POLICY ANALYSIS REPORT





























This project is supported by a range of stakeholders including: Department of Enterprise, Trade and Employment Department of the Environment, Climate and Communications

















Regional Enterprise Plan MIDLANDS





TABLE OF CONTENTS

AC	KNOV	VLEDGI	EMENIS	V		
EXE	CUTI	/E SUM	IMARY	1		
1.	INTR	ODUCT	TION	4		
2.	CLIM	ATE CH	HANGE	7		
	2.1 Climate Change Policy					
	2.2	Local A	Authority Climate Action	7		
		2.2.1	Adaptation Strategies	7		
		2.2.2	Climate Action Charter	8		
		2.2.3	Climate Action Regional Offices (CARO)	8		
		2.2.4	Delivering Effective Climate Action 2030	9		
	Refe	rences		9		
3.	DOCUMENTS ANALYSED AND APPROACH TO ANALYSIS					
	3.1	EU and	d National level documents	11		
	3.2	National level documents				
	3.3	Local level documents				
	3.4	Overvi	ew and approach to analysis	12		
4.	OPPORTUNITIES FOR LOCAL ENTERPRISE – EU & NATIONAL POLICY 15					
	4.1	Recycling and the Circular Economy				
	4.2					
		4.2.1	Food Waste	18		
		4.2.2	Construction and Demolition	18		
		4.2.3	Plastics	18		
		4.2.4	Agriculture	18		
		4.2.5	Resources and Raw Materials	18		
		4.2.6	Local Waste Prevention	19		
	4.3	Resea	rch, Technology and Innovation	19		
	4.4	Renov	ation, Retrofitting and Construction	20		
	4.5	Bioeco	onomy	22		
	4.6	Agricu	lture, Fishing and Forestry	23		
	4.7	Transport 2				
	4.8	Renewable Energy 2				
	4.9	Internet and Broadband Installation				
	4.10	Remote Working 28				
	4.11	Labour Force Re-Skilling and Training				

	4.12	Apprenticeships and Traineeships	29		
	4.13	Public Service Contracts	29		
	4.14	Development of Local Markets	31		
	4.15	PPE Manufacturing	31		
	4.16	Opportunity to harness existing structures and goodwill	31		
	4.17	Summary of EU and National Level Documents	33		
5.	OPPC	PRTUNITIES FOR LOCAL ENTERPRISE - LOCAL AUTHORITY POLICY	34		
	5.1	Create a Market and Demand for Green Goods, Services and Technologies	36		
	5.2	Identify Funding Streams	36		
	5.3	Support Green Innovation and Technology	37		
	5.4	Promote Green Business	39		
	5.5	Contracting Local Businesses	39		
	5.6	Regeneration, Retrofitting and Construction	40		
	5.7	Maintenance and Repair	40		
	5.8	Landscaping	42		
	5.9	Conducting Surveys and Identifying Potential Opportunities	44		
	5.10	Promote Renewable Energy	45		
	5.11	Promote More Environmentally Friendly Modes of Transport	45		
	5.12	Develop Co-Working Hubs	47		
	5.13	Promote the Circular Economy	47		
	5.14	Summary of Local Authority Level Documents	49		
6.	HOW	LOCAL AUTHORITIES CAN HELP ENTERPRISE	5 1		
	6.1	Support Innovation through Implementing the Local Authority Climate Action Charter	51		
	6.2	Sustainable Investment	53		
	6.3	Business Supports Available	53		
	6.4	Develop a Climate Action Toolkit and Framework	54		
	6.5	Regeneration and Retrofitting	54		
	6.6	Introducing minimum BER standards	55		
	6.7	Support Carbon-Neutral Transport	55		
	6.8	Support Afforestation	55		
	6.9	Leading through example	57		
	6.10	Develop Local Markets	57		
4 D:		·	٠.		
All	PENDI		59		
	Appendix 1 - Project Working Group				
	Appendix 2 - Project Steering Group				



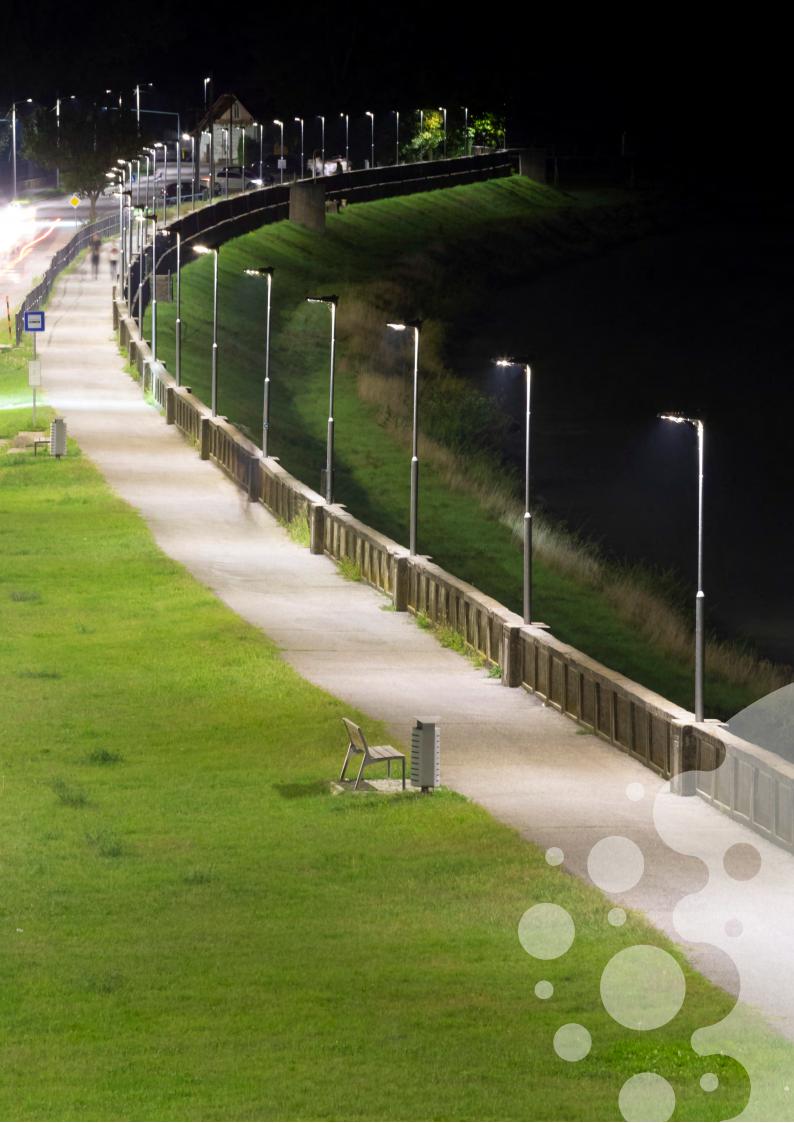
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A special thanks to all the working group members [Appendix 1] for their time in assisting with the project scope, research work and report outline. In addition, we are grateful to the project steering group [Appendix 2] for their input and guidance on the research.

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EXECUTIVE SUMMARY

The actions required to achieve national climate targets will change how Irish society and the economy operate. Businesses, as well as local government and other sectors must take steps to increase resilience to the impacts of climate change, thus reducing potential future costs from damage during extreme weather events. Additionally, as we transition away from dependence on fossil fuel use to a more sustainable and carbon neutral economy new opportunities for the economy will arise, and the need for new services will emerge for existing and new businesses.

This research project aims to identify, through analysis on EU and National strategies and reports where these opportunities may arise as well as identify where funding for these types of opportunities is being channelled.

The results of this work can be used to inform local authorities of the direction of future economic growth, which is now premised in the transition from reliance on fossil fuels, and the move to a climate neutral economy, by the end of the year 2050. This work also plays a key role in assisting all local authorities in meeting their commitments under section 3(r) of the Local Authority Climate Action Charter to support enterprise through the Local Community Development Committee and Local Enterprise Offices to exploit opportunities which will arise from meeting the challenges of Climate Change.

Key opportunities identified from the policy documents analysed at EU and National levels are summarised as follows:

- Developing the domestic recycling industry: textiles, paper and the Government's return scheme for plastic bottles and aluminium cans. Specifically, opportunities exist for local enterprises in the areas of startups, business expansions and new innovations for the textiles sector and return scheme for plastic bottles and aluminium cans. Further, there are opportunities for start-ups and new innovations in the paper sector.
- 2. **Research**, **innovation and technology:** there are opportunities for local enterprises in the areas of research, technology and innovations that work towards a carbon-neutral circular economy. Specifically, these enterprises may benefit from EU, national and regional funding streams.
- 3. Renovation and retrofitting: of public and private buildings, specifically in relation to local authority-owned dwellings, some of which are over 40 years-old, which are to be brought to a minimum B2 equivalent BER or cost optimal level improvements, where feasible. Local enterprises can compete for public service contracts.
- 4. **Developing an improved transportation system:** through building public transport routes, constructing Greenway and Blueway routes, and through establishing car and bike sharing enterprises, pop-up shops and bike repair services at popular Greenway/Blueway locations. Further opportunities exist in the installation and maintenance of electric vehicle charging points and additional active travel measures
- 5. National Broadband Plan: opportunities in installation and maintenance of broadband services, while the increased connectivity will help enterprises that will mainly operate online, while also increasing the number of enterprise hubs/shared office space offerings and increasing the number of Broadband Community Points (BCPs).



6. **Re-skilling and re-training:** Local businesses may avail of the funding available for the re-training of their employees, or possibly capitalise on the need for training services, educators and training facilities, across areas identified in 1-5 above.

The key opportunities identified at Local Authority Level include:

- Develop green innovations and technologies while working with LEOs, specifically in the areas of: anaerobic digestion, green roof technologies, construction and retrofitting, flood resistance technologies, watering of plants and trees.
- Constructing, surveying, renovating and retrofitting of local authority-owned buildings (including housing stock) and infrastructure, including public lighting retrofitting, retrofitting of local authority-owned buildings, and constructing near-zero-energy new builds
- 3. Conducting surveying projects for local authorities on their assets and infrastructures, including roads, trees and hedgerows, water supplies, housing and building stocks, rivers, culverts, harbours, piers and marinas.
- 4. **Maintaining and repairing** local authority assets, including local authority vehicles, buildings and properties, coastal and flood defences, and grasslands.
- 5. There are opportunities in secure **landscaping contracts** with local authorities, including: planting and maintenance of trees and hedgerows, reforestation and control of invasive species.
- 6. The installation and maintenance of **photovoltaic solar panels**.
- 7. The replacement of gas boilers with heat pumps.
- 8. **Developing local transportation systems**, including construction of transportation routes and amenities; provision and maintenance of electric vehicles and charging points; "Go Car" and bike rental schemes, bus infrastructure and services and active travel initiatives including greenways and blueways.
- 9. The development and management of **remote and co-working hubs/ facilities, broadband community points**.

There are additional opportunities highlighted at both the EU/National level and at the local authority level. These include:

- Renovation Wave/Retrofitting.
- Afforestation.
- Research, Innovation and Technologies.
- Transportation.
- Renewable Energies; community level responses e.g. district heating systems, and through the Renewable Electricity Support Scheme (RESS).
- Working-Hubs.
- Promoting Circular Economy.

It is noted that this research is very much time dependent and will need to be updated as soon as other policy instruments are adopted.





1. INTRODUCTION

The Local Government Act, 1991 and the Local Government Act, 2001 bestows responsibility on local authorities to promote the interests of the local community in a range of areas, including supporting and facilitating local economic growth and enterprise development. The Local Government Reform Act, 2014 further enhanced this economic development role through the integration of the Local Enterprise Offices (LEOs) along with a statutory requirement to prepare a Local Economic and Community Plan (LECP) every five years.

This expanded economic and enterprise development role of local authorities seeks to ensure that there is a cross cutting and integrated policy framework in place across the range of local government functions, delivering an effective environment for enterprise growth and development. Consequently, local authorities, as leaders of local development across social, environmental, economic, enterprise, community and cultural functional responsibilities, are ideally placed to facilitate effective collaboration and deliver the necessary multi-agency responses required to drive success, while underpinning the local government-business relationship as well as developing engagement with local communities.

Through the development of Climate Change Adaptation Strategies, local authorities have reinforced their enhanced economic remit by identifying that economic opportunities will arise from climate action. Additionally, Local Enterprise Offices continue to support, encourage and nurture new business and innovative ideas in this sphere. These activities provide opportunities for environmental and technological advances which are associated with climate action and which support the transition to a low carbon economy. The Local Authority Climate Action Charter (Section 3, (r)), commits local authorities to supporting enterprise through the Local Community Development Committee and Local Enterprise Offices to exploit opportunities which will arise from meeting the challenges of Climate Change.

Furthermore, local authorities are key stakeholders of the nine Regional Enterprise Plans (REPs). The REPs are an integral part of Ireland's enterprise policy, aimed at driving economic growth, fostering resilience, and delivering better quality of life throughout Ireland. Each REP is overseen by a Steering Committee with members drawn from local government and from across the relevant regional economy. The Eastern & Midlands CARO, for example, as part of this role is a member of the Midlands REP Steering Committee. These plans complement national level policies and programmes such as national enterprise policy, e.g. Enterprise 2025 Renewed, Future Jobs Ireland, IDAs Driving Recovery & Sustainable Growth 2021-24 and Enterprise Irelands Powering the Regions. Local authorities host the Regional Enterprise Development Offices and fund the Programme Manager role, which implement the REPs with regional stakeholders. The next iteration of REPs to 2024, are currently in development.

Under the National Climate Action Plan, the Department of Enterprise, Trade and Employment has tasked the REP Steering Committees to include 'Just Transition' as a standing item on agendas for all meetings. This is in recognition of the challenge of both the climate and digital transition in all regions as well as the importance of ensuring the presence of key stakeholders in contributing to transitioning to a low carbon economy. Furthermore, the Climate Action Regional Office (CARO) work



programme, as agreed between the City and County Management Association (CCMA) Climate Change, Transport and Networks Committee and the Department of Environment, Climate and Communications, mandates the CAROs to support local authorities in promoting economic development and innovation through the broader local authority economic and enterprise function.

Subsequently, local authorities are also informed by an understanding of their own counties unique local strengths, assets and opportunities and are therefore well positioned to enable a more effective translation of national policy into regional and local strategies and outcomes.

Given the above, the Eastern & Midlands CARO, has led the preparation of the following Report. One of two aligned work streams the output of which will include:

- 1. An analysis of European, national, regional and local policy and initiatives on the creation of economic opportunities from climate action relevant to the economic and enterprise remit of local authorities.
- 2. A survey of Local Enterprise Offices (LEOs) and Directors of Services with responsibility for Economic Development, on their awareness of, and capacity for, supporting the development of economic activity/ opportunities through climate action, and

This report addresses the first work stream highlighted above and involved a desktop analysis of climate action policy instruments at European, National, Regional and Local level.

DELIVERING EFFECTIVE CLIMATE ACTION 30

Local authority sector strategy for delivering on the Climate Action Charter and Climate **Action Plan**

















CLIMATE CHANGE

There is worldwide consensus among research scientists that human activities, primarily through greenhouse gas (GHG) emissions, are changing the Earth's climate (Herring, 2020). Nineteen of the twenty warmest years on record have occurred since 2001 with 2016 ranking as the warmest year to date (NASA, 2021). Most of the warming of the planet has occurred in our oceans leading to increased levels of evaporation and levels of water vapour in the atmosphere. This is having a direct influence on our climate and is causing an increase in the frequency, duration and intensity of extreme weather events (Carbon Brief, 2020). The impacts of climate change go beyond rising temperatures and are affecting ecosystems, water, wildlife, agriculture, communities and human health (NOAA, 2019).

2.1 CLIMATE CHANGE POLICY

If climate change is left unchecked, it will have catastrophic impacts to life on our planet. That is why in 2015 Governments from around the world agreed to take collective action, under the Paris Agreement, to keep global average temperatures below 20°C and to pursue efforts to limit it to 1.50°C. The agreement sets out a global framework to avoid dangerous climate change and includes both mitigation and adaption targets and actions (European Commission, 2021). Ireland ratified the Paris Agreement in November 2016 and has made considerable efforts to increase its resilience to climate change impacts and to reduce GHG emissions. Most notable climate policy efforts include the National Adaptation Framework (NAF) 2018, the All of Government Climate Action Plan 2019 and the Climate Action and Low Carbon Development (Amendment) Bill 2021. While the NAF provides direction on reducing vulnerability and risk to climate change impacts the Climate Action Plan 2019 provides a pathway towards transitioning the country towards a net-zero or carbon neutral society and economy by 2050. Additionally, the Climate Action and Low Carbon Development (Amendment) Bill 2021 commits the country, in law, to move to a climate resilient and climate neutral economy by 2050 and introduced 5-year rolling economy wide carbon budgets to incentivise this transition (DECC, 2021).

2.2 LOCAL AUTHORITY CLIMATE ACTION

National climate action policy has placed local authorities in a key leadership role in terms of delivering national climate action policy at local and community levels in terms of adaptation, mitigation, community engagement, just transition and mobilising economic opportunities arising from climate action.

2.2.1 Adaptation Strategies

Local authorities play a critical role in responding locally to the impacts of extreme weather events and will continue to do so in the future. With this in mind, the approval of the Climate Adaptation Strategies by all 31 local authorities in 2019 is an important development in responding to these extreme weather events. It is also viewed as the primary instrument in assisting local authorities to understand the key risks and vulnerabilities of climate change in their local areas, to advance adaptation measures and to ensure that climate adaptation is mainstreamed into all plans and policies of the local authority.



2.2.2 Climate Action Charter

In 2019, all 31 local authorities signed a Climate Action Charter activating action 147 of the Climate Action Plan 2019. The Charter represents a firm commitment on the part of local government to drive forward meaningful climate action in their communities. The Charter comprises 23 commitments that underpin the leadership role of local authorities in delivering effective climate action across the range of functions and services provided. In addition to commitments on pursuing adaptation and mitigation measures, it requires local authorities to put in place a process for carbon-proofing major decisions, programmes and projects, including investments in transport and energy, as well as in procurement.

2.2.3 Climate Action Regional Offices (CARO)

Four regional climate action offices were established in 2018 in response to Action 8 of the 2018 National Adaptation Framework (NAF) – Planning for a Climate Resilient Ireland and following on from a business case prepared by the County and City Managers Association (CCMA) and Local Government Management Agency (LGMA). The Eastern and Midlands CARO is one of four regional climate action offices.

The offices have been established to drive climate action at both regional and local levels. In recognition of the significant obligation to develop and implement climate action measures, the four regional offices are mandated to co-ordinate engagement across the varying levels of government and help build on experience and expertise that exists in the area of climate change and climate action.

The CAROs also represent the Local Government Sector in all cross sectoral issues relating to climate action and work closely with the DECC, the Local Government Management Agency (LGMA) and the City and County Managers Association (CCMA) on policy issues for the sector generally.

The composition of the four Climate Action Regions has been determined by the geographical and topographical characteristics, shared vulnerabilities and existing synergies in addressing threats and impacts of severe weather events and ongoing climate change risks. The CARO regions are outlined in Figure 1 below.

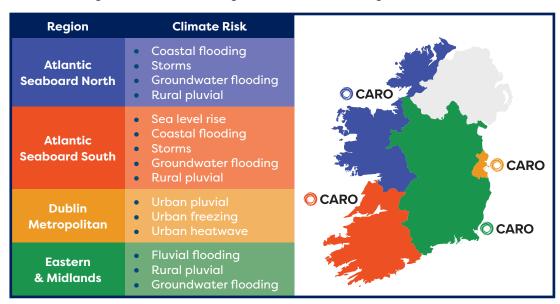


Figure 1: CARO Regions- Geographical and Topographical Risk Focus Areas



One of the most recent actions addressed by the CAROs is the development of the Local Authority Climate Action Training Programme. The development of this Local Authority Climate Action Training Programme, is a culmination of efforts from a range of contributors, managed by the CAROs and supported by the Department of Environment, Climate and Communications. The programme with its initial series of training courses under six unique pillars, serves to underpin the commitments set out under Action 150 of the Climate Action Plan to strengthen and empower local authority climate action leadership and build capacity within the sector to further reinforce the delivery of effective climate action.

2.2.4 Delivering Effective Climate Action 2030

The local authority climate action strategy for climate action – Delivering Effective Climate Action 2030, delivering on the Climate Action charter and the Climate Action Plan is very clear in its vision to "Leverage the capability, reach and resources of local authorities to effectively lead and coordinate climate action across Ireland". In order to achieve this vision, the strategy identifies six key goals, one of which is to: mobilise climate action in enterprise and support the transition to an inclusive, net zero and circular economy.

In order to support this goal, the local authority sector has committed to ensuring that local authorities lead in the development of inclusive, zero carbon and circular economies where local enterprises can benefit from playing an active role in decarbonisation and adapting to the changing climate. Key objectives identified in the strategy to achieve this include:

- Embed climate change and the circular economy in implementation of all local economic development strategies and Local Economic and Community Plans.
- Promote the development of a thriving green economy in which enterprises are supported to take advantage of emerging green business opportunities.
- Promote climate action and green skills in training and education in partnership with Education and Training Boards (ETBs) and Local Enterprise Offices (LEOs).
- Undertake a circular economy strategy, based on analysis of the local priority sectors, material flows and waste streams, e.g. municipal and industrial material flows, waste generation and explore the options for circular procurement.
- Support the growth and development of lower carbon enterprises through supplier development programmes that align with green procurement strategies.
- Utilise best practice in promoting economic opportunities that arise from climate action with local enterprise.

REFERENCES

CarbonBrief, (2020) Attributing Extreme Weather to Climate Change, Carbon Brief Clear on Climate, Accessed [Online] Available at: https://www.carbonbrief.org/ mapped-how-climate-change-affects-extreme-weather-around-the-world

DECC, (2021) Climate Action and Low Carbon Development (Amendment) Bill 2020, Department of the Environment, Climate and Communications, Accessed [Online] Available at: https://www.gov.ie/en/publication/984d2-climate-action-and-low-carbon-development-amendment-bill-2020/



European Commission, (2021) Paris Agreement, European Commission, International Action on Climate Change, Accessed [Online] Available at: https://ec.europa.eu/clima/policies/international/negotiations/paris_en

Herring, D. (2020) Isn't There a Lot of Disagreement Among Climate Scientists About Global Warming? Climate.gov Science & Information for a Climate-Smart Nation, Accessed [Online] Available at: https://www.climate.gov/news-features/climate-qa/ isnt-there-lot-disagreement-among-climate-scientists-about-global-warming

NASA, (2021) Global Climate Change Vital Signs of the Planet: Global Temperature, Accessed [Online] Available at: https://climate.nasa.gov/vital-signs/global-temperature/

NOAA, (2019) Climate Change Impacts, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Accessed [Online] Available at: https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts



3. DOCUMENTS ANALYSED AND APPROACH TO ANALYSIS

A detailed content analysis was conducted of fifty-three documents drawn from three distinct yet overlapping scales. This includes ten documents sourced from the EU level, eleven from the national level, and thirty-two from the local level, more specifically, from local authorities across Ireland. The findings of this analysis will be discussed in the following sections.

3.1 EU AND NATIONAL LEVEL DOCUMENTS

The ten European level documents analysed include:

- The European Green Deal.
- The European Green Deal Annex.
- Sustainable Europe Investment Plan European Green Deal Investment Plan.
- Circular Economy Action Plan.
- The European Green Deal Investment Plan and Just Transition Mechanism explained.
- Participation in Horizon Europe: Keeping it simple.
- Horizon Europe.
- Implementation Strategy for Horizon Europe: Version 1.0.
- Farm to Fork Strategy.
- Climate Awareness Bonds Framework.

3.2 NATIONAL LEVEL DOCUMENTS

The eleven National level documents analysed were:

- Climate Action and Low Carbon Development (Amendment) Bill 2020.
- Climate Action Plan 2019.
- Programme for Government Our Shared Future.
- July Job Stimulus 2020.
- A Waste Action Plan for a Circular Economy Ireland's National Waste Policy 2020-2025.
- National Policy Statement on the Bioeconomy.
- Resilience and Recovery 2020-2021 Plan for Living with COVID-19.
- Enterprise Ireland First Steps to Green Competitiveness Guidebook.
- Enterprise Ireland First Steps to Green Competitiveness: Environmental Guidebook for Services/Offices Based Companies.
- Environmental Protection Agency National Waste Prevention Programme
 Annual Report 2019 Preventing Waste, Driving the Circular Economy.
- EPA Research Programme 2014-2020 Local Authority Adaptation Strategy Development Guideline.



3.3 LOCAL LEVEL DOCUMENTS

The thirty-two local authority level documents analysed included:

- Local Authority Climate Action Charter.
- Carlow County Council Climate Change Adaptation Strategy 2019-2024.
- Cavan County Council Climate Change Adaptation Strategy 2019-2024.
- Clare County Council Climate Change Adaptation Strategy 2019-2024.
- Cork City Council Climate Change Adaptation Strategy 2019-2024.
- Cork County Council Climate Change Adaptation Strategy 2019-2024.
- Donegal County Council Climate Change Adaptation Strategy 2019-2024.
- Dublin City Council Climate Change Action Plan 2019-2024.
- Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024.
- Fingal County Council Climate Change Action Plan 2019-2024.
- Galway City Council Climate Change Adaptation Strategy 2019-2024.
- Galway County Council Climate Change Adaptation Strategy 2019-2024.
- Kerry County Council Climate Change Adaptation Strategy 2019-2024.
- Kildare County Council Climate Change Adaptation Strategy 2019-2024.
- Kilkenny County Council Climate Change Adaptation Strategy 2019-2024.
- Laois County Council Climate Change Adaptation Strategy 2019-2024.
- Leitrim County Council Climate Change Adaptation Strategy 2019-2024.
- Limerick County Council Climate Change Adaptation Strategy 2019-2024.
- Longford County Council Climate Change Adaptation Strategy 2019-2024.
- Louth County Council Climate Change Adaptation Strategy 2019-2024.
- Mayo County Council Climate Change Adaptation Strategy 2019-2024.
- Meath County Council Climate Change Action Strategy 2019-2024.
- Monaghan County Council Climate Change Adaptation Strategy 2019-2024.
- Offaly County Council Climate Change Adaptation Strategy 2019-2024.
- Roscommon County Council Climate Change Adaptation Strategy 2019-2024.
- Sligo County Council Climate Change Adaptation Strategy 2019-2024.
- South Dublin County Council Climate Change Action Plan 2019-2024.
- Tipperary County Council Climate Change Adaptation Strategy 2019-2024.
- Waterford City and County Council Climate Change Adaptation Strategy 2019-2024.
- Westmeath County Council Climate Change Adaptation Strategy 2019-2024.
- Wexford County Council Climate Change Adaptation Strategy 2019-2024.
- Wicklow County Council Climate Change Adaptation Strategy 2019-2024.

3.4 OVERVIEW AND APPROACH TO ANALYSIS

Nine key themes were identified through analysis of the documents. Five of these themes were pre-determined, including: "Opportunities for local enterprise", "How local authorities can help enterprises", "Hubs", "Right to Disconnect", and "Trade Offs". Four other themes were identified through the analysis, including: "References to Local Authorities", "Funds/Investment available", "Opportunities for growth" and "Opportunities for investment". In total, these themes were identified some three



hundred and ninety six (396) times within the twenty policy documents analysed from the EU and national levels. Each thematic code is listed below, followed by the frequency of that code:

- References to Local Authorities 94
- Funds/Investment Available 54
- Trade Offs 1
- Opportunities for growth 9
- Opportunities for investment 46
- Right to Disconnect 1
- Hubs 11
- How Local Authorities can help enterprises 31
- Opportunities for Local Enterprises 150

Of the identified themes, three are particularly noteworthy given their relevance to the local government system. The table below shows the frequencies of these key themes: references to local authorities; opportunities for local enterprises; and how local authorities can help enterprises.

Document	Opportunities for local enterprises	How local authorities can help enterprises	References to local authorities	Total number of identified codes
The European Green Deal	10	1	2	51
The European Green Deal Annex	0	0	0	0
European Green Deal Investment Plan – Sustainable Europe Investment Plan	3	6	4	7
Circular Economy Action Plan	14	0	1	17
The European Green Deal Investment Plan and Just Transition Mechanism	3	0	0	41
Participation in Horizon Europe: Keeping it simple	1	0	0	3
Horizon Europe Factsheet	2	0	0	4
Implementation Strategy for Horizon Europe: Version 1.0	0	0	0	2
Farm to Fork Action Plan 2020	13	3	1	25
Climate Action and Low Carbon Development (Amendment) Bill 2020	0	0	2	2
Climate Action Plan 2019	15	11	22	56
European Investment Bank Climate Awareness Bonds Framework	0	0	0	1
Programme for Government – Our Shared Future	29	3	28	78

continued



Document	Opportunities for local enterprises	How local authorities can help enterprises	References to local authorities	Total number of identified codes
July Job Stimulus 2020	3	0	0	7
A Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020-2025	17	2	21	41
National Policy Statement on the Bioeconomy	4	0	0	5
Resilience and Recovery 2020-2021 Plan for Living with COVID-19	3	1	6	12
Enterprise Ireland – First Steps to Green Competitiveness Guidebook	4	0	1	5
Enterprise Ireland – First Steps to Green Competitiveness: Environmental Guidebook for Services/Offices Based Companies	4	0	1	5
Environmental Protection Agency – National Waste Prevention Programme Annual Report 2019 – Preventing Waste, Driving the Circular Economy	25	4	5	34
Total	150	31	94	396

Table 1: Frequencies of key codes in EU and national level documents



4. OPPORTUNITIES FOR LOCAL ENTERPRISE– EU & NATIONAL POLICY

This section is structured in nine sub-sections corresponding to the opportunities for local enterprise identified within the EU and national level documents analysed. These opportunities, elaborated upon further below, are listed as follows:

- Recycling and the Circular Economy.
- Research, Technology and Innovation.
- Renovation, Retrofitting and Construction.
- Bioeconomy.
- Agriculture, Fishing and Forestry.
- Transport.
- Renewable Energy.
- Internet and Broadband Installation.
- Working Remotely.
- Labour Force Re-Skilling and Training.
- Apprenticeships and Traineeships.
- Public Service Contracts.
- Development of Local Markets.
- PPE Manufacturing.
- Opportunity to harness existing structures and goodwill to drive tailored local sustainability and business initiatives.

4.1 RECYCLING AND THE CIRCULAR ECONOMY

In order to ensure the EU's long-term competitiveness, while also achieving the EU's goals of climate neutrality by 2050 and decoupling economic growth from resource use, the EU aims to accelerate the transition to a circular economy. Importantly, the circular economy, if delivered, would see the EU reducing its consumption footprint while doubling its circular material usage rate. The development of such a regenerative model provides new possibilities and opportunities for businesses in the EU and beyond. Furthermore:

"Building on the single market and the potential of digital technologies, the circular economy can strengthen the EU's industrial base and foster business creation and entrepreneurship among SMEs. Innovative models based on a closer relationship with customers, mass customisation, the sharing and collaborative economy, and powered by digital technologies, such as the internet of things, big data, blockchain and artificial intelligence, will not only accelerate circularity but also the dematerialisation of our economy and make Europe less dependent on primary materials" (Circular Economy Action Plan, 2020: 4).

Recycling is a key aspect of the EU's proposed circular economy plan. Yet, at present, Ireland exports much of its waste to other countries for processing, a market that remains a potentially untapped resource of Irish industry. This under-developed market could provide local enterprise with a number of opportunities, if they were to engage and develop the domestic recycling industry. Of the numerous recyclable products mentioned in the Waste Action Plan for a Circular Economy (2020: 44-47), two, in particular, were identified as potential markets for development: textiles and paper.



"In 2021, establish a short-term textile industry action group that identifies opportunities to:

- » capitalise on the value (jobs, economic and resource value) of textiles present in Ireland, including reuse and preparation for reuse and also recycling; and
- » explore options to improve future circularity in textiles including the potential for introducing Extended Producer Responsibility schemes for textiles" (Waste Action Plan, 2020: 44).

"Developments in export markets in recent years have seen the value of paper exported for recycling reduce significantly. On the other hand, paper pulp (or fibre) is a high value material which is easily sold at a far higher price than raw untreated paper. The Department and the waste sector are examining the paper sector in Europe with a view to determine the viability of an indigenous treatment facility and identifying the best option for Ireland" (Waste Action Plan, 2020: 47).

In addition to these two possible indigenous recycling industries, there may also be potential in recycling of plastic bottles and aluminium cans, especially as the Irish government intends to introduce a deposit and return scheme for these products through working closely with a range of businesses:

"We will introduce a deposit and return scheme for plastic bottles and aluminium cans. In delivering this, we will work closely with the food and drink industries, retailers, waste collectors and treatment facilities, and our colleagues in Northern Ireland" (Waste Action Plan, 2020: 33).

4.2 NATIONAL WASTE PREVENTION

The National Waste Prevention Programme (NWPP) is Ireland's main initiative in relation to the development of a circular economy. Throughout the Environmental Protection Agency's (EPA) NWPP document, "Opportunities for local enterprise" was the most frequently identified thematic code, appearing 25 times. Primarily, these opportunities for local enterprise were identified in relation to the three ways in which the NWPP is delivered:

- Innovation and Demonstration.
- Delivery Through Partnerships.
- Advocacy and Communications.

Further, the EPA's NWPP annual report for 2019, identified 6 focus areas of the NWPP, which reflect the priority areas of the circular economy. These 6 areas also present opportunities for growth in the local economy in the development of the circular economy. These areas are:

- Food Waste.
- Construction and Demolition.
- Plastics.
- Agriculture.
- Resources and Raw Materials.
- Local Waste Prevention.





Each of these potential growth areas are discussed in the following sub-sections:

4.2.1 Food Waste

The aim of this focus area is to reduce waste in households, retailers and along the food production chain. As part of this aim, the EPA's NWPP published guidance to assist food service businesses to save €300 million in food waste costs. Further, they provided training to 400 people in workplaces and community groups on food waste reduction. There is significant opportunity for local authorities to further assist local food industries to reduce waste costs through training and through their interaction with, and mentoring of, this sector.

4.2.2 Construction and Demolition

As part of this aim, the NWPP works with industry and others to "tackle high-volume wastes in this critical sector" (EPA NWPP, 2019: 5). In order to achieve this aim, the NWPP have published an online repository of Irish and international best-practice documents, produced construction and demolition waste prevention recommendations, and held a "Conversations on a Circular Economy seminar" (EPA NWPP, 2019: 5). There remains opportunity for local level construction companies to become engaged in the re-use of construction materials and hence drive down the demand for the production of new material.

4.2.3 Plastics

This focus area aims to displace "single-use plastic items through prevention, reuse and recycling actions" (EPA NWPP, 2019: 5). As part of this aim, the EPA was shortlisted in Enterprise Ireland's "Small Business Innovation Research programme for solutions to reduce consumption of single-use plastics" (EPA NWPP, 2019: 5). This presents significant opportunity for new business but also for cost savings in existing businesses and therefore across the local economy.

4.2.4 Agriculture

This focus area aims to increase output efficiency and reduce carbon emissions for sustainable food production. This aim saw "Smart Farming working on 50 farms, identifying 10% greenhouse gas emissions reductions and saving €6,336 per farm" (EPA NWPP, 2019: 5). The move towards more sustainable food consumption will provide obvious opportunities for the agricultural sector as it deals with demands to decarbonise.

4.2.5 Resources and Raw Materials

The aim of this focus area is to maximise use of products and materials towards a circular economy. As part of this aim, the Rediscovery Centre launched "circular economy mentoring academy with nine founding member groups" (EPA NWPP, 2019: 5). Also, the "CRNI supported their members to reuse 24,400 tonnes of materials" (EPA NWPP, 2019: 5). Local authorities can play a significant role in promoting new enterprise in this area through the promotion of additional waste prevention initiatives and developing local level connections/networks between businesses and customers.



4.2.6 Local Waste Prevention

This final focus area aims to mobilise and empower communities to make changes for circular and sustainable living. Specifically, the "Repairmystuff.ie directory connected 800 businesses with 8,000 monthly users", FreeTrade Ireland enabled the reuse of 8,300 items, and local authorities funded "58 community waste prevention initiatives such as public water fountains and green festivals" (EPA NWPP, 2019: 5).

4.3 RESEARCH, TECHNOLOGY AND INNOVATION

In order to facilitate our move towards a carbon-neutral circular economy, significant developments will be needed in the areas of research, technology and innovation. The need for development in these areas provides local enterprises with significant opportunities, specifically in relation to funding and investment opportunities:

"Partnerships with industry and Member States will support research and innovation on transport, including batteries, clean hydrogen, low-carbon steel making, circular bio-based sectors and the built environment. The knowledge and innovation communities run by the European Institute of Innovation and Technology will continue to promote collaboration among higher education institutions, research organisations and companies on climate change, sustainable energy, food for the future, and smart, environmentally-friendly and integrated urban transport. The European Innovation Council will dedicate funding, equity investment and business acceleration services to high potential start-ups and SMEs for them to achieve breakthrough Green Deal innovation that can be scaled up rapidly on global markets" (European Green Deal, 2019: 18).

Furthermore:

"European businesses are frontrunners in circular innovations. The European Regional Development Fund, through smart specialisation, LIFE and Horizon Europe will complement private innovation funding and support the whole innovation cycle with the aim to bring solutions to the market. Horizon Europe will support the development of indicators and data, novel materials and products, substitution and elimination of hazardous substances based on "safe by design" approach, circular business models, and new production and recycling technologies, including exploring the potential of chemical recycling, keeping in mind the role of digital tools to achieve circular objectives. Marie Sklodowska Curie Actions can in addition support development of skills, training and mobility of researchers in this area" (New Circular Economy Action Plan, 2020: 21).

and:

"Under the next MFF (2021-27) all EU access to (risk) finance instruments will be implemented under a single Invest EU Fund. DG Research & Innovation is involved in two windows of InvestEU: the R&I Window and the SME Window. The R&I window aims to make financing for innovation available across the innovation cycle and corporate development cycle. The challenge will be to develop a window that is both inclusive (accommodating financing for R&I of all types) and at the same time fully in line with specific missions/global challenges of the next FP. For the SME window, DG Research & Innovation is in charge of the equity sub-window. The only exceptions are the European Innovation Council's



specific financial instruments, which will be funding extremely promising but high-risk projects that cannot meet the 'bankability' criteria of InvestEU. In close synergy with InvestEU, the EIC Accelerator, in its blended finance and equity financial support forms, will finance projects run by SMEs, including start-ups. In exceptional cases, small mid-caps will also be financed, if they are not yet able to generate revenues, be profitable, or able to attract sufficient investments to fully implement their projects. Such eligible entities will be considered as non-bankable. Once they will become bankable, those projects may, in a later stage of their development, be financed under InvestEU. Crucial decisions for the future will include how to organise the interface of Horizon Europe (and all other legacy programmes with internal financial instruments) with the future InvestEU Fund" (Horizon Europe Factsheet, 2019).

At the national level, the Irish Government aim to "Continue to support entrepreneurs and investors in high-risk innovative start-ups through bodies like Enterprise Ireland and the SBCI [Strategic Banking Corporation of Ireland]. We will review our existing supports in light of COVID-19 and the economic crisis, and set out a new programme, if required. We will set clear targets to increase the survival rate of high-growth start-ups" (Programme for Government, 2020: 21). These funding and investment opportunities for research, technology and innovation hold potential for local enterprise, specifically local SMEs and start-up companies whose innovations may be deemed "too risky" for traditional banking supports.

The theme of "Research, Technology and Innovation" was also identified in the Irish Government's "Resilience and Recovery 2020-2021". Specifically, it was stated that as Ireland enters into the next phase of the Covid-19 pandemic, a nationally coordinated research effort will be delivered and funded in order to deal with the consequences of the pandemic and to prepare for future emergencies:

"As we move into the next phase of the pandemic: We shall seek to build on this initial work to deliver a nationally coordinated research effort, with the necessary research infrastructure and funding, to manage and respond to the health, social and economic consequences of the pandemic and enhance our preparedness and resilience for future emergencies. This will involve; building further capacity for public health research, research to gauge the social and economic impacts of COVID-19 at a citizen and sectoral level, strengthening epidemiological modeling and behavioural science capabilities, capacity and demand modeling, supporting the clinical trials network, infrastructure to support biorepository studies and data linkages, advances in reliable testing and tracing capabilities" (Resilience and Recovery 2020-2021, 2020: 35).

Although the policy document does not explicitly state that this push for research may benefit local enterprise, there are nevertheless opportunities available for local businesses who are willing and able to take advantage of the "necessary research infrastructure and funding".

4.4 RENOVATION, RETROFITTING AND CONSTRUCTION

One of the key opportunities identified for local enterprise was in the area of renovation, retrofitting and construction. This theme appeared in policy documents drawn from both the EU and national level, specifically in relation to the call for a "renovation wave" of public and private buildings. Although renovation rates and costs are a challenge, renovation lowers energy bills, thus reducing energy





poverty, while also helping to reduce the environmental impacts of buildings. The call to renovate buildings would boost local construction sectors and is therefore an opportunity to support local SMEs and local jobs.

"To address the twin challenge of energy efficiency and affordability, the EU and the Member States should engage in a 'renovation wave' of public and private buildings. While increasing renovation rates is a challenge, renovation lowers energy bills, and can reduce energy poverty. It can also boost the construction sector and is an opportunity to support SMEs and local jobs" (European Green Deal, 2019: 9).

"In parallel, the Commission proposes to work with stakeholders on a new initiative for renovation in 2020. This will include an open platform bringing together the buildings and construction sector, architects and engineers and local authorities to address the barriers to renovation. This initiative will also include innovative financing schemes under InvestEU. These could target housing associations or energy service companies that could roll out renovation including through energy performance contracting. An essential aim would be to organise renovation efforts into larger blocks to benefit from better financing conditions and economies of scale. The Commission will also work to lift national regulatory barriers that inhibit energy efficiency investments in rented and multi-ownership buildings. Particular attention will be paid to the renovation of social housing, to help households who struggle to pay their energy bills. Focus should also be put on renovating schools and hospitals, as the money saved through building efficiency will be money available to support education and public health" (European Green Deal, 2019: 10).

At the national level, the recent Programme for Government (2020: 33) aims to deliver the National Aggregated Model of Retrofitting as part of the EU Renovation Wave in order to reach over 500,000 homes by 2030. As part of this aim, the Climate Action Plan (2019: 82) has identified the need to "develop a plan to establish a new delivery body to ensure the effectiveness and efficiency of the delivery system for retrofits, including examining how to deliver a major house retrofitting programme in the Midlands". Local Authorities have a role to play in this delivery system for retrofits as the Climate Action Plan (2019: 79) requires them to "upgrade their housing stock under Phase 2 of the social housing retrofit programme to bring dwellings more than 40 years old (30% of the social housing stock) to a B2 equivalent BER". Through doing this, the existing retrofitting industry will be grown substantially. Thus, there are opportunities for local SMEs to take advantage of this growth.

"Our plan will grow the existing retrofit industry tenfold and provide opportunities that the SME sector can take advantage of. We will also give enterprise the confidence to set up supply chains, train staff and invest in the required equipment" (Programme for Government, 2020: 37).

This is an early opportunity for local authorities to drive new enterprise at a local level with the provision of business supports from the Local Enterprise Office function.

4.5 BIOECONOMY

Another opportunity for local enterprise identified was in relation to the development of the bioeconomy. The bioeconomy means using renewable biological resources from land and sea, like crops, forests, fish, animals and micro-organisms to produce food, materials and energy.



This theme was identified four times in the policy document, "National Policy Statement on the Bioeconomy". According to this document, the bioeconomy "extends from farming and the agri-food businesses, marine-based industries, forestry, waste management, energy suppliers, and pharma and bio-technology products" (National Policy Statement on the Bioeconomy, 2018: 2). In relation to the bioeconomy and Irish industry, the document claims that Irish industry "has not been slow recognising the potential for materials and their associated 'waste' streams and by-products to be converted into valuable products. This is at the heart of the bioeconomy" (National Policy Statement on Bioeconomy, 2018: 2). Additionally, the document points out that:

"Ireland enjoys some important comparative advantages in relation to the bioeconomy and Government is determined to capitalise on these. Much of Ireland's advantage in the bioeconomy sphere can be attributed to its natural capital and relatively long growing season which arises from its temperate climate and fertile soils, with potential for growth up to 10 months of the year. Alongside its hospitable environment, Ireland has many other important assets relevant to the bioeconomy" (National Policy Statement on Bioeconomy, 2018: 7).

Further, the document draws upon the "Project Ireland 2040 – the National Planning Framework", to highlight the "potential of the bioeconomy in promoting more efficient use of renewable resources while supporting economic development and employment in rural Ireland" (National Policy Statement on Bioeconomy, 2018: 2). However, it also states that although "Ireland has flourishing firms in all of these sectors but much more can be done to unlock the bioeconomy's commercial potential and its environmental benefits. Doing so will also help the agri-food and maritime sectors to deal with the uncertainties posed by Brexit by diversifying their product base" (National Policy Statement on Bioeconomy, 2018: 2). Therefore, although the "National Policy Statement on the Bioeconomy" claims that Irish industry has recognised the potential of the bioeconomy, it also points towards the opportunities remaining for local enterprises in capitalising on the bioeconomy and its associated waste streams and by-products, as long as they align with the National Transition Objective.

4.6 AGRICULTURE, FISHING AND FORESTRY

As part of the EU and Irish Government's attempts to move towards a carbonneutral society, a number of changes would need to be made to the agriculture, fishing and forestry sectors. The European Green Deal sets out some of these changes while suggesting that measures such as eco-schemes might work to reward farmers for making necessary changes.

"These plans should lead to the use of sustainable practices, such as precision agriculture, organic farming, agro-ecology, agro-forestry and stricter animal welfare standards. By shifting the focus from compliance to performance, measures such as eco-schemes should reward farmers for improved environmental and climate performance, including managing and storing carbon in the soil, and improved nutrient management to improve water quality and reduce emissions. The Commission will work with the Member States to develop the potential of sustainable seafood as a source of low-carbon food" (European Green Deal, 2019: 12).



The Irish Government's Programme for Government (2020) lays out their plans to support Irish agriculture through on-farm investment, marketing tools and basic payments, something that may benefit local farmers.

"Support the beef, dairy, sheep, pig, poultry, tillage and horticulture sectors in the context of the next CAP through on-farm investment, the development of producer groups, animal welfare measures, and marketing tools such as Protected Geographical Indicator (PGI) status" (Programme for Government, 2020: 63).

"Introduce a new cap on basic payments, in line with the outcome of CAP negotiations" (Programme for Government, 2020: 63).

The forestry sector in Ireland currently supports c.12,000 jobs and an increase in ambition in Ireland's forestry targets through the Climate Action Plan and the Programme for Government, 2020 will lead to additional opportunities in this space.

4.7 TRANSPORT

In order to meet our Climate Goals, significant changes must be made to our transportation system, with increasing need for improved public transport. The Climate Action Plan (2019) details the Irish Government's plans to achieve this goal through building better infrastructure. Their action plan includes:

- "Implement major sustainable-mobility projects such as DART Expansion, Metro Link, and the BusConnects Programme. BusConnects targets a 50% increase in bus passenger numbers over the lifetime of the project in our major cities.
- Expand sustainable-travel measures, including a comprehensive cycling and walking network for metropolitan areas of Ireland's cities, with a particular emphasis on safety of cyclists. We shall also expand greenways, and develop over 200km of new cycling network under BusConnects.
- Promote compact growth and greater integration of policies for land use and transport planning, which will reduce the demand for commuter travel and support more efficient patterns of development and travel
- Establish a Park-and-Ride development office which shall publish a 5 year strategy by Q4 2019, which will consider:
 - » Development of an overall Park and Ride Implementation Plan including, where feasible, the provision of multimodal facilities (e.g. EV charging/ bicycle parking)
 - » A timeline to seek planning permissions for initial tranche of car park extensions at rail stations where required and for new strategic park and ride sites
 - » A timeline to commence construction of car park extensions at rail stations (where required) and for new strategic park and ride sites
- Consideration of how we can implement localised travel planning/behavioural change information programme" (Climate Action Plan, 2019: 90-91).

The building of such an infrastructure provides opportunities for local enterprise, specifically in the area of construction. There are also other opportunities available from such a modal shift, for example, car sharing enterprises, pop-up shops and bike repair services at popular Greenway/Blueway locations. Further, in order to meet their climate goals, the Irish Government's Programme for Government (2020: 15) commits





to "Continue to support the greening of the taxi fleet and continue to provide financial assistance to taxi drivers switching to battery electric vehicles and plug-in hybrid electric vehicles". This commitment to the greening of Ireland's taxi fleet is part of the government's broader goals of accelerating the adoption of EV cars and vans across Ireland. They aim to establish EVs as 100% of new cars and vans being purchased by 2030, something that will enable them to achieve their target of 950,000 EVs on the road by 2030 (Climate Action Plan, 2019: 11). As part of this goal, the government aims to accelerate "Accelerating the electrification of the transport system, including electric bikes, electric vehicles, and electric public transport, alongside a ban on new registrations of petrol and diesel cars from 2030" (Programme for Government, 2020: 33). The emergence of an EV industry, and the electrification of the transport industry, holds significant potential for local enterprises.

Local authorities have an obvious and key role to play in terms of both promoting this modal shift and the need for new infrastructure but also in assisting existing businesses to recognise and compete for contracts that will emerge in the implementation of this policy.

4.8 RENEWABLE ENERGY

As Europe and Ireland aim to move towards carbon-neutral societies, there is an increasing demand for renewable energy. This developing industry may hold potential benefits for local enterprise. As the Climate Action Plan (2019: 69) states, the "many new technologies – micro-generation, anaerobic digestion, biomass, heat recovery, carbon capture, biomethane – will come to maturity bringing new business opportunities". Further, in the Climate Action Plan, the Irish Government also identified the potential growth of indigenous bioenergy supply and industry, something that holds opportunities for local enterprise:

"Realising the potential of bioenergy supply opportunities, including biomass mobilisation and biogas/biomethane supplied from anaerobic digestion, will require sustained attention over the period ahead. We will:

- Support biomass mobilisation, by mapping through the Regional Authorities, rural and urban biomass, feedstock loss and waste, and current biomass mobilisation, to help industry develop new value chains and business models. Crucial future elements to consider include scale-up requirements; working with industry/regional authorities to identify market opportunities; mapping the knowledge and innovation system from lab to market; and learning about the economic, environmental, social and spatial impacts
- Adopt a whole-of-Government approach to reviewing the potential of anaerobic digestion to supply biogas and biomethane, including opportunities in indigenous grass silage and slurry
- Set a target for biogas and biomethane development in Ireland
- Develop and stabilise the indigenous supply of biomass for renewable heat and CHP
- Stimulate market demand through the SSRH. The second phase of the scheme will provide" (Climate Action Plan 2019, pg.107).





4.9 INTERNET AND BROADBAND INSTALLATION

As part of the Irish Government's National Broadband Plan, high speed broadband services will be delivered to more than 1.1 million people in areas where there are currently no existing or planned commercial networks. "The Intervention Area includes 540,000 premises, including 56,000 farms and 44,000 businesses. It will ensure that households and business in rural parts of Ireland will have a similar level of connectivity as households and businesses in urban areas" (Climate Action Plan, 2019: 46).

This increased broadband service will naturally benefit local enterprise and businesses, not only through enhanced connectivity, but potentially also through the installation and maintenance of the broadband service. Further, it will also help to reduce barriers to accessing information for enterprises that will mainly operate online, such as the ability to attend online courses for potential start-ups, while also increasing the number of enterprise hubs/shared office space offerings.

This will also increase the opportunity for online supports to be provided to local businesses.

4.10 REMOTE WORKING

As part of the Irish Government's broader Climate Action plans, they intend to develop "a strategy for remote working and remote service delivery, taking advantage of the opportunity for a rapid roll-out of the National Broadband Plan" (Programme for Government, 2020: 33). Again, this aim may potentially benefit local industry, especially in relation to the development of local hubs and revitalisation of local town centres.

4.11 LABOUR FORCE RE-SKILLING AND TRAINING

As Europe and Ireland move towards a carbon-neutral economy, it is expected that although many jobs and industries will be created and developed through innovation and new technologies, many others will be lost. As such, a proportion of the workforce will require re-skilling and training in order to find employment in the new circular economy. In order to facilitate this, both the EU and Irish government intend to invest in re-skilling, training and education.

"Pro-active re-skilling and upskilling are necessary to reap the benefits of the ecological transition. The proposed European Social Fund+ will play an important role in helping Europe's workforce to acquire the skills they need to transfer from declining sectors to growing sectors and to adapt to new processes. The Skills Agenda and the Youth Guarantee will be updated to enhance employability in the green economy" (European Green Deal, 2019: 19).

"The new SME Strategy19 will foster circular industrial collaboration among SMEs building on training, advice under the Enterprise Europe Network on cluster collaboration, and on knowledge transfer via the European Resource Efficiency Knowledge Centre" (New Circular Economy Action Plan, 2020: 9).



"A 200 million investment in training and education, skills development, work placement schemes, recruitment subsidies, and job search and assistance measures, will help those who have lost their jobs find a new one, retrain, or develop new skills, in particular for emerging growth sectors. This will include:

- 10,000 additional places on work placement and experience schemes available for those unemployed for over 6 months.
- 12,500 additional places funded through the Training Support Grant for short term skills training" (July Stimulus 2020, 2020: 3).

This commitment to the re-skilling and training of Ireland's workforce, may also hold possibilities for local enterprise. Specifically, local SMEs and businesses may be able to avail of the funding available for the re-training of their employees, or else capitalise on the need for training services, educators and training facilities.

4.12 APPRENTICESHIPS AND TRAINEESHIPS

As part of the Irish Government's plan to tackle both Climate Change and the economic fallout from Covid-19, they are committing to implementing, upskilling and reskilling programme "so that workers from sectors that are unlikely to return to full capacity in the following year can avail of the opportunities in other more sustainable sectors". In order to do this, they will update and publish the Apprenticeship Action Plan to explore new ways of structuring and funding apprenticeships (Programme for Government, 2020: 20). As part of this, they have committed to significantly growing the number of apprenticeships between 2020 and 2025 to at least 10,000 new registrations per annum. Local enterprise may have benefited from these apprenticeships and traineeships as the Apprenticeship Incentivisation Scheme "will provide a €2,000 euro payment to support employers to take on new apprenticeships in 2020" (July Stimulus, 2020: 4). There are obvious benefits at a local level should this incentivisation scheme be repeated.

4.13 PUBLIC SERVICE CONTRACTS

The above subsections listed numerous ways in which the Irish Government intend to address Climate Action. In order to achieve their goals relating to public services (transport, construction and retrofitting, broadband services, recycling, re-skilling of the workforce, research, etc.) contractors will need to be recruited. In the Programme for Government (2020: 20-22) the Irish Government have outlined their plans to support SMEs to compete for public contracts. Specifically, they intend to "continue to support and train Irish indigenous SMEs, so that they can compete for public procurement contracts in Ireland and abroad" (Programme for Government, 2020: 22). These contracts will be linked to the Irish Government's Climate Action Plan 2019, as well as annually updated Climate Action Plans from this year onwards, and other national public sector strategies. It is worthwhile noting that contracts and tenders with Public Service bodies (especially Local authorities) will be subject to Green Procurement criteria that they will have to meet. Green Procurement guidelines are being introduced across the sector currently. Local Enterprise Offices could play a key role in support of their clients who wish to compete for these projects.





4.14 DEVELOPMENT OF LOCAL MARKETS

The recent Programme for Government (2020: 66) sets out two plans for the development of local markets, something which will undoubtedly help local enterprise:

"Support local authorities to expand the number of farmers' markets, farm shops and food emporiums; and support the formation of community-owned markets in all towns, showcasing local food produce from local farmers, growers, and food producers" (Programme for Government, 2020: 66).

"Support the small food producer, providing support for on-farm diversification enterprises and investment in local processing facilities, allowing farmers to sell their products into the local and wider domestic markets" (Programme for Government, 2020: 66).

4.15 PPE MANUFACTURING

The "Resilience and Recovery 2020-2021" document identified PPE manufacturing as an area of potential opportunity for local Irish enterprise. On page 32 of the document, it was stated that:

"Ensuring continuity of supply for PPE requires a coordinated approach for implementing a national supply chain strategy, including encouraging indigenous manufacturing" (Resilience and Recovery 2020-2021, 2020: 32).

4.16 OPPORTUNITY TO HARNESS EXISTING STRUCTURES AND GOODWILL

This theme was also identified within the "Resilience and Recovery 2020-2021" document. Specifically, the document states that:

"There is an opportunity to harness existing structures and goodwill to drive tailored local sustainability and business initiatives. The local authorities working with the LCDCs and PPNs will develop recovery initiatives including town centre / public realm alterations, incentive schemes and advisory assistance Local Authorities will specifically use all instruments and agencies available to them such as the LEOs, Tourism Officers, local economic development initiatives, town centre management groups etc. The process will be supported by the Departments of Housing and Local Government and Rural and Community Development and Business, Enterprise and Innovation. The Departments, will work collaboratively with the City and County Managers to devise a process and timeline for local engagement and finalisation of local plans, drawing on and accelerating established processes for developing local economic and community plans (LECPs). Work will explore and harness local enterprise structures and substantial business support resources to underpin and drive local community recovery plans and reviewing existing LECPs for opportunities to re-purpose resources in the new context COVID-19 presents" (Resilience and Recovery 2020-2021, pg. 52).

The LECP review process will be an opportunity to begin integrating climate related actions into the Local Economic and Community Plans which will aid the transition to a low carbon economy through engagement with communities.





4.17 SUMMARY OF EU AND NATIONAL LEVEL DOCUMENTS

Opportunities for Local Enterprise

- Recycling and the Circular Economy.
- Research, Technology and Innovation.
- Renovation, Retrofitting and construction.
- Bioeconomy.
- Agriculture, Fishing and Forestry.
- Transport.
- Renewable Energy.
- Internet and Broadband Installation.
- · Working Remotely.
- Labour Force Re-Skilling and Training.
- Apprenticeships and Traineeships.
- Public Service Contracts.
- Development of Local Markets.
- PPE Manufacturing.
- Opportunity to harness existing structures and goodwill to drive tailored local sustainability and business initiatives.

How Local Authorities can help Local Enterprise

- Support Innovation through implementing the Climate Action Charter.
- Sustainable Investment.
- Business Supports Available for new enterprise.
- Develop a Climate Action Toolkit and Framework.
- Regeneration and Retrofitting.
- Introducing minimum BER standards.
- Support Carbon-Neutral Transport.
- Support Afforestation.
- Lead by Example.
- Develop Local Markets
- Support the development of renewable energy projects.
- Promote active travel projects.

Key Opportunities Overview

- Developing the domestic recycling industry, specifically in relation to textiles, paper and the Government's return scheme for plastic bottles and aluminium cans.
- Engaging in research, innovation and entrepreneurship in new technology to make advancements towards a carbon-neutral circular economy, while benefiting from EU, national and regional funding streams.
- Renovation and retrofitting of public and private buildings, specifically in relation to local authority-owned dwellings over 40 years-old which are to be brought to a minimum B2 equivalent BER.
- Developing an improved transportation system through building public transport
 routes, constructing Greenway and Blueway routes, and through establishing car and
 bike sharing enterprises, pop-up shops and bike repair services at popular Greenway/
 Blueway locations. Further opportunities exist in the installation and maintenance of
 electric vehicle charging points.
- The Irish Government's National Broadband Plan holds opportunities in the areas of
 installation and maintenance of broadband services, while the increased connectivity
 will help to reduce barriers to accessing information for enterprises that will mainly
 operate online, such as the ability to attend online courses for potential start-ups,
 while also increasing the number of enterprise hubs/shared office space offerings.
- As we move towards a carbon-neutral society, certain sectors of the workforce will need to be re-skilled or re-trained. Local businesses may avail of funding available for the re-training of their employees, or possibly capitalise on the need for training services, educators and training facilities.



5. OPPORTUNITIES FOR LOCAL ENTERPRISELOCAL AUTHORITY POLICY

Following the analysis of EU and national level documents, a detailed analysis was carried out on 33 local authority documents. These documents included the "EPA Research Programme 2014–2020 - Local Authority Adaptation Strategy Development Guidelines", the "Climate Action Charter for Local Authorities" and 31 Local Authority Climate Change Adaptation Strategies and/or Action Plans.

This section will focus primarily on the local authority climate change adaptation strategies and action plans as they hold particular relevance to the central concerns of this report; that is to say, opportunities for local enterprise and how local authorities can help enterprise.

Specifically, each of these strategies detail actions to achieve a climate adaptation goal. The range of adaptation goals listed include:

- Goal 1 Local Adaptation Governance and Business Operations.
- Goal 2 Infrastructure and Built Environment.
- Goal 3 Land use and Development.
- Goal 4 Drainage, Water and Flood Management.
- Goal 5 Nature, Natural Resources and Cultural Infrastructure.
- Goal 6 Local Community Health and Wellbeing.
- Goal 7 Mobility and Transport.
- Goal 8 Economic Development.
- Goal 9 Energy and Resource Management.

In total, 234 actions have been identified as relevant. Importantly, each of these 234 actions has been identified as a potential way in which local authorities can help local enterprise. 186 of them have been identified as opportunities for local enterprise. The following subsections will provide an overview of these relevant climate adaptation actions, which have been grouped thematically according to how local authorities might help local enterprise. Specifically, these thematic groupings are:

- 1. Create a Market and Demand for Green Goods, Services and Technologies.
- 2. Identify Funding Streams.
- 3. Support Green Innovation and Technology.
- 4. Promote Green Business.
- 5. Contracting Local Businesses.
 - a) Regeneration, Retrofitting and Construction.
 - b) Maintenance and Repair.
 - c) Landscaping.
- 6. Conducting Surveys and identifying potential opportunities.
- 7. Promote Renewable Energy.
- 8. Promote more environmentally friendly modes of transport.
- 9. Develop Co-working Hubs.
- 10. Promote the Circular Economy.





5.1 CREATE A MARKET AND DEMAND FOR GREEN GOODS, SERVICES AND TECHNOLOGIES

The first way in which local authorities can help local enterprises is to create a market and demand for green goods and services. Given their decisive role in local land-use and management, local authorities are uniquely placed to help promote and foster local markets and demands for green goods, services and technologies. Further, as the Irish Government's Climate Action Plan (2019: 128) acknowledges, local authorities play key roles in their respective communities and as such they act to "demonstrate public sector leadership on climate action in their areas as well as key mobilisers of action at a local and community level". Local authorities may help to develop and promote such demand through a number of the climate adaptation actions, including the six actions listed below:

- Ensure that climate action policy is translated into all functional plans and strategies throughout LA including capital investment, operational, economic, regeneration, social/community and development plans, standards and strategies.
- Take on a more robust role in promoting green procurement, in order for goods, services and works to support environmental and wider sustainable development objectives, to assist in balancing cost effectiveness and sustainable development, representing both short-term and long-term value for money.
- Actively pursue and implement measures to ban single use items within the main offices and buildings of LA including libraries and expand also to LA managed or supported events.
- Integrate climate considerations into the design, planning and construction
 of all roads, footpaths, bridges, public realm and other construction projects.
 Make provision to incorporate green infrastructure as a mechanism for carbon
 offset as well as taking advantage of the wider environmental benefits like
 providing shade to alleviate heat stress, supporting for urban biodiversity,
 water retention and flood alleviation.
- Integrate and promote climate-smart building and urban design performance outcomes in terms of policy and development standards through the development management process.
- Continue to promote the integrated planning, design and delivery of green infrastructure (including urban greening) through appropriate provisions in:
 - » Planning policies of development plans.
 - » Development standards and conditions on planning permissions.
 - » Infrastructural, public realm and community projects.

5.2 IDENTIFY FUNDING STREAMS

A second way in which local authorities can help local enterprises is to create and identify potential funding streams. Through identifying potential funding streams and aligning them with climate action projects relating to specific functions/sections, local authorities would be accessing funds that could be used for supporting local green enterprises and climate adaptation strategies, as was identified in several local authority climate adaptation actions such as those listed below:



- Explore the potential for local authority to expand its service delivery to include climate action considerations with the scope to inform on local climate change issues, climate action measures, run awareness campaigns and manage funding for climate action projects.
- Align climate actions with projects and dedicated funding streams through housing, regeneration and other development initiatives across LA activities.
- Identify, source and leverage funding streams for the active implementation
 of adaptation actions and measures across LA's jurisdiction with an emphasis
 on capitalising on opportunities that will contribute both environmentally and
 economically to the area.
- Identify funding opportunities provided by SEAI and OPW for retrofit/ renovation of public buildings.
- Review potential EU funding streams to understand whether climate strategy might place LA in stronger position to apply for certain funding.

5.3 SUPPORT GREEN INNOVATION AND TECHNOLOGY

A third way in which local authorities might assist local enterprise is through offering support for green innovation and technology. As was discussed in an earlier section, the Climate Action Plan (2019: 128) led to the development of a Climate Action Charter for local authorities. The implementation of this will help to encourage and support innovative projects being carried out by local authorities. Further, through offering supports for green innovations and technologies, local authorities would be helping to support local businesses through supporting their development of green technologies and innovations. Local Enterprise Offices would play a central role in achieving this aim. Listed below are some of the key climate adaptation actions identified in the local authority climate change adaptation strategies which demonstrate how local authorities may help local enterprises through supporting green innovation and technologies:

- Through the work of the LEOs, support, encourage and nurture new ideas seeking to capture opportunities associated with environmental and technological advances that support low carbon transition.
- Encourage and promote technologies, for example anaerobic digestion, that
 will contribute positively and grow the Circular and Bio-economy to promote
 sustainable rural and urban economic development as part of the overall aim
 of transiting to a low carbon economy with reduced greenhouse gases.
- Investigate the potential for technology-based solutions in coordination of responses to climate events in the areas of ICT and GIS.
- To encourage the use of green roof technology particularly on apartment, commercial, leisure and educational buildings.
- Review ways to improve house building and maintenance plan standards to reduce the impacts of climate change on occupants taking into consideration the proposed Public Sector Decarbonisation Strategy. This may include:
 - » Assessing the need to increase repair standards and maintenance frequency to mitigate against the expected increase in structure deterioration during extreme events and expected plant growth during growing season.
 - » Exploring the need and benefit of updating or installing new technologies in new builds and when retrofitting including energy efficient technology, water harvesting systems, plumbing technology, and heating and cooling systems.





- Examine methods or new technologies for the watering of plants/trees (i.e. gator system, rain harvesting, permeable systems).
- Help businesses grow through spotting opportunities for innovation, increasing resilience and saving money.
- Reduce the need for "Grey adaptation" measures, for example, identifying sites for trialling renewable energy projects.

5.4 PROMOTE GREEN BUSINESS

A fourth way in which local authorities may help local enterprise is through promoting green businesses. Primarily, the local authorities' climate change adaptation strategies point to two distinct ways in which this may be done. Firstly, local authorities can assist businesses that are seeking to lessen their environmental impact through providing them with information and supports to help build resilience:

- Develop a Climate Change Awareness Plan/Campaign for business and startups to inform of climate action measures that can be integrated into business activities. This may include;
 - » Information to business operators and start-ups on building resilience to the impacts of climate change.
 - » Adding Climate Change considerations on agendas at conferences, training and awareness programmes.
 - » Marketing campaign identifying business supports and funding options to businesses seeking to become more resilient to climate change events.
 - » Organise a green business conference with SEAI Development creating awareness for business.
 - » Develop a pilot project to audit businesses on their energy efficiency.
- Explore innovative ways of stimulating interest and creating awareness about climate change in the business community. For example: running a "Big Ideas" competition.
- Provide support to local businesses in recognizing opportunities for innovation, increasing resilience and saving money.

Secondly, local authorities can assist local enterprises that are already engaging in green/low-carbon business practices through showcasing and promoting their work:

 Showcase businesses in LA jurisdiction that are making money from green economy.

Both of these would promote share learning across local enterprise and act to promote new opportunities from climate action.

5.5 CONTRACTING LOCAL BUSINESSES

A fifth way that local authorities might help local businesses is through providing them with public service contracts. As was discussed in an earlier section, in the Programme for Government (2020: 20-22), the Irish Government aims to support SMEs to compete for public contracts. Local authorities across Ireland are well positioned to help achieve this aim. As was identified in many of the local authorities' climate adaptation actions, there are three key areas in which local authorities might



provide local businesses with public service contracts. These are: Regeneration, Retrofitting and Construction; Maintenance and Repair; and Landscaping.

The implementation of Green Public Procurement (GPP) is also a process where local authorities can exert significant influence to stimulate the provision of more resource-efficient goods, services and works within the marketplace. In supporting and promoting green procurement, local authorities can encourage innovative and eco-efficient new markets, whilst supporting local services provision above others.

5.6 REGENERATION, RETROFITTING AND CONSTRUCTION

As was discussed in relation to "Opportunities for Local Enterprise" above, the European Green Deal (2019: 9) has called upon EU Member States to engage in a "renovation wave' of public and private buildings", something that can "boost the construction sector and is an opportunity to support SMEs and local jobs". Given their role in governing land-use and their housing and building stocks, local authorities are well positioned to support local enterprise through the provision of regeneration, retrofitting and construction contracts to local businesses. Below are five climate adaptation actions listed in Local Authority Climate Change Adaptation Strategies which could benefit local businesses:

- Move towards near-zero-energy in council new build buildings, in line with EU policy.
- Support the public lighting retrofits programme currently in operation.
- To require, where feasible and practical, the provision of green roof technology for all new public buildings (council buildings, school buildings, hospitals, community centres, sports facilities, libraries, Garda stations etc.), to assist in flood alleviation, insulation and improved biodiversity, and to actively promote these measures where appropriate in new commercial and industrial buildings.
- Become leaders in and champions of energy efficiency, ensuring that all council owned buildings are assessed for possible retrofitting to improve energy efficiency.
- Promote increased energy efficiency in the LA housing stock including retrofitting.

5.7 MAINTENANCE AND REPAIR

Local authorities could also help local enterprise through allowing them the opportunity to compete for contracts in the areas of maintenance and repair. Local authorities have numerous assets that require regular maintenance, and in some cases repairing, something that local businesses could perform. This includes local authority vehicles, buildings and properties, coastal and flood defences, grasslands, and so on:

- Assess LA's vehicle policy and undertake vehicle suitability assessments regularly to ensure timely and necessary maintenance for effective operation in challenging conditions.
- Apply a robust risk assessment and management framework to local authority owned buildings and properties to identify and protect against the key vulnerabilities to the impacts of climate change and mitigate against service disruption.





- Introduce maintenance contracts that detail maintenance programmes that support climate adaptation measures, such as grassland management.
- Support the implementation of the winter maintenance services programme annually and keep up to date with developments in best practice.
- Develop a scheme to insulate all pipework in attics of LA owned properties to avoid potential damage caused by frozen/burst pipes.
- Undertake a Monitoring and Maintenance programme on existing public coastal defences.
- Develop a gulley maintenance and cleaning plan to ensure that programs are in place in all towns and villages prone to flooding and that all gulleys are cleaned in advance of the Autumn and Winter seasons.

5.8 LANDSCAPING

There are many possible opportunities for local authorities to help local enterprises through landscaping contracts. This includes the planting, replacement and maintenance of trees and hedgerows, the reforestation of suitable areas, and the control and maintenance of invasive species:

- Incorporate landscaping and planting into the planning and design of all major infrastructure developments in the county.
- Develop a policy for the replacement of trees that have to be removed to facilitate infrastructure projects.
- Promote conservation, regenerating and planting of natural woodland and hedgerows through interagency collaboration and planning policy.
- Tree planting and management:
 - » Develop a strategy to undertake and implement an active native tree planting programme in conjunction with an awareness campaign that informs of the benefits to communities in improving air quality, offsetting carbon emissions, promoting biodiversity, limiting flood risk, reducing urban heat, as well aesthetic value.
 - » Undertake risk assessment of trees located along travel routes and near critical infrastructure to examine their health/integrity, risk to infrastructure and public safety in context of severe wind events. Survey on an ongoing basis.
 - » Use of suitable and appropriate tree species as fire break to reduce spread of wildfires in areas at risk.
 - » Explore the use of technology to implement a regular tree survey.
 - » Ensure that any trees having to be removed are replaced at locations that are suitable to avoid future impact to infrastructure or public safety.
- Promote reforestation and new forestry policies and practices to combat the challenges of climate change.
- Integrate natural borders/buffers to be included as an integral component
 of the design of greenways/blueways, tracks and trails and amenity areas
 to promote natural enhancement through liaising with NPWS for advice and
 quidance.
- Continue to map, identify and manage sites where invasive species are detected.





5.9 CONDUCTING SURVEYS AND IDENTIFYING POTENTIAL OPPORTUNITIES

In order to successfully address many of the challenges brought by Climate Change and to lessen their potential impact, many local authorities include calls for surveying projects as part of their adaptation actions. This includes conducting surveys on roads, trees, hedgerows, water supplies, housing and building stock, rivers, culverts, harbours, piers and marinas:

- Carry out a survey of roads on soft ground to determine possible impact caused as a result of extreme dry weather.
- Initiate a survey of roadside trees along public roads.
- Initiate a survey of roadside hedgerows along public roads.
- Identify and protect sources of potable water for domestic use during times of water shortages.
- Undertake a Risk Assessment of all road infrastructure to identify the severity
 of climate change risks function and condition. This risk should provide for an
 understanding and quantification of risks posed by extreme heat/drought,
 cold and rainfall events. The findings should be integrated into decision
 making processes, road infrastructure programmes, design and planning for
 new roads, project budgets and investment.
- Record and document severe weather events and impact on road infrastructure
 as a baseline approach to future planning. Represent the information visually
 through GIS mapping (potential app for wider use) to help identify future
 diversionary routes and quickly mobilise action and a prepared response.
- Increase the resilience of local authority buildings, housing stock and infrastructure through:
 - » Identifying and assessing the integrity of old and derelict buildings in the context of extreme weather events and threat to public safety and take measures to reduce.
 - » Examine the need to regularly assess buildings owned or occupied by local authority after extreme events to ensure structural integrity, including: Roof, windows (including frames and hinges) and timber fencing.
 - » Explore the need to assess and identify the integrity of buildings, structures or surrounding trees that could be affected by soil instability.
 - » Assess vulnerability of housing stock to potential flooding damage including identifying stock currently in flood plains.
 - » Consider a one-off condition survey of all building stock to be undertaken to assess vulnerabilities to current and projected events.
- Undertake a monitoring and inspection programme for harbours piers, marinas and quays.
- Initiate a survey of roads affected by flooding in order to prioritise expenditure.
- Initiate a condition survey of rivers to determine risks associated with extreme weather events.
- Carry out a condition survey of all culverts and map digitally for future use.



5.10 PROMOTE RENEWABLE ENERGY

Another approach in which local authorities may help local enterprise is through the promotion of renewable energies and the renewable energy sector. By promoting renewable energies through climate adaptation actions, local businesses that are involved in the provision and supply of renewable energies are being afforded an opportunity for growth. This includes those working with solar, wind, electric and bioenergies, and those involved in the installation and maintenance of heat pumps:

- Review local authority plant and vehicle fleet to determine alternatives to fossil fuel.
- To encourage where feasible and practical, the provision of photovoltaic solar panels in new residential developments for electricity generation/storage and/ or water heating purposes.
- To support the use of heat pumps instead of gas boilers where suitable.
- To encourage the development of local authority wind energy policy, in accordance with government policy and with regard to the Landscape Character Assessment of the county and the Wind Energy Development Guidelines (2006), or any revisions thereof.

5.11 PROMOTE MORE ENVIRONMENTALLY FRIENDLY MODES OF TRANSPORT

Through the promotion of more environmentally friendly modes of transportation and the development of better transport routes, local authorities would be creating numerous opportunities for local enterprise. As identified from the local authorities' climate adaptation actions, these opportunities would be in the areas of construction of transportation routes and amenities, provision and maintenance of Electric Vehicles and charging points, "Go Car" and bike rental schemes, and bus infrastructure and services.

- Promote transport schemes in local authority jurisdiction such as the Go Car scheme and a pickup / drop off bike scheme.
- Promote availability of cycle bays and shower facilities at LA building to encourage cycling/walking to work.
- Encourage policy to support and develop the rollout of Electric Vehicle (EV) charging infrastructure on:
 - » Sites owned and occupied by LA.
 - » Private sites through supportive policies and control standards of the local authority landuse and spatial plans .
- Develop a scheme to pilot low carbon alternative vehicles for use by local authorities in relation to business travel.
- To identify and seek to implement a strategic, coherent and high-quality cycle and walking network across the local authority jurisdiction that is integrated with public transport and interconnected with cultural, recreational, retail, educational and employment destinations and attractions.
- Develop a programme to retrofit charging points and include as a criteria in devolvement standards of the local authority landuse and spatial plans for new charging points on private sites.





- Investigate the feasibility to introducing bike rental hubs at appropriate locations throughout the local authority jurisdiction.
- Liaise and collaborate with bus companies to identify deficiencies in bus infrastructure and examine ways of improving the infrastructure and awareness to promote bus usage including supporting and promoting the 'Local Link' within local authority jurisdiction.
- Explore the potential for expanding the local authority fleet with energy efficient amenity vehicles.

5.12 DEVELOP CO-WORKING HUBS

One further way in which local authorities might help local enterprise is through the creation of co-working hubs. Not only would the development of such hubs provide opportunities for businesses engaged in construction, but it would also act to support environmental and economic opportunities:

- In line with Strategic Objective No. 2 of the Mid-East Regional Enterprise Plan to 2020:
 - » Development of a clean tech hub in local authorities jurisdiction that will support environmental and technological economic opportunities.
 - » Encourage and promote projects that will contribute positively and grow the Circular and Bio-economy to promote sustainable rural and urban economic development as part of the overall aim of transiting to a low carbon economy.
 - » Support development of co-working hubs and work towards reducing the carbon footprint of local communities.
- Development of a clean-tech hub that will support environmental and technological economic opportunities.

A number of these projects are ongoing across different local authority areas and learnings from these projects could be used to bring further scale to co-working hubs at a national level.

5.13 PROMOTE THE CIRCULAR ECONOMY

Finally, local authorities can play a central role in promoting the circular economy and in helping to provide opportunities for local businesses that are engaged in the circular economy. Specifically, local authorities can help these local enterprises through acting to promote recycling practices and discouraging illegal or improper disposal of waste:

- Develop robust polices in the local authority Development Plan to:
 - » Encourage and support the provision of a separate collection of source segregated waste throughout the local authority jurisdiction;
 - » Encourage the development of waste infrastructure and associated developments in appropriate locations; and
 - » Encourage the recycling of construction and demolition waste and the reuse of aggregate and other materials in future construction projects





- » Encourage high quality sustainable waste recovery and disposal infrastructure/technology including composting (anaerobic digester) plants for managing organic solid waste at appropriate locations.
- To co-operate with relevant stakeholders to implement proposals which discourage illegal or improper disposal of waste and promote the diversion of recyclable items from the waste stream including 'bottle return and refund' schemes.
- To identify suitable sites for additional recycling centres and bring bank facilities.
- To develop awareness campaigns that seek to encourage and support the provision of a separate collection of waste throughout the local authority jurisdiction.
- To develop policies within the local authority landuse and spatial plans to promote high quality sustainable waste recovery and disposal infrastructure/ technology including composting (anaerobic digester) plants for managing organic solid waste at appropriate locations.
- To support the development of programmes to cater for commercial waste not provided for in the kerbside collection system such as WEEE, Construction and Demolition (C&D) type waste.

5.14 SUMMARY OF LOCAL AUTHORITY LEVEL DOCUMENTS

How Local Authorities can help Local Enterprise

- Create a Market and Demand for Green Goods, Services and Technologies.
- · Identify Funding Streams.
- Support Green Innovation and Technology.
- Promote Green Business.
- Conducting Surveys and identifying potential opportunities.
- Promote Renewable Energy.
- Promote More Environmentally Friendly Modes of Transport.
- Develop Co-Working Hubs.
- Promote the Circular Economy.
- Contracting Local Businesses.
 - » Regeneration, Retrofitting and Construction.
 - » Maintenance and Repair.
 - » Landscaping.



Key Opportunities Overview

- Develop green innovations and technologies while working with LEOs, specifically in the areas of:
 - » Anaerobic digestion.
 - » Green roof technologies.
 - » Exploring the need and benefit of updating or installing new technologies in new builds and when retrofitting including energy efficient technology, water harvesting systems, plumbing technology, and heating and cooling systems.
 - » Trialling flood resistance technologies, such as hemp baskets.
 - » Examine methods or new technologies for the watering of plants/trees (i.e. gator system, rain harvesting, permeable systems).
- Constructing, renovating and retrofitting local authority-owned buildings and infrastructure, including:
 - » Public lighting retrofitting.
 - » Retrofitting of local authority-owned buildings to improve energy efficiency.
 - » Constructing near-zero-energy new builds.
- Maintaining and Repairing local authority assets, including:
 - » Vehicles.
 - » Buildings and properties.
 - » Coastal and flood defences.
 - » Grasslands.
- There are several opportunities in the areas of landscaping contracts with local authorities, including:
 - » The planting and maintenance of trees and hedgerows.
 - » The reforestation of suitable areas.
 - » The control and maintenance of invasive species
- Conducting surveying projects for local authorities on their assets and infrastructures, including:
 - » Roads.
 - » Trees and hedgerows.
 - » Water supplies.
 - » Housing and building stocks.
 - » Rivers.
 - » Culverts.
 - » Harbours, piers and marinas.
- The installation and maintenance of photovoltaic solar panels.
- The replacement of gas boilers with heat pumps.
- Developing local transportation systems through:
 - » The construction of transportation routes and amenities.
 - » The provision and maintenance of Electric Vehicles and charging points.
 - » "Go Car" and bike rental schemes.
 - » Bus infrastructure and services.
- The construction and operation of co-working hubs.



6. HOW LOCAL AUTHORITIES CAN HELP ENTERPRISE

This section is structured in ten sub-sections corresponding to the ten ways that local authorities support enterprise through climate action as identified within the EU and national level documents analysed. These opportunities are listed below:

- 1. Support Innovation through implementation of the Climate Action Charter.
- 2. Sustainable Investment.
- 3. Business Supports available.
- 4. Develop a Climate Action Toolkit and Framework.
- 5. Regeneration and Retrofitting.
- 6. Introducing minimum BER standards.
- 7. Support Carbon-Neutral Transport.
- 8. Support Afforestation.
- 9. Lead by Example.
- 10. Develop Local Markets.

6.1 SUPPORT INNOVATION THROUGH IMPLEMENTING THE LOCAL AUTHORITY CLIMATE ACTION CHARTER

Following on from the Climate Action Plan (2019: 128) a Climate Action Charter for Local Authorities has been developed with Government support to be offered in implementing the actions under the Charter. Implementing this Climate Action Charter for local authorities will help to support and encourage innovative projects being carried out by local enterprises. The charter provides for a range of commitments to encompass all functions and services provided including;

- a) be advocates for Climate Action in our own policies and practices, and in our many various dealings with citizens and to underpin this role through the corporate planning process,
- b) adhere to the UN Sustainable Development Goals, in particular Goal 13 Climate Action.
- c) aim to measure the carbon impact of our various activities as accurately as possible and report as required so as to inform relevant local, regional and national policies,
- d) implement, in so far as is practicable, measures which reduce our carbon emissions in line with national objectives, and develop a method for planning and reporting on these actions,
- e) deliver a 50% improvement in energy efficiency by 2030(on the 2009 baseline)
- f) ensure that policies and practices at local government level lead us towards low carbon pathways and put in place a process for carbon proofing major decisions, programmes and projects on a systematic basis, including investments in transport and energy infrastructure moving over time to a near zero carbon investment strategy,
- g) Ask suppliers as part of the procurement process to provide information on their carbon footprint and on the sustainability practices and steps they plan to reduce its impact,



- h) implement green public procurement strategy and procedures across all business areas.
- i) support our employees to undertake changes in their lifestyles both at work and at home, to reduce carbon impact and encourage work-based employee-led groups to identify and implement ideas for improvement,
- j) put in place, and resource, a long-term training strategy (technical and behavioural) for LA staff to provide appropriate capacity for the sector to deliver on climate action.
- k) encourage clients/customers/service users to undertake lifestyle changes to reduce their carbon impact, with a particular emphasis on supporting those clients/customers/service users who may face difficulties in funding such measures.
- cultivate and actively participate in partnerships with enterprise, community and voluntary groups so as to, improve the use of resources and reduced climate impact,
- m) play a key role in helping to build and implement a sustained localised citizen engagement model in supporting the various initiatives under the National Dialogue on Climate Action,
- exercise our planning and regulatory roles to help improve climate outcomes in the wider community and beyond the public sector, by developing and implementing robust evidenced based policy and standards on climate action, through appropriate and relevant adaptation and mitigation measures,
- continue to identify and develop specific actions to be taken to reduce the risks associated with negative climate change impacts and build resilience to these impacts through effective implementation of climate adaptation strategies/ Climate Change Action Plans,
- p) support elected officials in ensuring all council led activities are climate proofed in terms of achieving effective low carbon and climate resilient outcomes,
- **q)** Explore opportunities to partner or collaborate on climate action initiatives across the public, private and education sectors,
- r) Support Enterprise through LEO/LCDC offices to exploit opportunities which will arise from meeting the challenges of Climate Change,
- s) work with relevant stakeholders to source funding for implementing climate action projects,
- t) liaise with 3rd level institutions & the research community both nationally and internationally with a view to developing centres of excellence where appropriate,
- develop links with young citizens to give voice to their understanding and concerns on climate change and to enhance their awareness and the actions that they can take,
- v) continue to develop and strengthen links with both central government (relevant departments and agencies) and regional bodies to help ensure a coordinated and coherent approach to the delivery of the national climate action agenda, and
- w) monitor, evaluate and report annually on the implementation of activities under this charter.



6.2 SUSTAINABLE INVESTMENT

The European Green Deal stipulates that public authorities need to play a coordinated and guiding role for sustainable investments as public actors are the main investors in certain sectors such as infrastructure and public services. Further, it suggests that "public authorities may also need to invest when market actors cannot step in, in particular when the social and environmental benefits are not reflected in private returns, or when projects are considered too risky. Where these investments often have a cross-border nature and spill-over effects across Member States, the Commission needs to play a coordinating role at the EU level" (European Green Deal - Sustainable Europe Investment Plan, 2020: 11). Such sustainable investment actions would help to support local enterprise seeking to undertake projects that may be deemed too risky by other investors.

6.3 BUSINESS SUPPORTS AVAILABLE

A further way in which local enterprise may be supported is through offering business supports. This theme was identified in both the "Enterprise Ireland – First Steps to Green Competitiveness Guidebook" and the "Enterprise Ireland – First Steps to Green Competitiveness: Environmental Guidebook for Services/Offices Based Companies". The theme was identified 4 times in each document. As both documents were published by Enterprise Ireland and discuss the same business supports available, they contain the same passages describing their business supports. Specifically, Enterprise Ireland offer 4 types of business supports in these documents:

- Enterprise Ireland Green Offer;
- Lean Offer;
- Operational Excellence Offer; and
- Benchmarking Company Competitiveness.

Given the nature of this research project, and its emphasis on Climate Change policy, the Enterprise Ireland Green Offer is perhaps most important:

"As part of assisting client companies achieve improved export growth, the Enterprise Ireland Green Offer facilitates the incorporation of sustainable practices into the day-to-day running of the business. This is a two tiered offer based around building capability within companies to improve environmental best practice:

- GreenStart.
- GreenPlus.

Areas covered by the offer include: Environmental Management Systems, Energy Management Systems, Carbon Management Systems, Water Stewardship and Life Cycle Assessment. Better environmental performance leads to improved resource efficiency and direct cost savings and can also increase access to customers who are increasingly demanding more environmentally friendly products and services" (First Steps to Green Competitiveness Guide Manufacturing, 2019: 21; First Steps to Green Competitiveness Guide for Services/Office Based Companies, 2019: 13).

The Local Enterprise Offices take a lead in localizing Enterprise Ireland projects within their local authority areas. The recent "Green for Micro" programme is a prime example of this and perhaps can be replicated in the future.



6.4 DEVELOP A CLIMATE ACTION TOOLKIT AND FRAMEWORK

The Climate Action Plan (2019: 65) sets out the aim to "develop and establish a climate-action toolkit and audit framework for Local Authority development planning to drive the adoption of stronger climate action policies in relation to the patterns and forms of future development". The development of such a toolkit and framework would enable local authorities to help local enterprises by creating a policy and development environment in which there is a demand for carbon-neutral and environmentally friendly business practices, technologies and innovations. The lead actors for this action are the Department of Public, Expenditure and Reform and the Department Housing, Local Government and Heritage with local authorities and the Sustainable Energy Authority of Ireland nominated as "other key stakeholders".

The Department of Enterprise Trade and Employment in partnership with the Department of the Environment, Climate and Communications are currently developing a 'Climate Toolkit 4 Business'. This online based toolkit is being developed with a number of stakeholders including the LEOs to maximise the benefit for the end user such as micro, small and medium sized businesses. It includes a carbon calculator and an action plan generator for enterprises and is an example of an instrument to drive stronger climate action policies through the positive influence of local authorities.

6.5 REGENERATION AND RETROFITTING

The retrofitting and regeneration of existing buildings is a key aspect of both Ireland's and the EU's Climate Action Plan. Local authorities are well positioned to help local enterprise in participating in the "renovation wave". As part of Ireland's Climate Action Plan (2019: 77-78), it is stated that; "mobilising the acceleration of work to make our buildings climate resilient will require new approaches that go well beyond existing approaches", including the below key initiatives:

- "Scaling up the present approach of individual grants to develop a model that aggregates up into large area-based packages where economies can be achieved in delivering professional advice, tendering the work and developing smart finance, and easy pay back methods (e.g. 30 Not specified in NDP, estimated based on residential ratio through your electricity bill)
- Ensuring that every significant new build or refurbishment takes the opportunity to maximise the adoption of climate resilient measures.
- Promoting the widespread adoption of heat pump or other renewable heating options
- These will take significant innovation in the approach adopted by DCCAE and
 its agencies but will also require collaborative approaches across Government,
 Local Authorities, Enterprise, Finance and Communities to deliver. A Task Force
 will be immediately established to develop the model" (Climate Action Plan,
 2019: 77-78).

Local authorities can achieve this through their Planning and Housing functions with business support provided through the Local Enterprise Office.



6.6 INTRODUCING MINIMUM BER STANDARDS

The Climate Action Plan (2019: 81-83) also suggests that local authorities introduce minimum BER standards in their social housing stock. Specifically, the aim is to reach a minimum of a B2 BER rating. This would be part of the refurbishment of vacant dwellings or retrofitting works being undertaken on older houses which would provide numerous opportunities for local enterprises (Climate Action Plan, 2019: 83). Further, by encouraging a wider use of BER ratings "by auctioneers, Local Authorities and other influencers, the wider promotion of audits can underpin community mobilisation", something that could benefit local enterprise (Climate Action Plan 2019, pg. 81). This may also help increase the number of Sustainable Energy Communities (through the SEAI SEC Programme) to deliver community-based energy efficiency and renewable energy projects, some of which may become enterprises in their own right providing similar services to other communities.

6.7 SUPPORT CARBON-NEUTRAL TRANSPORT

In order to support the Government with their ambitious goals for a modal shift towards carbon-neutral transport, one of the goals of the Climate Action Plan (2019: 90-91) is to: "consider further opportunities to expand and better integrate existing mobility management initiatives for institutions and enterprises, such as Smarter Travel Workplaces, Smarter Travel Campus, Green School Travel and Workplace Travel Plans, including the potential for increased participation by Local Authority-led structures" (Climate Action Plan, 2019: 90-91). Some examples of these opportunities are in the areas of car sharing practices and enterprises, as well as bike rental and sharing enterprises. Through expanding and better integrating carbon-neutral modes of transportation, local authorities would support the increase demand for such modes of transport and their associated services, something which has potential to benefit local enterprises.

Local authority Active Travel Offices will, once in place, play a vital role in realising future opportunities for enterprise in the provision of local contracts in this regard.

6.8 SUPPORT AFFORESTATION

In order to reach their forestry land-cover targets of 18% for carbon sequestration purposes towards net-zero carbon society by the second half of the century, the government's Climate Action Plan (2019: 106) aims to increase the afforestation rates to an average of 8000 ha per year. This will be achieved through engaging with landowners of all types, from farmers through to local authorities and state bodies. This objective will not only aid Ireland in achieving its carbon reduction targets, but it also holds potential for sustainable local enterprise. Specifically, the plan sets out to:

"Enable increased access into forests to allow the efficient and timely harvesting of timber for delivery to the market" (Climate Action Plan, 2019: 106).

By engaging in afforestation projects, which are supported by the Department of Agriculture, local authorities will provide opportunities for new enterprise in areas such as forestry services, ecological assessment, specialist machinery supply and repair etc.





6.9 LEADING THROUGH EXAMPLE

In the Irish Government's Climate Action Plan (2019: 128), local authorities have been acknowledged to play a key role in their respective local communities and can therefore act to "demonstrate public sector leadership on climate action in their areas as well as key mobilisers of action at a local and community level. Four Climate Action Regional Offices have already been established to assist the Local Authority Sector in building capacity to engage effectively with climate change, including developing and implementing its own climate action measures". Under the current plan, local authorities will be expected to develop an annual programme with measurable acts. Of the three measurable acts listed, one is particularly relevant to "how local authorities can help enterprise":

"Resources from the Project Ireland 2040 Funds will be mobilised to support local authority ambition on climate action, including measures to encourage refurbishment and regeneration and the local development of low-carbon, climate-resilient economic activities" (Climate Action Plan, 2019: 128).

The leadership role of local authorities is potentially the single most vital action in driving economic opportunities at a local level, as they arise from tackling climate action. By engaging in new business areas such as retrofitting, climate change adaptation, afforestation, renewable energy, green public procurement and active travel local authorities will drive investment in these areas and provide and environment for new enterprise to emerge in their localities.

6.10 DEVELOP LOCAL MARKETS

As was discussed earlier in relation to opportunities for local enterprise, the Programme for Government (2020: 66) sets out to assist local authorities in their efforts to increase the number of farm shops, food emporiums and farmers' markets, while also showcasing locally produced food through supporting the establishment of community-owned markets in all towns. This move holds great potential for local enterprises.





APPENDIX 1 - PROJECT WORKING GROUP

Chair: Jack Keyes, consultant.

- Eastern and Midlands CARO; Alan Dunney, Regional Coordinator
- Eastern and Midlands CARO; Breda Maher, Regional Executive
- Eastern and Midlands CARO; Paul Regan, Regional Assistant
- Eastern & Midlands Regional Assembly; Malachy Bradley, Assistant Director
- LEO Network; Elaine Moyles, Acting Head of Enterprise, Mayo Local Enterprise
 Office
- Policy Advisors Network; **Sean O'Riordain**, Chairman
- Midlands Regional Enterprise Plan, **Sarah Morgan**, Programme Manager
- South West Regional Enterprise Plan, Ross Church, Programme Manager
- Atlantic Seaboard South CARO, Liam Dromey, Regional Coordinator,
- Atlantic Seaboard South CARO, Aoife Sugrue, Regional Assistant
- Maynooth University; John Cullen, School of Business



APPENDIX 2 - PROJECT STEERING GROUP

Chair: Anna-Marie Delaney, Chief Executive, Offaly County Council, Chair EECCC, CCMA

- Eastern and Midlands CARO; Joe Boland, Director of Services (project lead)
- Eastern and Midlands CARO; Alan Dunney, Regional Coordinator
- Eastern and Midlands CARO; Breda Maher, Regional Executive
- LGMA; Marina Duffy, CCMA Economic, Enterprise, Community & Culture Committee
- Department of Environment, Climate and Communications (DECC); Noel Regan,
 Principal Officer
- Department of Enterprise, Trade and Employment; Joe Cummins, Economic Infrastructure & Climate Action Unit
- IBEC; Conor Minogue, Climate and Energy Lead
- Chambers Ireland; Ian Talbot, Chief Executive
- Northern and Western Regional Assembly; David Minton, Director
- Eastern and Midlands Regional Assembly; Jim Conway, Director
- LEO Network; Elaine Moyles, Acting Head of Enterprise, Mayo Local Enterprise
 Office
- Policy Advisors Network; Sean O'Riordain, Chairman
- Atlantic Seaboard South CARO; Liam Dromey, Regional Coordinator
- South West Regional Enterprise Plan; Ross Church, Programme Manager
- Maynooth University; John Cullen, School of Business

