for all communities in Ireland. This is to be underpinned by the core philosophy that no sector of society or community is left behind in the movement to a low carbon future. The Climate Action Plan also highlights the leadership role of the public sector, including local authorities, and the importance of citizen engagement and community leadership. At the heart of the Plan is the key message that climate action requires a range of thematic areas to blend together to meet the challenge.

This will require strong governance, robust and evidence based policy at all levels, a variety of funding supports, technical advancements, exploration of co-benefits, societal innovation and ultimately - creativity and imagination.

The concept of decarbonising zones will be highly important analytical test beds for the local government sector to give leadership in both understanding the mechanics of achieving the targets set by EU and national policy on climate, as they relate to specific locations within their functional areas, in mapping out the pathways to achieving such targets and key stakeholders and crucially the practical learnings by which such decarbonisation can be rolled out to the rest of their functional areas with the engagement by all the relevant stakeholders and mechanisms, once they are understood.

Decarbonising Zones explained

1: Working Definition

A Decarbonising Zone (DZ) is a spatial area identified by the local authority, in which a range of climate mitigation, adaptation and biodiversity measures and action owners are identified to address local low carbon energy, greenhouse gas emissions and climate needs to contribute to national climate action targets

The range of projects proposed should be specific to the energy and climate characteristics of the spatial area covered by the DZ, and identify appropriate project sponsors and embracing a range of technologies and measures addressing arrange of areas which include:

- electricity sourcing;
- heat management;
- reducing needs for travel and shifting travel modes towards active and public transport;
- enhanced building energy efficiency;
- carbon sequestration; and
- energy storage and management systems.

Plans for the identified Decarbonising Zones should also consider the economic and social benefits of decarbonizing including just transition and health.

A Decarbonising Zone should also address the wider co-benefits of air quality, improved health, biodiversity, embodied carbon, agricultural practices, sustainable land management, lower noise

levels, waste, water, circular economy etc., and should integrate with smart data and 'smart cities' initiatives (as relevant).

A Decarbonising Zone can also explore the co-benefits of climate adaptation, and examine a range of local measures such as climate proofing, afforestation, green and blue infrastructure, reducing heat island effects, citizen awareness and behavioural change.

2. Scope

The accompanying briefing paper on Decarbonizing Zones prepared by the local authority Climate Action Regional Offices (CAROs) in conjunction with Codema the Dublin Energy Agency, highlights emerging learnings and perspectives of the sector in developing decarbonising zones. Key points include:

- a) **Local authorities are well positioned to be the key drivers** to advance understanding in what is involved in decarbonisation because of their knowledge of their local areas and their reach into local communities and potential local climate action partners that will foster buy-in and leadership across all sectors and engagement of local communities.
- b) The **private sector and other sectors** such as third level institutions, are prospective key partners in the development of Decarbonising Zones, with particular regard to testing advancing technologies, cultural innovation and change management.
- c) As cities and urban areas are hot spots of higher density development and energy demand, they can operate as effective '**living laboratories**', engaging a range of sectors to test climate innovation, disruptive technologies and smart technologies in practice.
- d) Existing **local level initiatives** such as Sustainable Energy Communities (SEC), Renewable Energy Communities (REC), Energy Cooperatives or the Renewable Electrical Support Scheme (RESS) can provide an enabling framework for community participation in renewable and low carbon energy projects.
- e) The further integration of **climate action policy and spatial planning** is required to enable holistic and replicable Decarbonising Zones to develop. Such policy areas include energy efficiency measures, renewable and low carbon electricity sources, district heating, energy storage, agricultural practices, rural land management and carbon sequestration measures.

- f) **Transport orientated development** should be a key component of Decarbonising Zones. Mobility hubs, easy access to very attractive and well designed and direct walking and cycling networks, and the promotion of measures to facilitate electric vehicles (such as dedicated parking and charging points) should be prioritised in the areas. Such measures result in co-benefits such as improved air quality, improved health, lower noise levels, and integrates well with 'smart cities' initiatives.
- g) The identification and development of Decarbonising Zones could include the **exploration of climate adaptation and associated co-benefits**, in particular carbon sequestration including re-wetting and restoring peatland areas, re-use of formally LA owned and managed landfills, the enhancement of carbon sinks, continued afforestation and tree planting measures.
- h) Decarbonising Zones can be **test beds and have synergies with other sustainability measures** such as promoting the circular economy, waste management, the potential for sustainable employment using remote working opportunities, active and sustainable land management.
- i) Finally, to foster and replicate learnings from Decarbonising Zones, continuous efforts will be needed to **monitor and collect data** on building efficiency, energy usage and citizen behaviour.

3. Summary of Potential Content of Plans for Decarbonising Zones

Set out below is a list of key sectoral headings that could form a basis for planning for a Local Authority Decarbonising Zone:

- **Transport** – transport should be developed in accordance with the CO₂ emissions hierarchy.
- **Buildings** – energy efficient buildings which limit energy demand.
- **Green spaces** – providing carbon sequestration, reduce heat island effects.
- **Energy planning and policy** – dwelling density to support more energy efficient use of infrastructure in the areas of energy, transport, water etc. Trial site for certain policy mechanisms. Maintaining accurate and detailed data sets (GIS etc.) which can be represented spatially is vital for energy planning; it is also important that a list of these data sets be maintained to allow planners and policy makers to understand the information that is at their disposal.

- **Complementary infrastructure** to facilitate high proportions of renewable generation. (e.g. providing transmission, grid balancing, frequency control)
- **Land value** – be it economic (contaminated land, cutaway bog land, land with low agricultural or development potential etc.) or environmental (such as SPAs, SACs, NHAs)
- **Air quality** – the implementation of a range of measures, including low emissions methodology should overlap with air quality monitoring and improvement.
- **Gap to Target contribution** - The delivery and overall monitoring and upscaling / replication of these zones should include gap to target contributions on thematic climate targets at EU, national level etc.
- **Biodiversity (to complete ref Biodiversity strategy)**
<https://www.npws.ie/legislation/national-biodiversity-plan>
- **Waste Management:** Take on a leadership role regarding waste management, the circular economy and green procurement. Examples of policies include, but are not limited to, the Waste Action Plan for a Circular Economy, the National Circular Economy Strategy (due to be published in 2021) and associated National Waste Prevention Programme.

4. Baseline Analysis

A critical first step in progressing DZs for each local authority is to develop a thorough understanding of the energy demands in the relevant area, for example through a Spatial Energy Demand Analysis (SEDA). Such analysis involves assessing the energy demand within a given area and creating a spatial visualisation of this information; this yields an evidence-based energy map which can be used as a tool by planners and policy makers to create effective policies and actions to influence future energy use.

SEDA bridges the gap between spatial and energy planning methodologies at a local level in Ireland and builds on the experience of other leading European countries. In Ireland, SEDAs have been developed by Codema on behalf of each of the four Dublin local authorities. SEDAs have been used to generate maps highlighting areas with the lowest Building Energy Ratings (BERs), which could be areas highlighted as priority areas for energy efficiency retrofit schemes.

Moreover, overlapping these low-BER areas with areas with high energy costs and high unemployment allows for the identification of areas at risk of energy poverty. The maps also showed

areas with the highest concentration of fossil fuel usage and emissions which were typically older developments with high use of oil or solid fossil fuels or areas with large industrial development.

The Portlaoise Low Carbon Town project also started with effective baseline analysis and a synopsis of the approach undertaken, its findings and current status are outlined in the presentation attached with this letter.

Data Sources and Resources

There are many publicly available data sources that can be utilised when analysing potential Decarbonising Zones. Data from the Central Statistics Office (CSO), Valuation Office, SEAI, National Transport Authority (NTA), EPA, Geological Survey of Ireland (GSI) and local authorities.

Local spatial and energy-related characteristics determine whether certain low-carbon solutions are technically feasible, such as density of development, grid availability, population density, available suitable space for new infrastructure, and available natural resources. There are also social and economic characteristics that can be overlaid with the technical data, to identify areas where policies will have most success or impact, such as areas at risk of energy poverty, areas with high traffic, areas of new development etc.

A list of key resource documents is attached at Appendix 1.

Implementation

The identification and development of Decarbonising Zones should explore the components of policy, projects and partnerships and their associated inter-relationships. The scoping approach should also reflect the diverse climate baselines and opportunities provided by both the urban and the rural environments.

The identification and development of DZs across the country can also benefit from the range of multi-stakeholder partnerships already in place, from national to local level. This includes existing broad ranging supports from the Department of the Environment, Climate and Communications (DECC), the Environmental Protection Agency (EPA), the Sustainable Energy Authority of Ireland (SEAI), GSI and many others.

With regard to the evolving role of spatial planning and climate action, the Department of Housing, Local Government and Heritage (DHLGH) and the Office of the Planning Regulator (OPR) will have an important leadership role, in providing continued guidance and support to local authorities.

The role of Energy Agencies is also important to include work undertaken in local authority areas that could be considered as Decarbonising Zones.

In the zero-carbon transition, integrated urban planning and cross-sectoral governance is crucial.

ENQUIRIES

Further enquires about this circular should be addressed to Kevin Forde at kevin.forde@housing.gov.ie.

An invitation to the workshop on 12 February has already issued to all Local Authorities but if you have specific enquiries in that regard please email Ciaran Hyde in the Local Government Management Agency at chyde@lgma.ie.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Cian Ó Lionáin', with a long horizontal stroke extending to the right.

Cian Ó Lionáin,
Principal,
Local Government Structures and Modernisation.

Appendix 2 – Mayo DZ workshop information

Mayo's first Decarbonising Zone (DZ) Workshop series

To assist communities with the application process a number of workshops were held on Thursday's, March 25th – April 8th, 6-7pm. The workshops were recorded and can be found on www.mayo.ie/ClimateAction/DecarbonisingZone

Workshop 1 – Introduction to DZ and review of application form

Thursday, 25th March 6 – 7pm

Welcome by Martin Keating, Head of Environment, Climate Change and Agriculture , Mayo County Council

Orla Murphy MRIA is Assistant Professor in UCD School of Architecture Planning and Environmental Policy, Co-Director of UCD Centre for Irish Towns (CfIT) member of the high-level roundtable on the New European Bauhaus initiative

Orla will speak about the New European Bauhaus and how communities are central to reimagining and co-creating a decarbonised future.

[New European Bauhaus](#)

Laura Dixon, Climate Action Officer, Mayo County Council

Laura will introduce the Decarbonising Zones initiative and run through what is required in the DZ community application form.

Workshop 2 – Energy; How to transition to a low carbon community?

Thursday, 1st April 6-7pm

Dr Orla Nic Suibhne, SEAI Sustainable Energy Community (SEC) mentor in County Mayo

Orla will give ideas and inspiration on how communities can work towards becoming low carbon and energy efficient and will outline the supports that are available from SEAI including 100% funding for Energy Master Plans.

Avril Ní Shearcaigh, manager of the Aran Islands Energy Co-Op

Established in 2012, the co-op is working towards generating clean, community owned, energy to ensure the sustainability of the islands into the future.

www.aranislandsenergycoop.ie

Workshop 3 –[Nature Based Solutions; How can nature help us decarbonise?](#)

Thursday, 8th April 6-7pm

Dr. Marcus Collier, Assistant Professor in Urban Nature-based Innovation in the School of Natural Sciences in Trinity College Dublin

Nature-based solutions can provide many benefits but what exactly are they and why are they important? This session will show examples of nature-based solutions and outline their potential for decarbonization.

Gary Goggins, Public Awareness Manager with Wild Atlantic Nature

Gary will introduce the Wild Atlantic Nature LIFE Integrated Project (IP), which aims to improve Ireland's performance in conserving habitats and in particular blanket bog. The project works with farmers and local communities to conserve and improve the quality of blanket bogs and associated habitats and the ecosystem services they provide including clean water, carbon storage and biodiversity.

Appendix 3 – Mayo DZ Application Form, including scoring



Comhairle Contae Mhaigh Eo
Mayo County Council

Mayo's Initial Decarbonising Zone Community Application Form

SECTION 1: APPLICANT DETAILS

NAME OF APPLICANT GROUP:		
Contact Names for Correspondence:	1.	2.
Position in Group/Organisation:		
E-mail Addresses for Correspondence:		

Please confirm which category you apply to:

1. urban areas and agglomerations with a population not less than 5000 persons,	<input type="checkbox"/>
2. rural areas with an area of not less than 4km ²	<input type="checkbox"/>

About your community:

Name	
Population	
Size – km sq	
Townlands included (please provide outline google map of area)	
Number of schools and are they registered with Green-Schools (if so, which theme)	
○ Primary	
○ secondary	

○ third level	
Significant/High Energy Users in Zone (recommend letters of support)	
Main employment in area	
SECTION 2: COMMUNITY INFORMATION (SCORED)	

To meet the ambitious targets of reducing emissions by over 50% by 2030 will require a whole of community approach. In acknowledging this Mayo County Council have put together a scoring sheet focused on

1. community track record,
2. an ambitious vision for 2030 and
3. proof of community structure and engagement to meet the 2030 vision.

1. Community track record (40 marks) Please answer with information from 2015 on only.	
a) Outline previous successful community projects (10 marks)	
1. Community awards eg. Pride of Place, other community awards.	
2. Community assets eg. Community centre, playground, community walks etc.	
3. Participation in previous Mayo County Council environmental and/or biodiversity campaigns eg. Cleaner communities, Community Action Fund, LAWPro.	
4. Registered with Mayo Public Participation Network (PPN)?	

b) Existing relevant environmental community plans (10 marks) <i>Please include relevant plans in application pack</i>	
1. Are you Sustainable Energy Communities (SEC), Renewable Energy Communities (REC), Energy Cooperatives or the	

Renewable Electrical Support Scheme (RESS).	
2. Do you have a SEC Energy Masterplan or other renewable energy plan.	
3. Do you have a Biodiversity Plan?	
4. Other relevant plans eg. Flood alleviation plan, climate action plan, carbon sequestration.	

c) Previous climate action projects (20 marks)

Provide details on previous climate action projects. Highlight if the project was a success and give metrics to prove success. If project was not as successful as envisaged please provide details as to why.

Examples of projects to include:

- Better Energy Community Projects
- Community Energy
- Carbon sequestration
- Climate adaptation measures eg. Flood alleviation/prevention
- Smarter Travel projects
- Biodiversity
- Other

2. Vision (30 marks)

Each applicant will be required to set out a high level vision setting out how they imagine their low carbon community will look in 2030.

10 marks will be allotted for a standard vision, 20 for an ambitious vision and 30 ambitious and innovative visions.

Please begin with **In 2030** (max 500 words)

Tip: Use the expanded definition of a DZ below for ideas for your 2030 future

In 2030

We aim to document Mayo communities decarbonizing journey and so request your permission to share your vision on the Mayo.ie website and on other media?	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

A **Decarbonising Zone** is an area spatially identified by the local authority, in which a range of climate mitigation measures can co-exist to address local low carbon energy, greenhouse gas emissions and climate needs.

The range of policies and projects developed are specific to the energy and climate characteristics of the spatial area covered by the DZ. This can include a range of technologies and measures addressing electricity, heat, transport, building energy efficiency, carbon sequestration, energy storage, grid frequency/inertia etc.

A Decarbonising Zone should also address the wider co-benefits of air quality, improved health, biodiversity, embodied carbon, agricultural practices, sustainable land management, lower noise levels, waste, water, circular economy etc., and should integrate with smart data and ‘smart cities’ initiatives (as relevant).

A Decarbonising Zone can also explore the co-benefits of climate adaptation, and examine a range of local measures such as climate proofing, afforestation, green and blue infrastructure, reducing heat island effects, citizen awareness and behavioural change.

3. DZ team Structure (30 marks)

a) Collaboration of 3 or more established community groups.
Please name all community groups involved in the DZ application process

b) Evidence of community support through Letters/emails of support eg. From local school, church, sporting groups, businesses etc.

Please list the letters/emails of support here and include copies in application pack

c) DZ Committee – min of 5 people.

The committee should represent your community eg. Youth, business, community groups, large energy users, etc.

Please also highlight any community Expertise that will be assisting you with your DZ journey eg. Ecologists, energy engineers, project mgmt., climate champions, etc.

SECTION 3: ADDITIONAL INFORMATION REQUIRED (NOT SCORED)

Does your community have (please expand where relevant)?

Public Transport

Natural Gas connection

Fibre broadband connection

Wastewater Treatment Plant connection or Septic Tanks

Green and blue Spaces ie. rivers, lakes, parks etc.	
Agriculture (identify type ie. Beef, dairy, sheep, tillage, vegetable, other)	
Forestry (identify type ie. Amenity forests, urban forests, native woodlands, farm forests, upland and peatland forests)	
Wetlands/bogs	
Cycle/walk ways	
EV charging points (no.)	
Remote working hubs	
Public buildings in Zone	
Protected Areas eg. SACs, SPAs	
Local Area Plans	
Brownfield and former commercial / industrial sites	
Social Housing and/or fuel poor homes (provide no.)	
What is the Median BER of community (ArcGIS Web Application)	

INCOMPLETE OR LATE APPLICATIONS WILL NOT BE CONSIDERED.

Please submit your completed application form and any additional information by **email to:**
Laura Dixon, Climate Action Officer, Mayo County Council, ldixon@mayococo.ie

**Closing date for receipt of completed application forms is
4.00 p.m. on Friday 16th April 2021.**



Comhairle Contae Mhaigh Eo
Mayo County Council

Office Use Only:

Date Application Received: _____ *If eligible, Ref. No. assigned:* _____

Appendix 4 – Community Visions for 2030

*Each applicant was required to set out a high level vision setting out how they imagine their low carbon community will look in 2030. Each vision was requested to begin with **In 2030..***

Please find the applicant visions attached	Page
1. Achill	30
2. Ballina	31
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1. Achill (Shraheens, Pollranny (Lynchaghan) and Pollranny (Sweeney))

Awaiting approval to share vision

2. Ballina

Our Vision for Ballina - 2030



In 2030, Ballina aims to be a European exemplar for large scale de-carbonization and a model for the green transition.

Thinking Global, Acting Local

The EU plans to become the first carbon neutral continent by 2050, recognising that action and leadership must come from communities to achieve this. We believe Ballina can become a model for towns to de-carbonize by prioritizing local action within a defined framework.

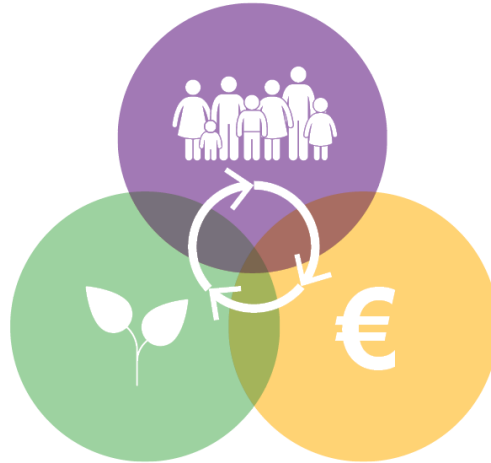
The urgency to respond to climate change has never been more present. In Mayo we are seeing yearly increases in flooding, storms and dry periods and a large reduction in the nature and wildlife on which we depend.

Working towards carbon neutrality needs an ambitious shared vision and collective action. We know change is needed. Ballina is stepping up to this challenge. We recognise our green ambition will bring social, economic and environmental opportunities for Ballina, we understand that the future is green and we will lead the way in this space.

Building the Future

Our vision is for a future where people are prioritized, where household energy consumers become energy producers, where nature blends with our town, is rejuvenated and thrives, where you are never more than 10mins by bike from where you want to be and where products and produce are produced locally and sustainability!

We will achieve this by working with and for our natural systems, with innovative energy solutions, rethinking our economy, re-imagining the way we live and travel and by working together.



Motivation through Inspiration

Ballina’s green ambition is inspired by amazing grassroots efforts in cleaning, greening and reviving the town and by the impact of advocacy by people like Mary Robinson on our community. Ballina Green Town brings together local stakeholders, responding to the urgency of the current situation and exploring ways to empower our community to individual actions while defining town-wide strategies and projects to achieve our goal.

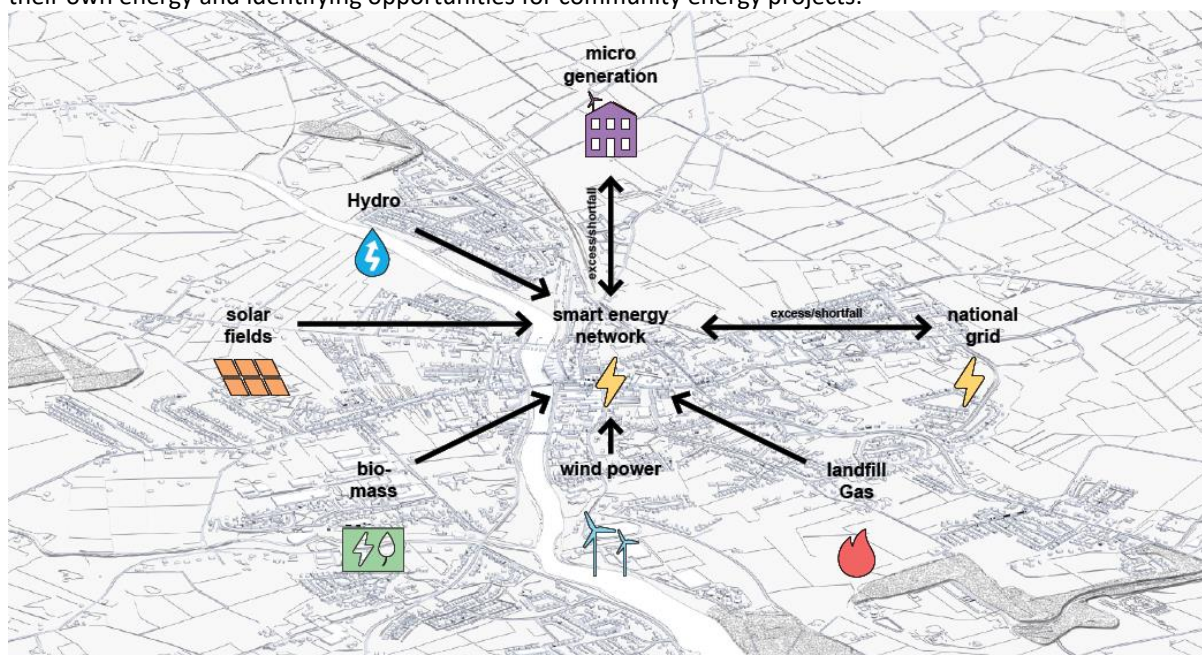
Strategic Action

Our vision includes five interdependent core areas - Energy, Mobility, Economy, Ecology and People. Each has a high level target and three strategies, reflecting best practice, tested methodologies and an understanding of the critical social-ecological systems relating to Ballina, prompting actions from the individual to town-wide.



Vision in Action

Ballina SEC is one such project, developing a plan for energy independence by 2030, engaging with Ballina Credit Union to provide a deep retrofit finance model for homeowners, working with large energy users to produce their own energy and identifying opportunities for community energy projects.



Aligning the Top-down with the Bottom-up

We know our transition to a green future means aligning our efforts from top-down to bottom-up.

We will create a 'green ecosystem', encouraging community activism, empowering and supporting grass roots pilot projects, providing a 'how to' toolbox of ideas, connections, resources and methods to get started.

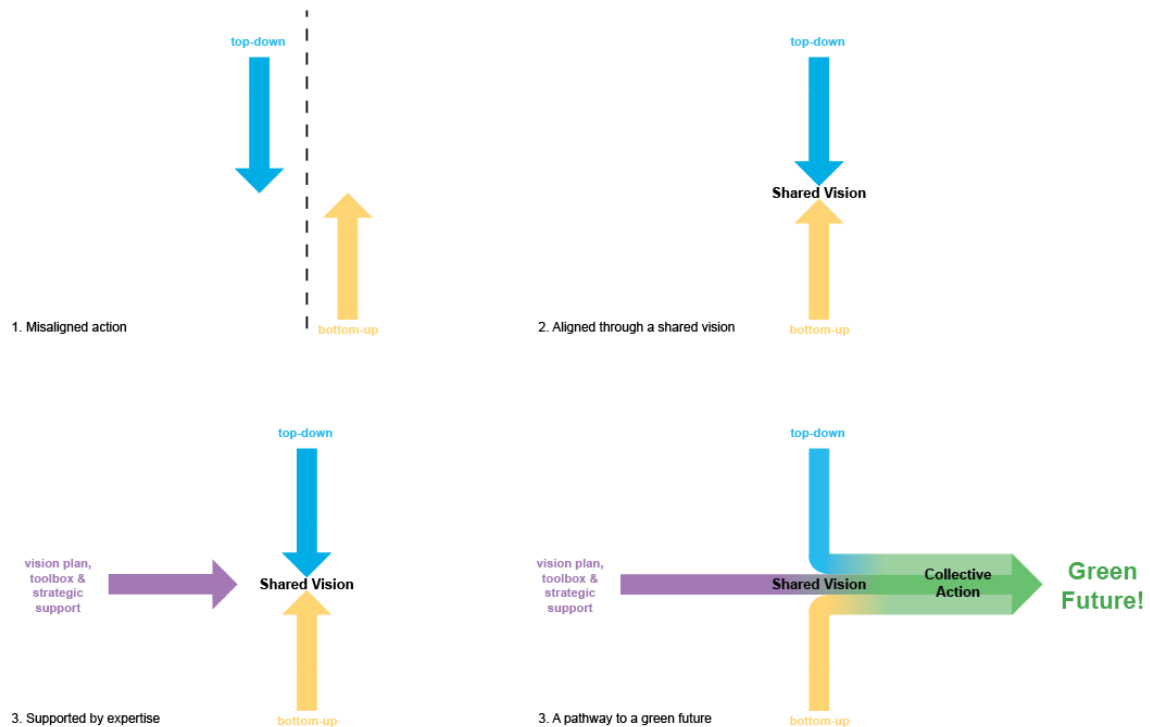
We will work with local authorities, government bodies and elected representatives to contribute to the vision. In July 2020 Ballina Municipal District passed a motion to adopt the goal of becoming Ireland's Greenest town by 2025 and to support initiatives to this end, including preserving a town centre green space as a public park and converting flat roof space in town into green roofs.

Collaboration is Key

Collaboration is at the heart of Ballina Green Town. We are working with schools, business, community groups, households and government, and believe everyone has something to offer.

On a specialist level, we're building a passionate team who have offered their time and expertise because they believe in our vision. This includes academic and research teams at UCD, the Centre for Irish Towns (CfIT) and NUIG, energy specialist Elgin and world-leading urban planning and infrastructure experts ARUP and MVRDV.

Our shared vision allows us to coordinate community ambition, policy, projects and expertise while keeping our goal in clear view.



Measuring Success

Measuring success is critical to our vision strategy. A data driven approach will measure our current situation and progress over time. Using GIS, a smart platform/app will allow us measure progress, give support and information and facilitate community feedback.

Ballina’s global climate champion Mary Robinson believes *‘history has shown, time and time again, that when we come together, we are capable of big things. Change happens when people collectively take action to make our world a better place.’* The principle of Meitheal - collaborating and putting people at the heart of the solution - has guided our approach to sustainable development in Ballina to 2030 and beyond.

Becoming Mayo’s pilot de-carbonization zone would be a huge boost in making this a reality.

New models for living



Connecting the Town



Energy Independence



Mixing People and Nature



Prioritising People



Re-imagining Mobility



Re-Engaging the Waterfront



Future Proofing the Town Centre



Activating Community Space



3. Breaffy

In 2030 Breaffy is a flagship ecovillage with a happy, healthy, enriched and sustainable community. As a result of the last nine years of cultivating social and ecological sustainability, coupled with everyday connection and cooperation, there has been immense positive benefits to each member of the Breaffy Community.

There are very little car journeys to the village with most children cycling or walking to school, the playground, village centre or the GAA pitch. People of all ages cycle or walk to Church and the hotel, shop and post office. We can now safely cycle widely within the county through the greenway network. Over the last nine years the development of these cycle and walk ways were one of the biggest drivers of ensuring that people have used the active transport and a reduced CO2 emissions. This has created social cohesion, a healthy and happy community and has dramatically reduced the environmental impact of vehicles. Most families use electric cars for longer journeys and engage in community wise lift sharing. There are multiple solar charging points for Electric Vehicles in the Village.

We have a large natural indigenous woodland and biodiversity park with community gardens which has greatly reduced waste and packaging encouraging healthier lifestyle. Rewilding with animal and insect friendly gardens and sweet meadows are a common sight in Breaffy where locals have dedicated areas of their garden and farmland to wildlife. The community wide educational campaigns have led to eco-friendly planting of more trees and not using pesticides. Breaffy is now an upcycling and a recycling community where there is sharing of resources from the centralized area in the village. These - include lawnmowers, strimmer's and hedge cutters.

Breaffy Community is a flagship for a healthy whole food plant-based community, with very little childhood and adult obesity, and its community members have a significant reduction in lifestyle illness such as stroke, heart disease, diabetes and certain cancers. There has been a dramatic reduction in the amount of meat consumption, which has benefited the CO2 emissions but also the health of the community. The Community wide approach to healthy plant based sustainable living includes local farmers market for produce every Saturday in the village centre. Breaffy community plays a pivotal role in "*Social Prescribing*", and this been proven to reduce stress and improve mental health

and physical wellbeing.

The homes in Breaffy are warm, cosy and sustainable. The older houses are retrofitted with insulation, are of passive standard or use a sustainable more efficient heating systems such as geothermal or air to water. Photovoltaic panels, solar panels or windmills power the houses, and rainwater harvesting systems are commonplace.

The Old Breaffy Business Centre is now renamed “Breaffy Green Enterprise Centre”.

There is high speed broadband throughout the community, so people can easily and happily work remotely and there is a significant reduction in use of cars to travel and which has led to a significant reduction in CO2 emissions.

The energized and empowered community openly share their learning and experience with other communities.

Local business's now run all electrical vehicles, have paperless offices and staff cycle to work, carbon emissions have been offset as the local community no longer cut peat and have successfully rewet their bog lands afforestation has been implemented in a number of areas, which all adds up to create a carbon neutral lifestyle for the inhabitants.

There is a huge emphasis on education in relation to greener living & lifestyle, the local school has embraced this , every child is growing up to know how important living in a sustainable community is, they are keen to improve, live & strive to have a brighter, happier & healthier future.

The community has thrived after successful selection as a decarbonising zone over the last 9 years, Breaffy and its inhabitants have proactively engaged and thoroughly embraced all aspects. Through our initiatives renewables were a key focus as we believe we have a ten- fold energy benefit in comparison to retrofitting, and believe we have met and exceeded the objectives and key targets set out by the local Climate Action Regional Office.

4. Claremorris

In 2030 Claremorris is a vibrant, beautiful, progressive, successful town. We have green cycle ways through the town, pedestrian walkways, beautiful open parks, vehicles running on renewable energy, children pushing the limits of what can be and a more sustainable community for the future.

In 2030, over 90% of Claremorris's heat demand is in buildings. Despite a possible 12% reduction in heat in housing predicted by 2030 due to energy efficiencies, the overall heat demand has grown by 14%, driven mainly by industry. In 2030, working with Tipperary Energy, Claremorris have retrofitted 50% of the larger buildings and 65% of older house dwellings utilising heat pump ready technologies and Green gas heating systems.

In 2030, Claremorris has a network of underground hot water pipes running to energy users known as district heating. Designed in 2018 with Mayo County Council, Claremorris supplies heat from a centralised renewable heat source to heat consumers, enabling the large-scale substitution of the incumbent individual fossil fuel based heating systems. The network reaches out to the Primary Care Centre (piped ready in 2017), Mayo County Council offices, Claremorris National School and Claremorris swimming pool. It serves over 80 social housing recipients, eliminating fuel poverty. With supported from GMIT's iSET research group, Tipperary Energy and the Irish District Heating Association, the project reduces the CO2 emission from all buildings by over 62% on an annual basis, utilising the heat pump at times of low CO2 intensity electricity, optimum use of thermal storage and utilising hydrogen/bio methane.

In 2030, the Claremorris farming community share a vision of a fully integrated, agriculture led, on-farm sustainability approach to the decarbonisation of the Irish food supply chain. Based on circular bio-economy, farmers produce indigenous bio methane decarbonising thermal heat processes, commercialise its by-product, digestate producing organic fertiliser, replacing synthetic fertiliser and monetizing of the quantified soil carbon sequestration on their farms. Complying with the Paris Agreement, EU Green Deal, Biocircular Economy strategy, Farm to Fork strategy and AG-Climate, they have achieved emission reductions, displacing over 3,000t CO2 per annum. Claremorris town benefits from carbon labelling, reusable degradable packaging while larger companies access sustainable, taxonomy-aligned finance. People benefit from enhanced biodiversity, water and air quality.

In 2030, Claremorris working with Mayo County Council, produce renewable electricity from two 5MW solar parks (one the old land fill site), costing over 10 million euro, having received planning in 2020 after four years of intensive work. Claremorris is the only town in Co. Mayo with two solar parks, 100% community owned. In 2030, Claremorris have installed solar panels on building roof, displacing over 650,000 metric tons of CO2 per year per GW of total solar power which is the equivalent of removing over 130,000 cars from the road yearly, or planting approximately 17 million trees per year.

In 2030, Community Energy is one of the largest community energy companies in the EU and a model for community based renewable energy roll-out. The organisation is a renewable energy commodity trader, trading renewable electricity, renewable gas and carbon credits. Claremorris as one of its founders leads the drive for decarbonised zones, selling power nationally to all communities. Community Energy finance, now funds community projects all over Ireland.

In 2030, the evolving progression of inquisitive students will trade the “Carbon Coin” currency. Each coin equates to a carbon saving from transport/heat/electricity, which is financially tradeable as a commodity. Sponsored by the Co-Op and the town community, the initiative will promote carbon awareness. Working with RealSim, Claremorris have an interactive 3D model of Claremorris highlighting in real time the quantitate savings in energy usage and CO2 emissions. The model is a leading education tool in Ireland for communities, leading by example,

In 2030, Claremorris will be generating its own hydrogen. As a combination of surplus electricity from solar and bio methane. Working with NUIG and supported by the towns Irish magazine “Fleet”, Claremorris will become the town of “*alternative fuels*” for the transport sector.

Adapting to, and embracing change requires a vision of the future to overcome inertia of how things were done in the past. Claremorris started on its decarbonising journey in 2015. **All the above** are ambitious and innovative visions, yet the goals are real. Presently recognized as one of the leading energy communities in Ireland, Claremorris are best placed to lead by example, decarbonising Europe. In the absence of a **real and honest vision**, we just fall back into the inertia of how things were at the expense of the environment, time and generations to come!

5. Crossmolina

The meaning of community has been resistant to a satisfactory definition, but we would see it as a group of people with the ability to make decisions and follow through with actions to achieve goals and in Crossmolina we have these attributes as it has a strong sense of community. We intend to exploit every opportunity in relation to decarbonisation and are confident the community will play their part.

Visions:

- Renewable energy will be applied on a small, localised scale with increased community ownership rather than corporate ownership. This can be achieved by projects such as putting solar panels on community buildings. Renewable energy use will have expanded by generation at appropriate locations.
- We will focus on identifying ways that our community can engage in actions that lead to reductions in Green House Gas emissions, e.g., by switching to Electric Vehicles. Energy transition will be important with the escalation of the replacement of fossil fuels by current and future renewable technologies.
- We expect that buildings will become more energy efficient through retrofitting of older buildings to achieve a B2 BER/ cost optional equivalent or carbon equivalent. This will also apply to new builds. Most if not all houses will have heat pumps.
- Our flood relief plan will be in place ensuring that there will be flood risk management and we will avoid inappropriate development in areas of risk of flooding.
- The Community will have a sustainable water management solution, such as Sustainable Urban Drainage, non-porous surfacing and green roofs.
- The Community will have an Energy Master Plan which will determine how much energy we are using, and this will provide us with an energy efficiency roadmap for the area. Sustainable Energy Communities (SEC), Renewable Energy Communities (REC), Energy Cooperatives or the Renewable Electrical Support Scheme (RESS) will provide an enabling framework for community participation in renewable and low carbon energy projects in the area.
- Other community projects will involve developing initiatives on energy efficiency, sustainable transport, locally grown food, encouraging more sustainable lifestyles and livelihoods through to community-based waste reduction and re-cycling efforts.
- Carbon capture will be enhanced by the promoting the expansion of the community's carbon sequestration in the bogs and forests of the area. This will include re-wetting and restoring peatland areas, biodiversity protection and enhancement, expansion of carbon sinks and continued afforestation and tree planting measures. The Bog Complex, in the Eskeragh/Bellacorrick area, following the cessation of peat extraction,

is now host to a large wind farm and it is also subject to a comprehensive rehabilitation programme.

Community led projects have been shown to often have a greater ability to engage and empower local actors and stakeholders than top-down initiatives. We understand that understanding social attitudes and developing clear narratives and mechanisms for social change are critical in building support to achieve climate change policy objectives in our community.

The Crossmolina Community Decarbonising Zone will also have addressed the wider co-benefits of air quality, improved health, biodiversity, agricultural practices, sustainable land management and noise levels.

6. Kiltimagh

In 2030 Kiltimagh will have embraced a pathway towards greener living. Our 6 ½ acre green heart in the centre of the town will act as a hub where existing walking and cycling routes meet, enabling the park to serve in providing a safe environment for our community to meet and enjoy nature and the biodiversity that surrounds us. The outdoor classroom will be located across the road from the national school and parents will use the walking/running track before and after their childrens school.

Our new velorail will serve as an environmentally friendly tourism hub that allows visitors to experience the wonderful views surrounding Kiltimagh while enabling all the family to participate in the experience.

The bogs that surround the town will have been rewet and the new habitat will become a haven for wildlife and visitors who will experience the full myriad of benefits that encompass a community who embraces nature.

Local enviro industry companies like HONE will have finished their PV park which will provide power to the Cairn business park . Genfitt and CMS peripherals will have reached their net zero target through self auditing at the outset and bringing simple effective principles into the workplace that has resulted in them gaining greater share in their perspective markets as green businesses and technology form the basis of the global investment revolution that has taken place.

Transport was one of the first infrastructural assets that underwent change. The town was audited and created a geo fence soon after winning the DZ project. This enabled docking and charging points to form a 5km radius around Kiltimagh with points located along and at the boundary of the network. By partnering up with new Irish companies the community were able to design a system that only worked on designated roads thus ensuring safety and establishing a network that enabled every registered user to dock within 500 meters of their destination. This was thanks to the huge network of secondary roads and country roads that existed here from a time when the bike, walking and horseback were the main transport methods. EV charging points will be located in the square and adjacent to Housing in the environs of Kiltimagh will have changed considerably . The Town will benefit from green power generated from its own wind farm located on Sliabh Cairn . Existing infrastructure had been constructed for earlier wind farms and the community won new community connection to the grid to construct a

wind farm that ensured the town had a supply of green electricity generated by wind. This coupled with the existing PV farm allowed the community to create a combined storage system using battery technology . The town had gone ' off grid ' so to speak a number of years ago and were now feeding in to the network and generating revenue for community projects.

Coupled with this was an innovative project by Mayo county council to ensure all brownfield sites in the town were either community spaces for the benefit of the community or developed into A rated buildings . The market square benefited from a covered structure that enabled a greater focus on community living and multi use space which became an outdoor market at the weekends focusing on rewarding local producers with a place to sell their goods and ensured the community did not feel the need to leave the town to purchase shopping. In summary the town centre will have become repopulated. The resulting reduction in short haul trips for school runs, convenience shopping etc has made a huge reduction in carbon emissions.

The community has embraced the now well known theory of forest bathing and native trees have been planted throughout the public spaces in the community as well as an initiative to plant private lands within the town boundary.

The council reviewed its housing and land stock in the area and committed to retrofitting all its buildings as well as maximizing its land stock towards decarbonizing.

Because of the peaty nature of Kiltimagh and its environs a new agricultural practice has really taken hold. Paludiculture, which is the practice of crop production on wet soils, predominantly occurring on peatlands. In conventional agriculture, many peatlands are drained to enable e.g., grazing of cows. Unfortunately, drainage causes a myriad of problems, such as land subsidence and increased flood risks. This was recognised by the DZ committee and EU funding was sourced to create a circular economy and improve local habitat.

Farmers also adapted their farms to grow a new multi sward crop that fed into the Agri Biogas Plant established 7km away near Swinford. This resulted in reduced stocking rates, enabled landowners to work full time outside the farm and had huge environmental benefits.

7. Louisburgh, Killeen, Clare Island (LKCI)

Ethos

We are completely dependent on nature for our survival as a species; it provides the air we breathe and the food we need. More than that it provides context for who and what we are.

Ultimately our aim must be to create a world where we no longer need projects to protect the environment because we will have learnt to live in such a way that we no longer pose a threat to the planet or to ourselves.

Vision

In 2030 LKCI DZ will be an environmentally, economically, socially and culturally sustainable decarbonized zone. A zone that will serve as an integrated model for development and sustainability of Mayo's rural communities, offshore islands, and rich terrestrial and marine ecosystems.

Our vision is informed by extensive community consultation, and years of individual and collective actions to promote environmental awareness and climate change mitigation. It is founded on a commitment to a holistic, participatory, and all-sector, approach to decarbonization.

Predominantly rural in its make-up, Mayo boasts the longest coastline of any county and is home to some of the country's most important SPC's and SPA's. The LKCI-DZ encompasses this diversity of terrestrial and marine ecosystems, and the diverse agricultural, fisheries and corporate economies they support. Diversity brings with it a unique opportunity. The opportunity to consider multiple and oftentimes disparate challenges and opportunities facing decarbonisation in Mayo's diverse economies and ecosystems.

OBJECTIVES

- 50% reduction in carbon emissions from the LKCI-DZ and the marine and terrestrial transport systems uniting the area's townland and island boundaries.
- Widely representative, iterative decision-making processes for planning, implementing and monitoring, decarbonization projects and carbon reduction.
- Increased awareness and commitment to decarbonization among all sectors of the LKCI-DZ community.
- A robust circular economy, promoting and rewarding carbon neutral farming, fishing, tourism and trade.
- Unique participatory digital media record and online dissemination of decarbonisation process

Actions

By 2030 projects addressing a wide range of practical, currently achievable, and forward-looking carbon reduction measures will have been operating for some time in the LKCI-DZ Community:

Carbon Reduction Measures

1. Retrofitting of domestic, community, commercial and farm buildings.

Objective: minimum of 10 buildings retrofitted in year one with annual 25% increase and all community buildings retrofitted by 2030. Pilot stage already commenced.

2. Increased adoption of carbon neutral, regenerative farming practices,

Objective: minimum 20 hectares per year increase in agroforestry and peatland regeneration. Several aspects already in hand e.g. Callacoon and Mullagh Native Woodland Projects.

3. Transition to EVs, cycle and public transport.

Objective: Terrestrial transport CO2 emissions reduced by over 50%; EV charging facilities readily available throughout LKCIDZ. By 2030 70%+ of island car imports EVs. completion of integrated Greenway/Blueway corridor throughout the DZ.

4. Research and innovation for just transition to carbon neutral marine transport scheme.

Objective: LKCIDZ participating in the promotion of collaborative research and innovation for just transition from fossil fuels to renewable or hybrid energy sources for marine transport and working vessels

5. Reduction of transport for food and feed

Objective: 50%+ self-sufficiency in organic local vegetables, meat, dairy and fish products and animal fodder. Already commenced.

Carbon Sequestration Measures

6. Network of new native woodland projects managed to secure the optimum level of carbon capture and biodiversity, through continuous cover forests.

Objective: minimum 20 hectares annually giving 200+ hectares by 2030. This project has already commenced. (Appendix 13)

7. Bog regeneration,

Objective: Minimum 20 hectares per year giving 200+ hectares by 2030.

8. Agroforestry with trees and grazing animals, e.g. sheep and widely spaced appropriate pioneer species.

Objective: Minimum 25 hectares annually

Renewable electricity production

9. Microgeneration using hydro, wind and solar renewable energy sources. Objective: LKCI-DZ 75% of local electricity needs met by Community owned energy company, generating 5MW per annum, supplying surplus to the national grid

10. Community participation in large scale onshore/offshore renewable energy generation project(s). Objective: construction commenced by 2030, with significant shareholding by LKCI-DZ (Appendix 15)

Waste reduction and local management

13. Reduce waste and related transport and disposal.

Objective: Increased community awareness and commitment to reduce waste through considered purchase, home composting, brown bin system and recycling.

Monitoring and Dissemination

14. Education will play large part in programme; with schools, transition year projects, adult night classes and in person and online courses. The Mayo LKCIDZ is known around the world. Through the widespread dissemination of its unique audio-visual recording of the ten-year transition to a carbon neutral economy.

8. Mulranny

In 2030 Mulranny will be an empowered community, with a low carbon economy, living in a thriving biosphere. Mulranny will promote “diversity, participation, collaboration and reciprocity, with strengthened community networks, a spirit of high trust, and care for community wellbeing” Raworth et al, 2020. Mulranny will have a [social solidarity economy](#) where “ordinary people play an active role in shaping all of the dimensions of human life: economic, social, cultural, political, and environmental”, Intercontinental Network for the Promotion of Social Solidarity Economy, 2021. Mulranny will have achieved a defining decade of measurable climate action, having progressed the [United Nations Sustainable Development Goals](#) within the life-supporting [planetary boundaries](#) of the biosphere.



Planetary Boundaries, source: Skokholm Resilience Centre Sustainable Development Goals, source United Nations

a. Participative Democracy Network:

Having invoked the spirit of [Meitheal](#), or cooperative, and building on the co-creative methodologies of the [Greenplan©](#), [Sustainable Energy Communities](#), [Mayo Community Futures](#), and [Geodesign](#), the whole community will have mobilised to take climate action, under a “Mulranny Cooperative” or “Meitheal Mhala Ratiné” banner. Mulranny Community Futures and affiliated community groups will have advanced the cooperative form, [the 7 cooperative principles](#) and the [viable systems model](#) to extend democratic participation, and distributed leadership, based on the one member one vote principle. The community will have access to smart buildings to support collaboration, cooperation and enterprise. Mulranny will work in a spirit of open design with other [Sustainable Energy Communities](#), Decarbonising Communities, [Mayo Community Futures Network](#) and the [Mayo Public Participation Network](#).

b. Flagship Community Energy Project:

Anchor Institutions, [Mulranny National School](#) and [Saint Brendan's Village](#), will benefit from 100% renewable solar power and a [community owned](#) 8-10 MW Agro-PV farm will power 2,000 homes, contributing to climate action and Mulranny's community wealth fund.

c. Social Solidarity Economy:

Homes will be refitted for energy efficiency. Mulranny's anchor institutions, [Mulranny National School](#) and [Saint Brendan's Village](#), will have benefited from concerted community effort to reduce their carbon footprints and expand their educational and social care ambitions.

Mulranny will have expanded on the [gift-of-hands](#) upcycling social enterprise model, and built a community-centric, circular, community wealth building, economy, to support community-led local development and a [just transition](#). A regenerative tourism network will have emerged around community, creativity and conservation-based eco-tourism enterprises. Mulranny Park Hotel and Nevin's Newfield Inn will lead our private sector transformation to net zero-carbon.

d. Procurement:

Mulranny has ecological impacts beyond its borders, due to consumption. [Ireland's Earth Overshoot Day](#) for 2021 is estimated to be the 27th of April, meaning that Ireland uses the resources of 3 planets per year. Using the [Greenplan©](#) Sustainable Development Procurement Policy Mulranny will interface with fair trade supply chains to ensure sustainably sourced materials and ethical treatment of workers. To reduce consumption Mulranny will "share, repair, reuse, restore and regenerate" Raworth et al, 2020.

e. Smarter Travel:

Transport needs will be reduced through remote working homes and hubs, while modes will be pedestrian, and cyclist-friendly, promoting health and wellbeing. Mulranny's 2021 community electric bike-sharing initiative will have evolved to include electric car-sharing, while the transport fleet migrates to electric models.

f. Regenerative Agriculture:

Mulranny's farmers will have advanced high nature value farming solutions, organic/traditional low input farming practices, agroforestry and smart carbon-reducing technologies through a Farming Cooperative, in partnership with [Wild Atlantic Nature](#) which targets Mulranny's uplands. Mulranny's extensive upland blanket bogs will be sequestering carbon. Abandoned farmlands will be relieved of invasive rhododendron and repurposed to dual-purpose Agro-PV. Saint Brendan's foundational horticultural project will have grown organically into a multifaceted, community food cooperative.

g. Biosphere:

Mulranny's biosphere will be gaining diversity and sequestering carbon through peatlands management, pollinator-friendly planting, native woodland planting and enhanced natural corridors. Alien invasive species will be in decline. Mulranny's coastline will be holistically managed as a living ecosystem, for recreation, biodiversity and climate resilience. Mulranny's night sky will be dark, illuminated by moonlight and the milky way. Mulranny will proudly promote Mayo's Dark Sky Park, UNESCO Biosphere Park and Nature Reserve dedicated to the Old Irish Goat

9. Tourmakeady

In 2030 Tourmakeady will be a zero-carbon sustainable energy community creating a healthier future for ourselves and our planet.

In 2030 Tourmakeady will be a shining light for decarbonisation in County Mayo, on the island of Ireland and in Europe. This modest sized rural village, situated between the Partry mountains and Lough Mask, will have achieved this through the success of a range of complementary climate mitigation measures to meet our targets.

The confidence we have for achieving this vision is based on strong Tourmakeady community buy-in, sound strategic planning capability and a real track record of achievement as a sustainable energy community (SEC) with our recently completed Energy Master Plan.

By 2030 our community will be successfully utilising a range of technologies and measures for green energy generation for electricity, heat and transport. This will be complemented by our highly energy efficient buildings, conservation of our carbon sequestration environment and utilization of energy storage solutions, net metering and smart grid technologies.

Our buildings

By 2030 more than 50% of our housing stock (412) will have achieved a BER B rating. From our Energy Master Plan (EMP) we know that 60% of all energy use in our homes is for heating and 86% use fossil fuels (oil and solid fuel) for heating. Since 2015 15.7% (63) of homes have had extensive energy upgrades. By 2030 an additional 35% or 125 homes will be retro-fitted utilising further rounds of the SEAI Community Energy schemes.

Community buildings and local businesses will have reached greater than 50% reduction in GHG emissions through the implementation of a detailed plan, based on stakeholder consultation and with the aid of our “Residential and non-residential Planners” accompanying our EMP.

Community Energy Generation

By 2030 we will have fully operationalized community hydro-electricity generation, producing approximately 165kW of clean electricity. This is equivalent to 25% of our

residential non-thermal electricity use. Our SEC will be highly experienced and have the necessary 'know-how' to work on large-scale community energy projects, leading to becoming a net exporter of energy.

In addition, a 'Social Energy' project, sharing energy generated by solar PV panels in our community residential estate, will allow energy to be traded between homes, leading to enhanced energy usage and social cohesion. This will be supported and expanded into a Smart Micro-Grid servicing local energy needs.

By 2030 we will have fully operationalized community hydro-electricity generation through at least four micro-hydro sites, producing a minimum of 165kW of clean electricity to replace at least €130,000 worth of bought in electricity per annum. This is equivalent to 25% of our residential non-thermal electricity use. This will give us the necessary 'know-how' to work on innovative community energy projects, through additional turbine capacity on other suitable water courses and exploration of wind and solar energy generation, making Tourmakeady a net exporter of clean energy. Our EMP noted a number of suitable potential locations for solar and wind energy, and by 2030 the feasibility of community-led sustainable wind farm development will have been examined, utilising the Renewable Electricity Support Scheme.

Smarter travel and work

Walking, cycling and public transport accounted for less than 3% of total commuting to work and less than 6% of commuting to school (EMP) in 2019. In 2030 our transport will have been transformed through expansion of our paths for walking and cycling, use of the bike to work scheme, our schools and community groups support a "Park & Walk or Cycle" initiative, a community e-bus for local needs, multiple e-charging points and conversion to electric vehicles. Remote working will have expanded greatly, and a new gGteic with hot-desk broadband will be functional. Local jobs and income will be enhanced through the JCWL UNESCO Global Geopark. Total final consumption of transport will have reduced by a third from 2019, and an 80% reduction in CO2 transport emissions.

Life in Tourmakeady in 2030

Our children and adults will be informed citizens, empowered with the knowledge and skills to make life-style choices that respect our environment, mitigate climate change and promote biodiversity and wellbeing. Our schools and youth organisations will lead zero emission campaigns, embracing technology-based solutions to increase awareness of energy consumption, our carbon footprint and opportunities to become 'prosumers' of clean energy. In appreciation of our biodiversity and carbon sequestration ability of our uplands and woods, we will advance both traditional and innovative nature-based solutions to protect our biodiversity and develop circular economy initiatives in trade and craft skills. All these measures will improve the health of our community, with reduced risk of chronic illnesses and enhanced sense of social cohesion.

References/ guiding documents

- Sustainable, Inclusive and Empowered Communities A five-year strategy to support the community and voluntary sector in Ireland 2019-2024 (Dept of Rural & Community Development)
- Rural Development Policy 2021-2025 – Our Rural Future (Dept of Rural & Community Development)
- Draft Mayo County Development Plan 2021-2027
- Climate Action Plan 2019 (gov.ie)
- EU 2050 Long-term strategy – European Green Deal
- Renewable Electricity Support Scheme (RESS) (www.SEAI.ie)
- 'Ag Climatise' National Climate & Air Roadmap for the Agriculture Sector (Dept of Agriculture, Food and the Marine)
- Joyce Country & Western Lakes Global UNESCO Geopark Project (www.joycecountrygeoparkproject.ie)

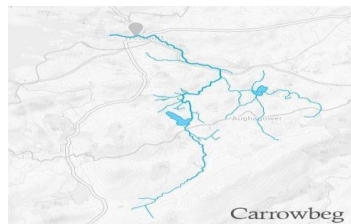
10. Westport



Westport DZ Vision

Westport is inextricably linked with the landscape in which it is embedded, from the slopes of Croagh Patrick, to the islands of Clew Bay and the rolling drumlins of Westport's wider hinterlands. Our vision for Westport 2030 is deeply rooted in that landscape and our decarbonising tale can be told via the three rivers whose catchments we have used to define Westport's Decarbonising Zone: The Carrowbeg, the Moyour and the Owenwee.

These three river systems, which flow through distinct urban (Carrowbeg), rural (Moyour), and wilderness (Owenwee) areas, will guide us on our path towards a low carbon community. All three rivers present their own unique challenges and opportunities, but together they form a microcosm of what Mayo, and Ireland, faces as we attempt to reduce our carbon emissions by at least 51% by 2030.

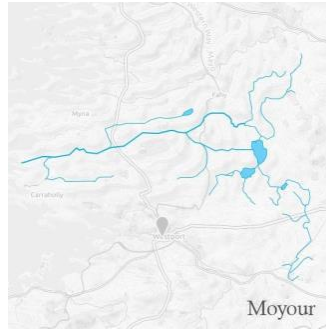


The Carrowbeg River, flowing as it does through the heart of Westport Town and into the sea at Westport House, represents the transition of Westport's urban area to a low-carbon circular economy, where the everyday demands of human activity must be balanced to match the available natural resources.

Our Energy Masterplan has ambitions to decarbonise the electricity grid and quadruple the amount of renewable electricity generated within our community. The equitable distribution of this community-generated energy, in tandem with retrofitting homes and district heating systems, will ensure a just transition for all the people of Westport.

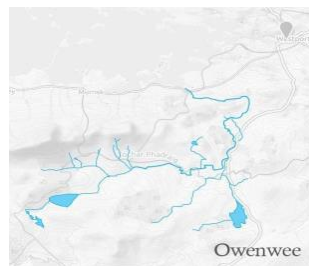
The implementation of a sustainable transport system is outlined in our 15-Minute Westport concept, which envisions a healthy, vibrant and liveable town where people's everyday needs can be met by a 15-minute journey on foot or by bicycle. Our local active travel network will intersect with a reliable, convenient public transport service which will connect our community with the wider region. Ecotourism and food tourism will be the foundation stones upon which the recovery of Westport's hospitality industry will be built. Just as our pioneering Greenway has inspired others, Westport's embracing of ecotourism will inform and educate the many visitors who come here every year. Westport's transition to a circular economy will be underpinned by an education system providing the

skills and knowledge necessary to sustain it. This skilled workforce will be harnessed by the local industries who are supporting and embracing our efforts to decarbonise.



The Moyour River runs west through the rolling drumlins and farmland of Kilmeena. The Moyour's catchment could become an exemplar for how we can support and enable a just transition to nature-based and regenerative farming models which ensure a viable and rewarding livelihood for farmers. Through learning from and working with local farmers, results-based farming systems can be adopted which reward farmers for working with and enhancing nature. Successful Irish examples of systems which can be adopted include the High Nature Value scheme - pioneered in the Burren - and the Pearl Mussel Project.

The Owenwee is the wild river of Westport's decarbonising zone where our approach will be to restore and rewild the natural landscape where possible, creating a biodiverse habitat which supports native flora and fauna.



The Owenwee Bog presents an opportunity to develop a large carbon sink, but its restoration must take into account the local people who have relied on its peat as a fuel source. The bog's successful regeneration is dependent on ensuring those people are aided in adapting to renewable energy sources and energy-efficient homes.

Clew Bay is the final destination of our waterways and our efforts to enhance the rivers will be reflected in the water quality and biodiversity of the bay. Other projects to enhance Clew Bay's function as a carbon sink will include protecting and restoring seagrass areas and regenerating coastal habitats such as Bertra Beach.

Waterways are the backbone of our ecosystem and our relationship with, and reliance upon, them is a cornerstone of our cultural heritage. Our path to a low carbon community will involve us rediscovering that heritage and harmonising our human activities with the natural cycles upon which we ultimately depend. By using our local rivers as ecological indicators we will form a feedback loop wherein what's healthy for the rivers is healthy for the community and vice versa.

Just as tributaries gather to become rivers, Westport's people, community organisations and businesses are now coming together for the common purpose of decarbonising our community.

Westport is primed to become a national leader in climate mitigation and we are eager to begin our journey towards Net Zero Carbon.

Appendix 5 – Mulranny DZ area



Comhairle Contae Mhaigh Eo
Mayo County Council

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Mayo Decarbonisation Zone - Map of Application Zones Zone Name: Mulranny

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