

Baseline Evidence

Summary Report

Local Authority Climate Action Plan

JULY 2023

KERRY COUNTY COUNCIL



Introduction



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Climate Change – The Challenges Ahead

Climate Change is the defining social, economic and environmental challenge of our time. Projections of future global and regional climate change indicate that continued emissions of greenhouse gases (GHGs) will cause further warming and further changes to our climate leading to increased risks to people and nature.

In line with International and European visions of a climate resilient future, Ireland has now committed to a transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy by 2050. This “national 2050 climate objective” has been made into law by the Climate Action and Low Carbon Development (Amendment) Act of 2021.

Ireland has since progressed to publish its first carbon budgets in 2021, sectoral emissions ceilings in 2022 and its latest National Climate Action Plan in 2023 (CAP 2023). Climate action and planning for climate change is now driving public policy across all sectors such as electricity, transport, agriculture and how we build into the future.

Purpose of this Report

Local Government has been identified as a key player in leading climate action particularly at a local, community-based level. Local Government is set to lever support and resources to deliver effective climate action from the ground up. This will be plan-led through a *Local Authority Climate Action Plan* (LACAP) to be developed by every Local Authority in the country. These plans will be adopted by Elected Members in 2024 and last for 5 years.

This *Baseline Evidence Summary Report* provides information on how Kerry County Council has commenced this LACAP plan making process. While Kerry County Council has, for some time, been actively implementing a range of actions across various functions and services to tackle climate change, the development of the LACAP will ensure a coordinated local response to climate change and bring together critical stakeholders across local government, communities, and businesses to build a vision for a climate neutral and resilient future.

As we prepare the plan over the following months, we are seeking your views on how the Climate Action Plan should now evolve.

We want to hear your reviews and would value your thoughts on these questions:

1. In your opinion how should Kerry County Council influence and support communities to mitigate climate change and move towards decarbonisation?
2. In your opinion how should Kerry County Council influence and support communities to adapt to the impacts of climate change and become resilient?
3. Can you suggest actions to be included in the Climate Action Plan for County Kerry?
4. Do you have any issues, suggestions or recommendations that you would like to see added to the Climate Action Plan for County Kerry?

Submissions and/or any other comments or thoughts can be made via:



<https://consult.kerrycoco.ie/en>

Kerry - A County Profile

County Kerry is located in the southwest of Ireland. The administrative area of the county covers an area of over 4,807km² and is the second largest county in Munster. It adjoins Cork to the east and Limerick to the north. Kerry has a population of 156,458 spread across five administrative Municipal Districts. The population is accommodated in a network of attractive towns, villages and across its rural area. Many of these settlements have a high degree of self-containment, operating as significant local employment and service centres for large rural hinterlands.

Kerry through its geographical location has strong economic, educational, cultural and access links to both Limerick (Mid-West) and Cork (South-West), and this has been evident through Kerry's association with Limerick and Cork at various times through regional planning, tourism, and economic development bodies. Links to Cork have recently been strengthened with the merger of Tralee and Cork Institutes of Technology to form the Munster Technological University.

Notwithstanding the county's proximity to the major adjacent urban metropolitan areas of Limerick and Cork, research undertaken as part of the recent adoption of the County Development Plan (2022) shows commuting workflow patterns indicate that Kerry residents remain largely dependent on economic activity within the county to generate employment opportunities. Indeed, the county has a strong internal economic core comprising of the linked hub towns of Tralee, Killarney and by extension Killorglin. All three form a knowledge triangle (Kerry Hub & Knowledge Triangle). Both Tralee, Killarney and by extension Killorglin offer a higher range of functions than similarly sized towns nationally, including the new third level Munster Technological University.

The county is also located within the *Atlantic Economic Corridor* region and on the *Wild Atlantic Way* tourism route. Both are drivers of economic growth and investment and build on the county's diverse range of landscapes, including extensive coastlines and uplands. Coastal areas contain culturally distinctive communities, notably Island communities, and form an integral part of the State's heritage – natural and cultural. Kerry, including the Dingle Peninsula, is internationally known as one of Ireland's premier tourist destinations.

Kerry has a number of International, European, National and local sites of ecological significance with corresponding environmental designations. The Natura 2000 network is a European nature conservation designation that aims to protect habitats and species that are rare or threatened across Europe. They are more commonly known as Special Areas of Conservation (SAC) and Special Protection Areas (SPA). Large areas of County Kerry are covered by these European designations as well as National designations known as National Heritage Areas (NHAs). Much of Kerry's biodiversity is found in farmland, be it within High Nature Value (HNV) farmland or within hedgerows and watercourses located in our farmed landscapes. Many sites of local ecological value occur across the county. Hedgerows, wetlands, watercourses, patches of woodland or semi-natural grasslands all act as stepping-stones within broader ecological systems and form an integral part of Kerry's famous landscape.



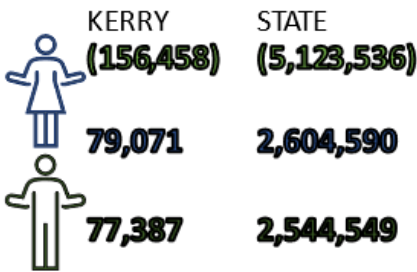


KERRY

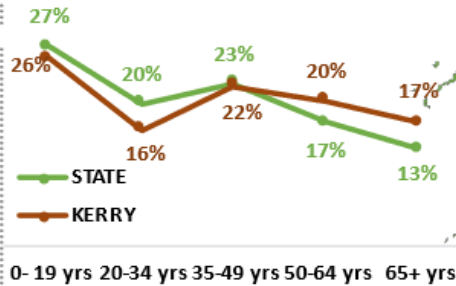
Census Data 2022 & 2016



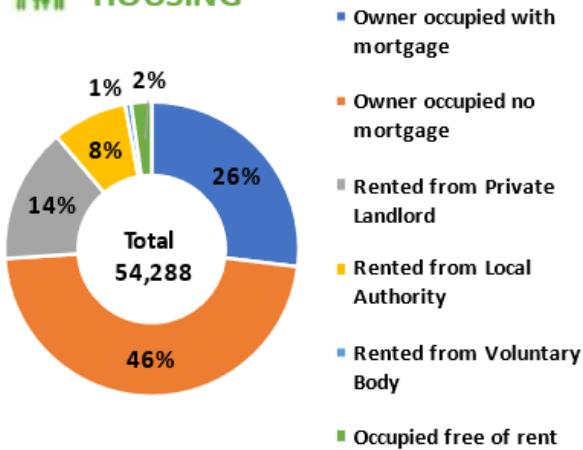
POPULATION



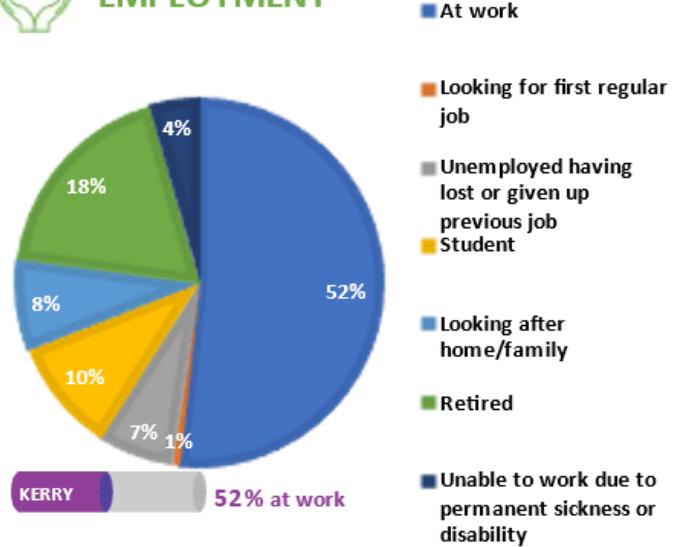
AGE PROFILE



HOUSING

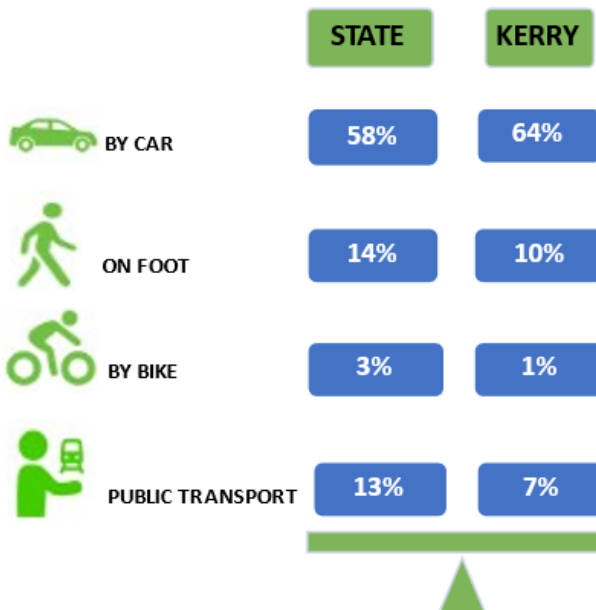


EMPLOYMENT

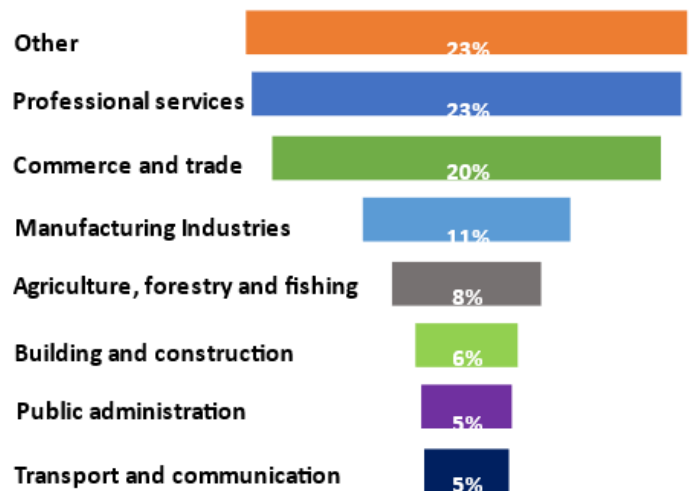


MEANS OF TRAVEL

To Work



WORKING PERSONS BY SECTOR



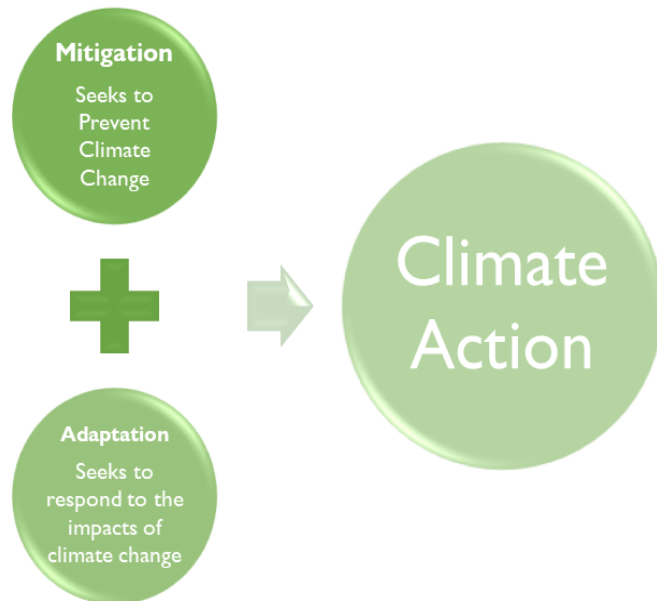
Climate Action – Why does Kerry need a Climate Action Plan?

What is Climate Action? Climate Action is seen as two integrated responses that society has to take to meet the challenges of climate change. **Mitigation** – where we reduce or cut greenhouse gas (GHG) emissions, and **Adaptation** – where we adapt to the “locked-in” future impacts of climate change.

Climate law in Ireland now requires each Local Authority to lead in Climate Action at county level through individual *Local Authority Climate Action Plans*

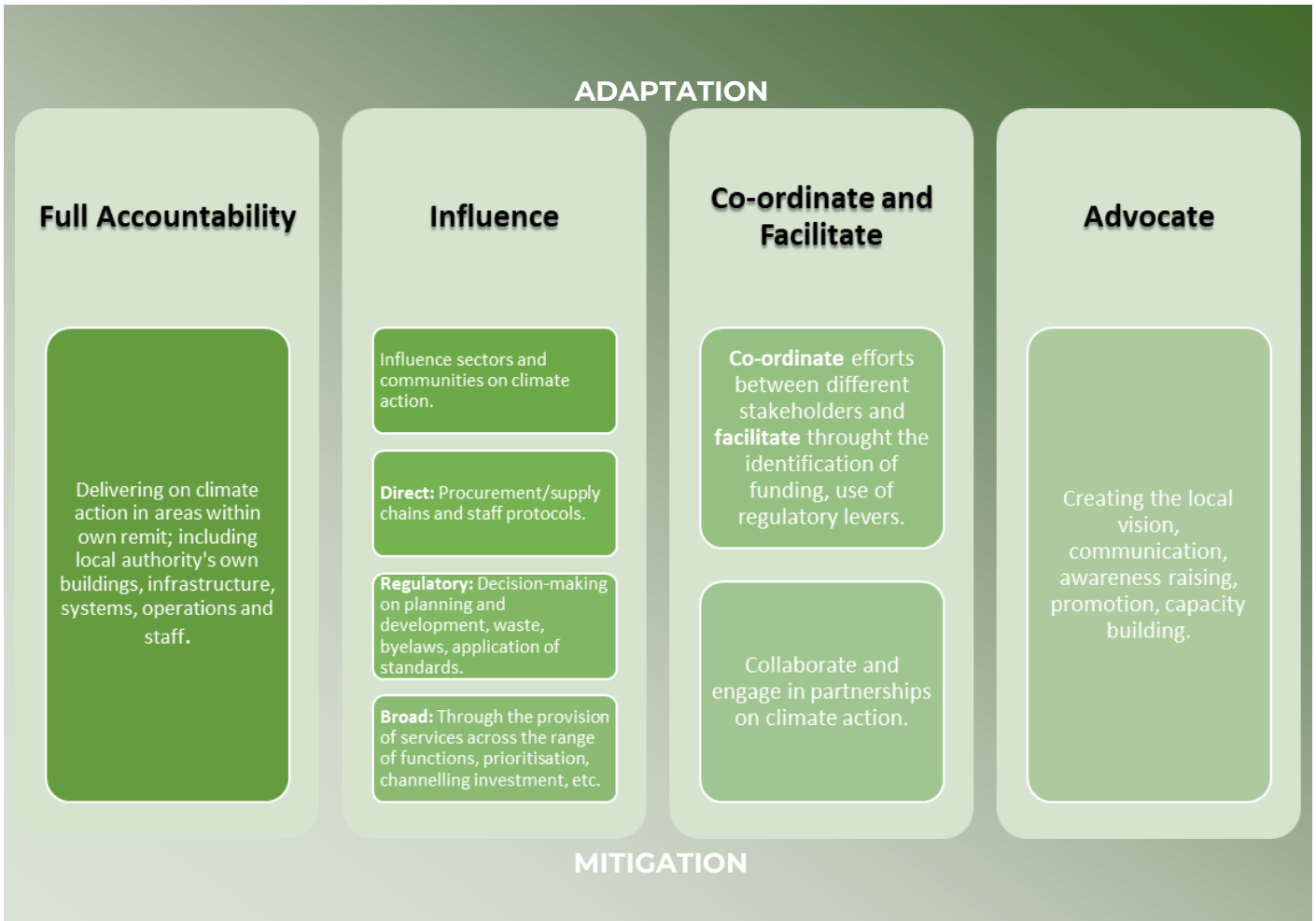
(LACAP). The LACAP is to be a

key instrument that strengthens the links between local, regional, national and international climate policy. The plan will need to deliver effective climate action at local and community level through place-based and evidence-based climate action. These statutory 5-year plans are to include mitigation and adaptation actions that ultimately provide pathways to achieve a decarbonised society.



The Scope of Kerry’s Local Authority Climate Action Plan

In March 2023 the Irish Government provided guidelines to Local Authorities on what the LACAPs should include and how they should be prepared. The guidelines acknowledge that LAs in their geographical areas account for a relatively small percentage of emissions of which they have full responsibility. However, the LA has other roles and functions in the community. LACAP will need to influence, co-ordinate/facilitate and advocate for climate action across business, agricultural, industry and the community.



The LACAP will be underpinned by the principle of a *just transition* – no one is to be left behind as we transition to a decarbonised society.

To inform the LA CAP, three parcels of work have already been undertaken and are further described in this report:

1. A **Baseline Emissions Inventory** (BEI) that details the current source of GHGs in the county,
2. A **Climate Change Risk Assessment** (CCRA) that evaluates the current and future climate related impacts and risks faced by the local authority and the local community, and
3. A specific **Decarbonisation Zone** (DZ) with BEI - a DZ is defined as an area in which a range of climate mitigation, adaptation and biodiversity measures are identified for key emitting sectors. Key emitting sectors are identified from a specific BEI for the DZ area.

Baseline Emissions Inventory



Baseline Emissions Inventory

Before we can reach emission targets we have to know where our emissions are coming from. We need a baseline in order to set targets for reductions. Each local authority therefore has to develop an understanding of the sources of Greenhouse gas (GHG) emissions in their area.

This process has been completed by Kerry County Council for the county. We now have baseline data measured in % of KtCO₂-eq (Kilotons of Carbon Dioxide equivalent) on emissions from:

- 1) services/infrastructure directly under the control and remit of KCC,
- 2) other sectors in the county, and
- 3) within our identified decarbonised zone of Corca Dhuibhne/Dingle Peninsula.

Having this information will allow a focus on mitigation/adaptation efforts and application of best practice actions to directly reduce emissions from specific sectors. Monitoring progress in reaching our target will also need to be tracked. This will be an important aspect of the plan at implementation phase.

1) Kerry County Council Emissions

The Baseline Emissions Inventory provides information on the GHG emissions from Kerry County Council's own energy consumption. The emissions baseline has been developed from the local authority's 2016-2018 emissions and is shown in

The target for Kerry County Council in the Local Authority Climate Action Plan (LACAP) is a 51% reduction in GHG emissions. Baseline emissions for the local authority show this reduction relates predominately to thermal (Heat) and transport emissions. The gap to target model provided by the Sustainable Energy Authority of Ireland (SEAI) shows that Kerry County Council needs to achieve a reduction of 2.529 KtCO₂-eq (2,529tCO₂-eq) by 2030 as shown in Figure 2.

To meet this target Kerry County Council will need to change and adapt the way its buildings are heated and the way its fleet is fuelled. Electrification, as an example, is not currently a viable option for the larger machinery/vans within the council's fleet.

Pathways to reach targets will be further explored and actioned in the Local Authority Climate Action Plan (LACAP).

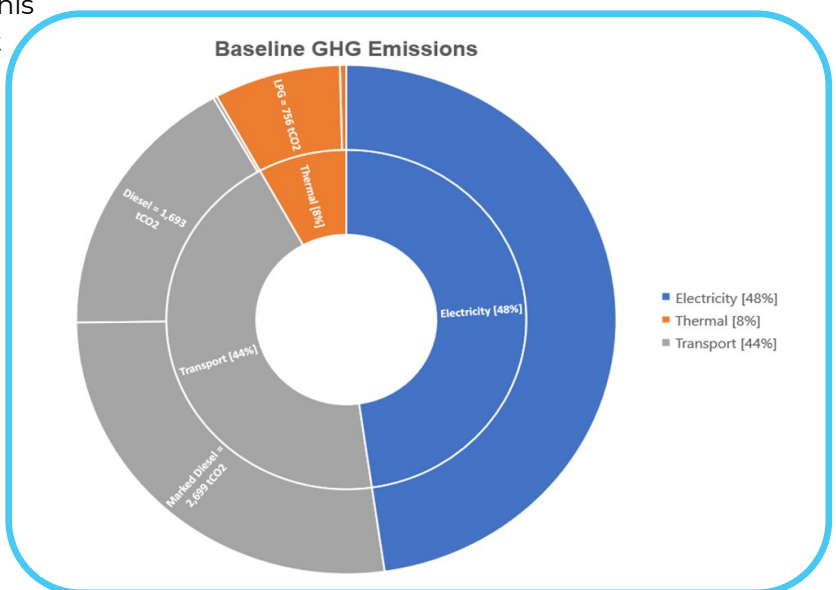


Figure 1. BEI for Kerry County Council based on 2018 baseline data.

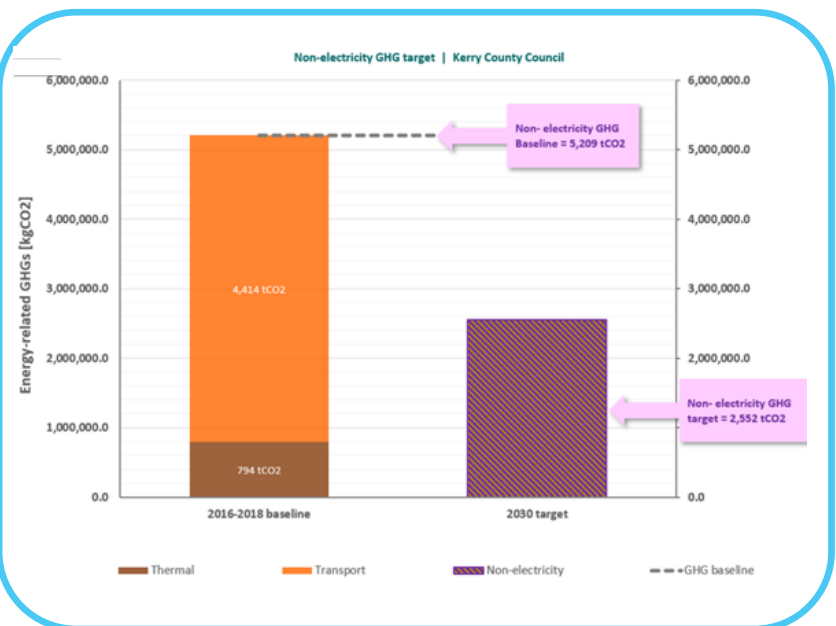


Figure 2. The **gap to target** analysis showing the reductions required by Kerry County Council.

2) County-Wide Emissions

Using a range of data sources prescribed by national guidelines, Kerry's overall county emissions have been measured and are identified below in Figure 3.

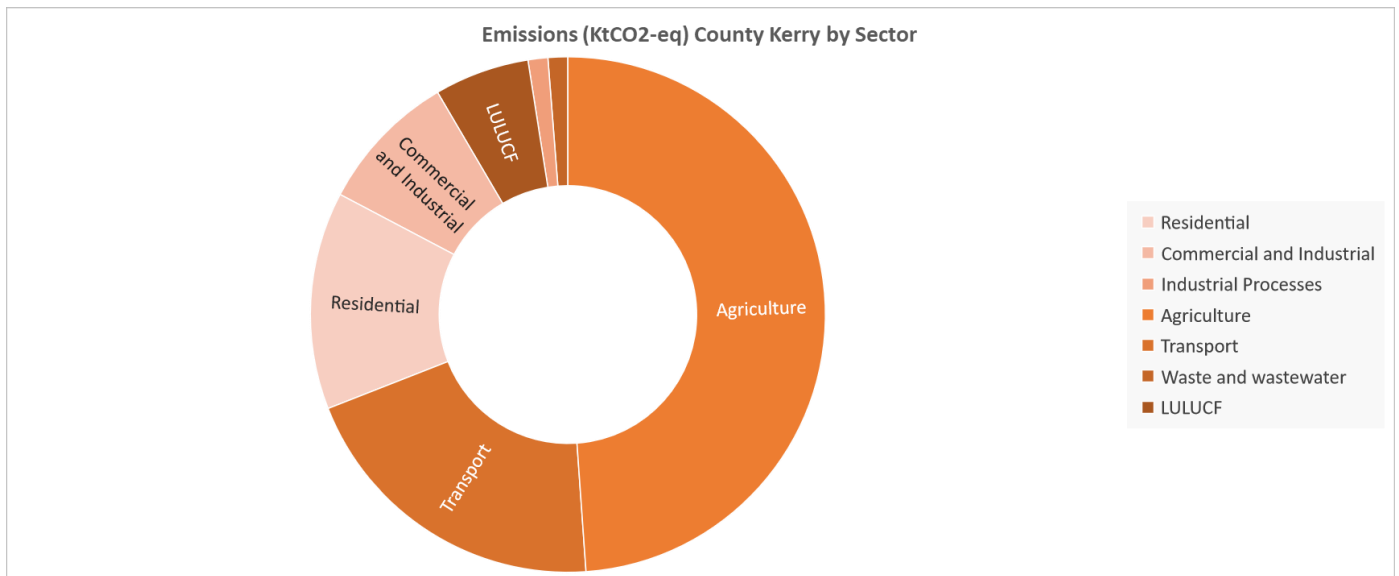


Figure 3. Sectoral emissions in County Kerry

Due to the rural nature of the county, unsurprisingly agriculture is the highest emitter followed by transport and the built environment. Again, challenges in all these sectors are acknowledged due in part to the rural economy base; settlement patterns in the county and a relatively older housing/building stock. The challenge for the LACAP is to engage with stakeholders to target actions at each sector to enable a reduction in GHG emissions.

Climate Change Risk Assessment



Climate Change Risk Assessment

In order to understand the current and future risks posed by climate change to all the public infrastructure and services provided by Kerry County Council, a Climate Change Risk Assessment (CCRA) was undertaken on behalf of the council by KPMG.

The CCRA enables Kerry County Council to understand the likelihood of current and future climate hazards, the potential impacts of these hazards at local and community level and support the development of adaptation actions to avoid or reduce the impacts of climate risks.

The first step was to identify observed changes in Kerry's Climate. These are shown below in Figure 4.

Observed Changes in Kerry's Climate

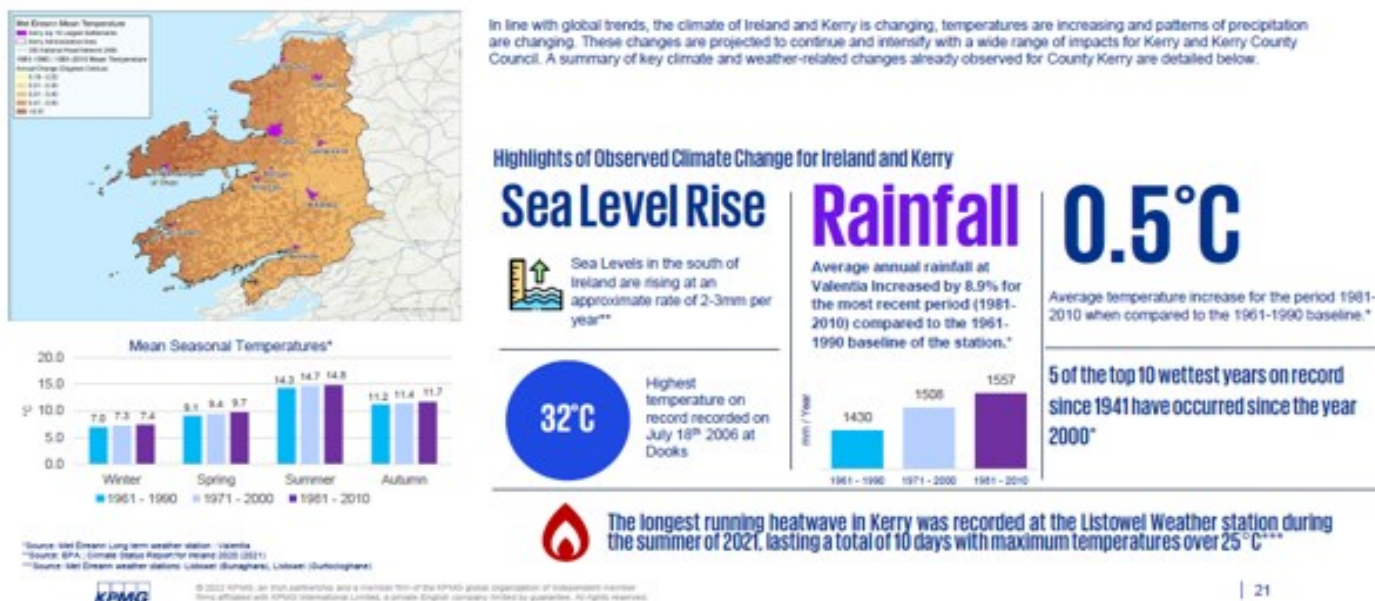


Figure 4. Observed change in Kerry's climate.

Using these predicted future changes in climate and weather patterns, a climate risk matrix was developed. The matrix forms an assessment of future risks and vulnerabilities across the County to the full range of the local authorities remit. This includes infrastructure provisions and maintenance through to services provided – social, economic and environmental.

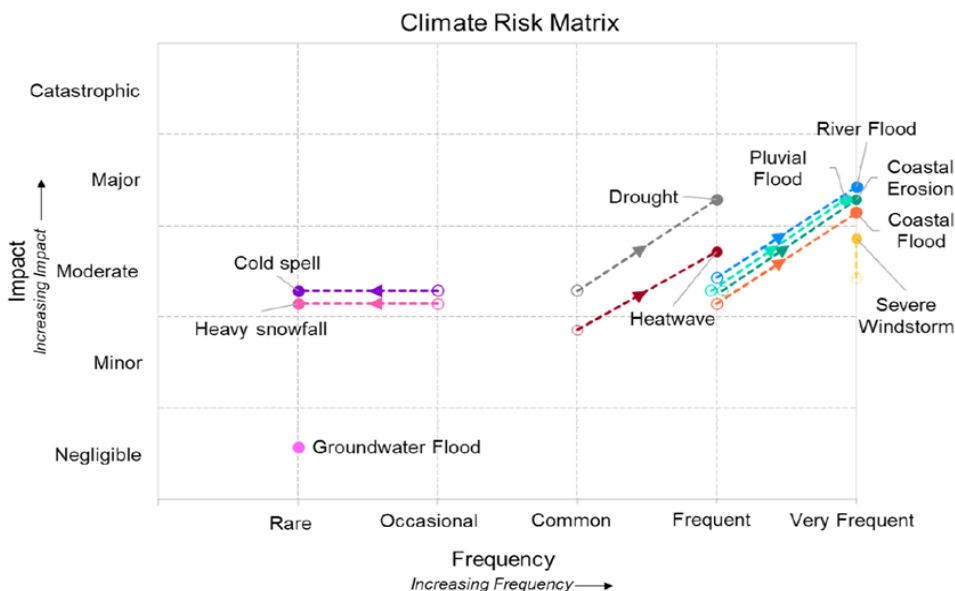


Figure 5. Climate Risk Matrix for the County.

The risk matrix is shown above in Figure 5. On the right shows the future change in risk with the hollow marker showing the current risk and the solid marker the future risk. The dotted line shows the change between the current and future risk.

The CCRA shows a wide range of impacts can be expected across County Kerry from damage to infrastructure such as roads and bridges, to adverse impacts on biodiversity and restrictions on water supply. Disruptions to a range of services that the council provides within the community can be expected.

Key results from the CCRA are summarised below in Figure 6.



Figure 6. Summary of the Climate Change Risk Assessment for the County

Increase Expected  Decrease Expected  No Change Expected 

The summary shows the likely climate change impact and how this will potentially affect services into the future. To increase resilience, Kerry County Council will therefore need to proactively plan for and adapt to the current and future climate change risks.

Decarbonising Zone



Decarbonising Zone - Corca Dhuibhne/Dingle Peninsula

Decarbonising Zone (DZ)

Each local authority is required to identify and develop plans for a Decarbonising Zone (DZ) within their administrative area. A DZ is an area identified by the local authority where a range of climate mitigation, adaptation and biodiversity actions are envisaged to respond to climate change.



It is intended that the DZ will be a demonstration or “living lab” of what is possible for decarbonisation and climate action at local and community levels to help support and realise national climate ambition. Through a feedback loop of experimentation and evaluation, the DZ should foster a flexible, incremental and community-driven approach to climate action.

Climate actions in a DZ will need to address a variety of areas/sectors including electricity sourcing; heat management; reducing needs for travel and shifting travel modes towards active and public transport; enhanced building energy efficiency; biodiversity initiatives etc.

The area identified in Kerry is the Corca Dhuibhne/Dingle Peninsula Decarbonising Zone. It is defined by the territory to the west of a line connecting Blennerville to Castlemaine and with an area of 583 sq. km and extending 48 km into the Atlantic.

The LACAP will build on a significant body of work already undertaken on the Peninsula via the *Corca Dhuibhne/Dingle Peninsula 2030 project*. Commenced in 2018, Corca Dhuibhne/Dingle Peninsula 2030 is a multi-partner community driven initiative aimed at transitioning the Peninsula to a low carbon and resilient community by 2030.

Partners, amongst many others, include:

- *The Dingle Creativity and Innovation Hub*
- *Irish Farmers Association (IFA)*
- *ESB Networks*
- *MaREI*
- *North East West Kerry Development (NEWKD)*
- *Údarás na Gaeltachta*
- *Munster Technological University*
- *Sustainability Energy Authority of Ireland (SEAI)*
- *Kerry County Council*



The initiative has carried out significant research on the Peninsula including a series of pilot projects in energy; agriculture; transport; marine and tourism (Figure 7). The aim of the LACAP is to now build on these initiatives in-collaboration with all stakeholders.

Corca Dhuibhne 2030 Projects



ENERGY FUINNEAMH 2030

Includes Sustainable Energy Community (SEC), Energy Master Plan (EMP), ESB Networks Dingle Project and Bio-Energy



AGRICULTURE TALAMHÍOCHT 2030

Precision Farming: The Dingle Creativity and Innovation Hub are currently piloting a Farm Ambassador Programme.



TRANSPORT IOMPAR 2030

Sustainable Travel: In order to improve the sustainability of travel around the peninsula, there are a number of proposed projects in the works.



MARINE MARA 2030

Water Quality Monitoring: Water quality, levels, temperature, conductivity, dissolved oxygen, PH and nitrates are being measured.



TOURISM TURASÓIREACHT 2030

Sustainable Tourism: To include projects focusing on making tourism to and around the peninsula more sustainable.

Figure 7. Pilot projects in energy; agriculture; transport; marine and tourism.

Baseline Emissions Inventory for the Corca Dhubihne/Dingle Peninsula 2030

At the commencement of the LACAP a baseline inventory for **Dingle - Decarbonising Zone (DZ)** had already been completed. The baseline emissions are shown in Figure 8.

The emissions data shows agriculture and Land Use, Land Use Change and Forestry (LULUCF) are two significant players accounting for 55% and 17% of Greenhouse gas emissions in the county. Residential and transport account for the next highest figures at 13% and 11%, respectively.

The BEI indicates that mitigation actions proposed in Dingle will require a focus on agriculture, the built environment and transport. Adaptation actions will also be significant in the context of future-proofing developments and broader land uses for the changes predicted in the Climate Change Risk Assessment.

The mitigation/adaptation actions for Dingle will need to examine ways to build partnerships with the farming community

Working with agri-environmental schemes such as ACRES; the implementation of the Water Framework Directive, National Forestry Programme and/or supporting European Innovation Partnerships (EIP) are all likely to result in co-benefits for community; biodiversity; water and air quality; the bioeconomy and sustainable food production.

Existing collaborations in the Dingle area envision a cycle of projects that will see the Peninsula meet its reduction in emissions. Four key areas are identified for possible climate actions. These are shown in Figure 9.

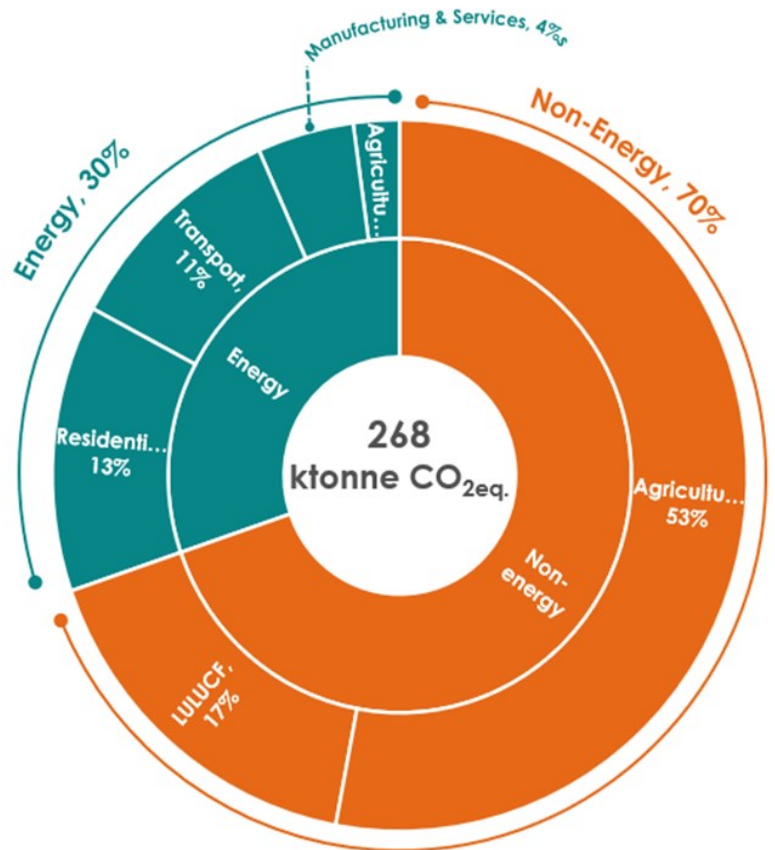


Figure 8. Emissions identified in the DZ area.

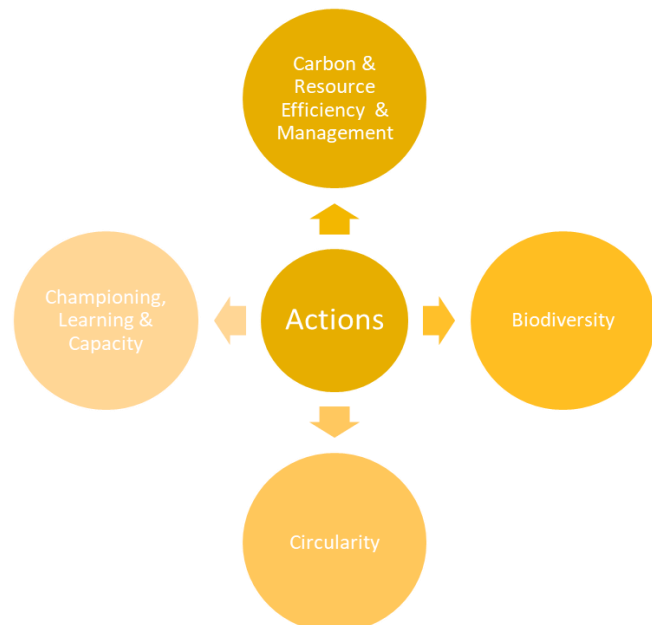


Figure 9. Key areas where potential actions are required in the DZ.

A Vision for Climate Action in Kerry



A Vision for Climate Action in Kerry



A Vision for the Kerry Local Authority Climate Action Plan

Kerry County Council, through its Climate Action Plan has a *Vision* of how a climate resilient county will look and operate in 2030 and on to 2050. In line with national guidelines, the CAP has a *Mission Statement* outlining how Kerry County Council sees itself meeting that vision. Finally, five *Strategic Goals* (SGs) are identified that will bring to fruition the vision and mission statement. The SGs will guide the specific, action-focused, timebound and measurable actions of the plan.

Vision

Kerry will meet the environmental, economic and social challenges of climate change. Through just transition, the county will mitigate and adapt to a decarbonised, climate neutral and resilient future. This will be achieved by protecting our environment and building strong partnerships and collaborations with our communities.

Mission Statement

Kerry County Council will lead by example in meeting the challenges of climate action. It will meet its own ambitious targets and work with the community to ensure a just transition for all to a carbon neutral and climate resilient future. The Local Authority will influence, encourage, and advocate for all sectors to reach their climate targets as we aim to become a decarbonised climate resilient and biodiversity rich society by 2050.

Strategic Goals



Have Your Say



Have your say

We welcome early engagement on the scope and content of the evolving Climate Action Plan.

We value your views/opinions/comments on these questions:

1. In your opinion how should Kerry County Council influence and support communities to mitigate climate change and move towards decarbonisation?
2. In your opinion how should Kerry County Council influence and support communities to adapt to the impacts of climate change and become resilient?
3. Can you suggest actions to be included in the Climate Action Plan for County Kerry?
4. Do you have any issues, suggestions or recommendations that you would like to see added to the Climate Action Plan for County Kerry?

Engagement Feedback

You can submit your responses via:



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Appendix 1 - Acronyms

BEI	Baseline Emissions Inventory
CAP 2023	National Climate Action Plan 2023
CCRA	Climate Change Risk Assessment
DZ	Decarbonising Zone
GHG	Greenhouse Gas
KCC	Kerry County Council
KtCO ₂ -eq/tCO ₂ -eq	Kiloton Carbon Dioxide Equivalent/Tonne
LACAP	Local Authority Climate Action Plan
LULUCF	Land Use, Land Use Change and Forestry
SEAI	Sustainable Energy Authority of Ireland

