



# Strategic Environmental Assessment Screening Report

For  
**Climate Change Adaptation Strategy for Offaly County  
Council**

*Determination of the need for a Strategic Environmental  
Assessment for Offaly County Council Climate Change  
Adaptation Strategy prepared under the National Climate  
Change Adaptation Framework*

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**ON BEHALF OF**  
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## 1 INTRODUCTION

### 1.1 Background

The Earth's Climate is changing. While natural fluctuations in climate are considered normal, emerging research and observational records from across the world show rates of change that are far greater than those experienced in recent history. Global temperatures have risen and are projected to rise further bringing changes in weather patterns, rising sea levels and increased frequency and intensity of extreme weather. Ireland's climate is changing in line with global patterns and these changes are bringing significant and wide ranging economic, environmental and social impacts.

Climate change is now recognised as a global challenge with policy responses required in terms of both mitigating the causes of climate change and in adapting to the now inevitable consequences of our changing climate. Action at local level is vitally important to help reduce the risks and impacts of climate change across communities.

This local authority Climate Change Adaptation Strategy forms part of Ireland's national strategy for climate adaptation as set out in the National Adaptation Framework (NAF) which was produced under the provisions of the Climate Action and Low Carbon Development Act 2015.<sup>1</sup>

It is tasked with mainstreaming climate change adaptation over time into all functions, operations and services of the local authority. It seeks to inform or 'climate proof' existing plans and policies produced and implemented by the local authority. This ensures a considered, consistent and coherent approach, facing head-on the challenges of a changing climate. Crucially, it also helps in building resilience within the local authority organisation itself as well as across all communities.

## 2 LEGISLATIVE CONTEXT

### 2.1 Strategic Environmental Assessment

A Strategic Environmental Assessment (SEA) is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or program, or variation to a plan or program, before a decision is made to adopt it. The SEA Directive<sup>2</sup> requires, inter alia, that SEA is undertaken for certain plans, programs or variations to these.

The SEA Directive has been transposed into Irish law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004) and The Planning and Development Strategic Environmental Assessment (SEA) Regulations 2004 (S.I. 436 of 2004). These Regulations have since been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development (SEA) (Amendment) Regulations 2011 (SI No. 201 of 2011). The criteria as set out in Annex II of The SEA Directive (Directive 2001/42/EC) on the assessment of the effects of certain plans and programmes on the environment and as also set out in Schedule 2A of the Planning and Development (SEA) Regulations 2004 (S.I. No. 436 of 2004) need to be considered while drafting of the Climate Change Adaptation Strategies.

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<sup>1</sup> *Climate Action and Low Carbon Development Act 2015* (S.I. No. 25/2016). Available at <http://www.irishstatutebook.ie/eli/2015/act/46/enacted/en/htm>

<sup>2</sup> Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment

This SEA screening report is consistent with the process as recommended by The Department of Environment, Heritage and Local Government guidance document entitled *Implementation of SEA Directive 2001/42/EC Assessment of the Effects of Certain Plans and Programmes on the Environment November 2004*, specifically Chapter 3 (SEA: Screening and Scoping) and furthermore uses the criteria for SEA screening criteria set out in the SEA Directive.

An Appropriate Assessment Screening Report is also being prepared for this Climate Change Adaptation Strategy in line with Article 6(3) of the EU Habitats Directive (92/43/EEC).

## 2.2 Climate Change Adaptation

### 2.2.1 International Context

The **United Nations Framework Convention on Climate Change (UNFCCC)** is an international environmental treaty adopted in May 1992. The framework's objective is "*to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system*". The framework did not set binding limits on greenhouse gas emissions and contained no enforcement mechanisms. However, the framework outlined how specific international treaties may negotiate further action towards its key objective. **The Paris Agreement 2015** is a protocol set within the context of the UNFCCC (ratified by Ireland on 4<sup>th</sup> November 2016) and it is aimed at:

- Limiting global warming to less than 2<sup>0</sup>C above pre-industrial level and pursuing efforts to limit the temperature increase to 1.5<sup>0</sup>C.
- Building resilience and increasing the ability to mitigate the impacts of climate change.

The agreement states the need for Parties to formulate and implement National Adaptation Plans.

### 2.2.2 EU Context

The 2013 EU Strategy on Adaptation to Climate Change encouraged all Member states to adopt comprehensive adaptation strategies. It sought better informed decision making through the identification and addressing of gaps in knowledge about adaptation. The European Climate Adaptation Platform Climate-ADAPT, was developed as a resource mechanism to help users access and share information on adaptation.

The Global Covenant of Mayors for Climate and Energy is a voluntary, bottom up, approach for cities and local governments to combat Climate Change and move towards a low emission, resilient society. The Global Covenant of Mayors for Climate and Energy brought the Compact of Mayors and the EU Covenant of Mayors under one international body in January 2017 incorporating over 9,000 cities and local governments.

### 2.2.3 National Context

The 2012 National Climate Change Adaptation Framework (NCCAF) was Ireland's first step in developing a national policy on adaptation actions to combat the impacts of climate change.

The National Policy Position on Climate Action and Low Carbon Development 2014 restated the policy position of the NCCAF, 2012. Greenhouse gas mitigation and adaptation to the impacts of climate change were to be addressed in parallel national plans under an evolving climate policy to 2050.

The Climate Action and Low Carbon Development Act 2015 was a landmark national milestone in the evolution of climate change policy in Ireland. It provides the statutory basis for the national transition objective laid out in the National Policy Position (as per above). Further to this, it made provision for and gives statutory authority to both the National Mitigation Plan (NMP), published in 2017 and the

National Adaptation Framework (NAF) published in 2018. This Local Adaptation Strategy forms part of the National Adaptation Framework.

The Local Authority Adaptation Strategy Development Guidelines 2018 provides guidance to Local Authorities to develop their own Climate Action Adaptation Strategy. In developing this adaptation strategy Offaly County Council has been consistent with these guidelines.

## 2.3 Offaly's Climate Change Adaptation Objectives

The purpose of the Offaly County Council's Climate Change Adaptation Strategy is to achieve the national objective of becoming a more climate resilient society and economy by 2050. In order to help tackle current and future challenges that climate change can present, Offaly County Council have set out a number of key objectives in their strategy, under six thematic principles. Table 1 below outlines Offaly County Councils Climate Change Adaptation Strategy objectives per theme.

Under each theme in the Climate Change Adaptation Strategy there are a number of actions that have been detailed to achieve each Objective. All the actions per theme can be found in Appendix 1.

**TABLE 1 OFFALY'S CLIMATE CHANGE ADAPTATION STRATEGY OBJECTIVES**

<b>Local Adaptation for Governance and Business Operations</b>	
1.1	To support the successful and practical implementation of climate change adaptation actions
1.2	To ensure that climate change adaptation is mainstreamed into all activities and operations
1.3	To build capacity within Offaly County Council to respond effectively to extreme weather events
1.4	To build resilience within Offaly County Council to support service delivery
1.5	To identify and support opportunities that may arise from pursuing adaptation efforts through the functions of Offaly County Council
1.6	To support the development of green energy jobs and efficiencies
<b>Infrastructure and Built Environment</b>	
2.1	To Increase the resilience of roads and transport infrastructure
2.2	To Increase the resilience of County Council buildings and housing stock
2.3	To support the transition to a climate resilient low carbon society
<b>Land Use and Development</b>	
3.1	To integrate climate change adaptation considerations into landuse planning policy
3.2	To explore policies to help the transition to a climate resilient low carbon society
3.3	To promote and maximize the most efficient and sustainable use of land
<b>Drainage and Flood Management.</b>	
4.1	To mitigate the risk and impact of flooding
4.2	To liaise and work with other bodies, agencies responsible for flood management
4.3	To provide and plan for effective drainage systems
4.4	To provide for adequate and quality water supply in times of extreme drought conditions
<b>Natural Resources and Cultural Infrastructure</b>	
5.1	To protect and enhance the natural environment to work positively towards climate action
5.2	To support bio-diversity for its intrinsic value within the natural environment
5.3	To protect heritage and cultural infrastructure
<b>Community Health and Wellbeing</b>	
6.1	To build capacity and resilience within communities

<b>6.2</b>	To collaborate with other agencies and groups working with communities to enhance the effectiveness of community programmes related to climate change
<b>6.3</b>	To protect and encourage climate resilient community infrastructure

## 2.4 Consultation

### 2.4.1 Environmental Authorities

Article 5 (4) of the SEA Directive specifies that each Member State should designate the relevant Environmental Authorities which, by reason of their specific environmental responsibility, are likely to be concerned with the potential environmental effect of any plan or programme. Article 9(5) and 9(6) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (as amended) details the need for the competent authority (Offaly County Council) to consult the relevant environmental authorities regarding the development of certain plans and programmes. On an Irish context, as a minimum the following environmental authorities should be contacted when developing county plans and programmes:

- Environmental Protection Agency (EPA);
- The Minister for the Environment (Minister Communications, Climate Action and Environment) – *where the planning authority considers that a plan might have significant effects in relation to the architectural or archaeological heritage or to nature conservation*; and
- The Minister for Communications, Marine and Natural Resources (Minister for Agriculture, Food and the Marine) - *where the planning authority considers that a plan might have significant effects on fisheries or the marine environment*.

Offaly County Council on the 28<sup>th</sup> May 2019 sent the Draft Climate Change Adaptation Strategy and the SEA Screening Report to the following Environmental Authorities:

- Inland Fisheries Ireland (IFI);
- Department of Communications, Climate Action & Environment;
- Department of Agriculture, Food & Marine;
- Department of Culture Heritage & the Gaeltacht; and
- Environmental Protection Agency (EPA).

### 2.4.2 Public Consultation

Post Environmental Authority consultation, Offaly County Council conducted a four-week period from 26<sup>th</sup> June 2019 to 26<sup>th</sup> July 2019, where the Draft Climate Change Adaptation Strategy, with the accompanying SEA Screening Report and Appropriate Assessment Screening report were presented for public consultation. The following outreach methods were used:

- Newspaper notice, notification placed on council website and advertisement on social media from 26<sup>th</sup> June 2019 to 26<sup>th</sup> July 2019;
- Email and Council Report sent to Elected Members on 26<sup>th</sup> June 2019;
- Email sent to Public Private Partnership PPN and adjoining Local Authorities on 26<sup>th</sup> June 2019; and
- Notification uploaded on the [www.gov.ie](http://www.gov.ie) public consultation portal on 26<sup>th</sup> June 2019.

A number of submissions came in during the consultation period, and 10 submissions were received in total, from the following organisation and individuals:

- Environmental Protection Agency (EPA);

- OPW;
- Irish Water;
- Mr. M Egan;
- OPW;
- Green Offaly;
- Mr. A Mannerings;
- Gas Networks Ireland;
- Department of Agriculture, Food and the Marine; and
- Fáilte Ireland.

### 2.4.3 Summary of Consultation Submissions

Table 2 details the summary of responses from each of the organisations and individuals that made a submission to the consultation periods and a summary of the response from Offaly County Council to each of the submissions is detailed.

**TABLE 2 SUMMARY OF CONSULTATION SUBMISSIONS AND RESPONSES**

Organization / individual	Summary submission	Offaly Co. Co. response
EPA	<ul style="list-style-type: none"> <li>• The EPA recommends including a schematic, clarifying the relationship between the Strategy and the Climate Act, National Adaptation Framework, adaptation guidelines etc;</li> <li>• The EPA acknowledges that the Offaly Strategy commits to aligning with national commitments on climate change adaptation and recommends incorporating relevant recommendations or actions of the various sectoral adaptation strategies as they are published over the coming months and the lifetime of the Offaly Strategy. The EPA recommends that opportunities should be sought to align with and collaborate with adjacent Local Authorities;</li> <li>• The EPA recommends maximising the many potential co-benefits of climate adaptation measures for human health, biodiversity, water quality, flood risk management, land use planning, and other interrelated areas while ensuring that potential negative environmental impacts are minimised;</li> <li>• The EPA recommends that the Offaly Strategy should clearly reference the climate data and projections / scenarios used in developing the Strategy and should refer to the relevant OPW flood risk management plans;</li> </ul>	<ul style="list-style-type: none"> <li>• A schematic, clarifying the relationship between the Strategy and the Climate Act, National Adaptation Framework, adaptation guidelines is to be included in the Offaly Strategy;</li> <li>• Relevant recommendations or actions of the various sectoral adaptation strategies as they are published over the lifetime of the Offaly Strategy are incorporated into the Strategy;</li> <li>• Opportunities will be sought to align and collaborate with adjacent Local Authorities;</li> <li>• The Offaly Strategy references the climate data and projections used in developing the Strategy and refers to the relevant OPW flood risk management plans; and</li> <li>• The Offaly Strategy refers to and links with the relevant UN Sustainable Development Goals (SDGs).</li> </ul>



	<ul style="list-style-type: none"> <li>• The EPA recommends that the Offaly Strategy should refer to and link with the relevant UN Sustainable Development Goals (SDGs) and should be included in the Strategy.</li> <li>• The EPA recommends that the Council should also consult with the Minister for Housing, Planning and Local Government, Minister for Agriculture, Food and the Marine, and the Minister for Communications, Climate Action and Environment, Minister for Culture, Heritage and the Gaeltacht;</li> <li>• The EPA recommends that changes to the Offaly Strategy should be screened for potential for likely significant effects in accordance with the criteria set out in Schedule 1 of the SEA Regulations (S.I. No. 435 of 2004); the Offaly Strategy complies with the requirements of the Habitats Directive where relevant; where Appropriate Assessment is required, the key findings and recommendations should be incorporated into the SEA and the Strategy; determination available for public inspection and environmental authorities notified.</li> </ul>	
<p>Office of Public Works (OPW) (two submissions received on 1<sup>st</sup> July 2019 and 22<sup>nd</sup> July 2019)</p>	<ul style="list-style-type: none"> <li>• The OPW advises that the National Catchment-based Flood Risk Assessment and Management (CFRAM) Programme Flood Maps should assist in the planning of appropriate adaptation strategies and measures;</li> <li>• The OPW notes that Rahan is identified as a tranche 1 flood protection scheme with Birr identified as tranche 2 scheme, each will consider climate change adaptation and OPW would welcome their promotion and support within the Strategy</li> <li>• The OPW advises that “Projected increases in winter rainfall will likely increase the risk of fluvial flooding In fast response catchments” as referred to in the Offaly Strategy is not limited to ‘fast response’ catchments;</li> <li>• The OPW recommends including information on the existing level of flooding and flood risk, making reference to both past flood events and</li> </ul>	<ul style="list-style-type: none"> <li>• Review the Drainage and Flood Management Goal in the Offaly Strategy to incorporate the recommendations of the OPW and include the 2 flood protection schemes; and</li> <li>• Update Chapter 4 to reflect that projected increases in winter rainfall will likely increase the risk of fluvial flooding in all catchments.</li> </ul>

	<p>also, where available, predictive assessments of flood hazard and risk based on assessments such as the Catchment Flood Risk Assessment and Management (CFRAM) Programme and the Irish Coastal Protection Strategy Study (ICPSS);</p> <ul style="list-style-type: none"> <li>• The OPW recommends considering flood risk management or related activities when preparing the objectives and actions for the adaptation strategies, as described below:</li> <li>• Flood Risk Management Plans and Flood Relief Schemes</li> <li>• Sustainable Urban Drainage Systems and Urban Storm Water Drainage</li> <li>• Natural Water Retention Measures</li> <li>• Land Use Planning</li> <li>• Infrastructure</li> <li>• Emergency Response Planning</li> </ul>	
Irish Water	<p>Irish Water welcomes the publication of the Offaly Strategy and looks forward to collaborating with the Council in implementing the measures set out in the recently published Government Climate Action Plan and in the Draft Climate Change Sectoral Adaptation Plan: Water Quality and Water Services Infrastructure.</p>	<p>As identified in Action 1.1.5 Offaly County Council will liaise, collaborate and work in partnership with the sectors identified in the National Adaptation Framework, subject to funding, in the delivery of the Government approved sectoral adaptation actions, where they relate and are relevant to the functions and activities of the Council at local level and /in local communities.</p>
Mr. M Egan	<p>In response to the Offaly Strategy Mr Egan made observations on the Government's plan and his findings on reducing the Carbon Footprint summarised as follows:</p> <ul style="list-style-type: none"> <li>• Cost of purchasing an EV is beyond that of the average person;</li> <li>• Inadequate charging points and charging congestion;</li> <li>• There is a more sustainable and renewable solution CNG - Compressed Natural Gas;</li> <li>• Gas Networks Ireland is developing the technology in Ireland; CNG vehicles emit 99% less particulate matter, 80% less sulphur dioxide, 70% less nitrogen oxide and 1/5 less carbon dioxide than conventionally fuelled vehicles;</li> </ul>	<p>Expand Objective 2.3 to incorporate a review of other carbon reducing measures, sustainable and renewable solutions available including the use of CNG.</p>

	<ul style="list-style-type: none"> <li>• The Government's plan will not be sufficient to meet the targets of 20% reduction in emissions from the 2005 level by 2020 and 30% by 2030; Failure to do so will mean we will have to pay several million euro per year in fines.</li> </ul>	
<p>Green Offaly</p>	<p>Green Offaly acknowledges the Offaly Strategy and sees climate change as an opportunity with ambition and careful planning for Offaly and the genuine assets in the County.</p> <ul style="list-style-type: none"> <li>• The importance of Offaly as a County in Irelands plans to decarbonise by 2050 cannot be underestimated;</li> <li>• Green Offaly states that Offaly has 32,400 hectares of peatlands and over 3,400 farms, key player in the capture and storage of carbon and in the challenge to keep emissions below the 2-degree mark; as a rural county one of the biggest challenges to overcome is that of transport;</li> <li>• Green Offaly will be working on a Grey Adaptation project in Phase 2 involving the Geothermal Mapping of Offaly to see what geothermal energy potential lies beneath. Geothermal is more expensive to install however in the long term it demonstrates most efficacy. It operates in both hot and cold climate scenarios, it has minimal disruption to the natural environment and the long term costs of running it are low.</li> <li>• Green Offaly states that efficacy has to come before cost when looking at technical and engineering solutions for the County and would welcome a costing structure which is more long term (over 25 years), when looking at any of the grey area solutions and incorporates a costing structure that includes carbon cost, environmental cost and monetary cost as of equal merit and consideration;</li> <li>• Green Offaly sees Green Adaptations as central to the work and ethos of Green Offaly and will be embedding Green Adaptations into the fabric of</li> </ul>	<ul style="list-style-type: none"> <li>• Review the feedback on the individual goals and actions and incorporate the suggestions in the Strategy if appropriate; and</li> <li>• Explore the opportunity to work with Green Offaly to develop ideals and future actions.</li> </ul>

	<p>their projects. Community owned forestry, assets which house green community enterprises, rehabilitated landscapes which increase the eco tourism profile of the County will all serve the dual purpose of environmental and economic renewal;</p> <ul style="list-style-type: none"> <li>• Green Offaly would welcome areas of commons land being seen as Community Assets and as such used for projects such as Community owned Forestry, Gardens and Energy Schemes. This would serve the dual purpose of securing Community buy in and utilising land for the sequestering of Carbon etc.;</li> <li>• Green Offaly supports and welcomes the six thematic areas and high level goals outlined in the Strategy makes suggestions and offers feedback as follows:             <ul style="list-style-type: none"> <li>○ Action 1.2.1 Green Offaly welcomes the appointment of a Climate Change Adaptation Officer with emphasis on community support;</li> <li>○ Action 1.2.2 Green Offaly supports the appointment of an Energy Efficiency Officer;</li> <li>○ Action 1.5.3 quantifying Offaly's CO2 emissions as a base will supporting Green Offaly's goal of becoming Irelands first Sustainable Energy County;</li> <li>○ Objective 1.6.2 &amp; 1.6.3 &amp; 1.6.4: Green Offaly supports the development of green jobs and efficiencies and notes that the Local Enterprise Office is an invaluable resource facilitating the transition to a Green Economy; these measures support the vision of Offaly as a real alternative to Dublin and could create a ground swell in innovation in Green Enterprise in Offaly;</li> <li>○ Action 2.1.2 &amp; 2.1.4: Green Offaly acknowledges the</li> </ul> </li> </ul>	
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	<p>challenge of bog roads in Offaly; serious innovation is going to be required; as peatlands are to be rewetted, the likelihood of flooding for the bog roads and surrounding farmland is going to be a dominant factor; opportunity to develop a bog road network which is elevated and therefore flood resilient;</p> <ul style="list-style-type: none"><li>○ Action 2.1.7 Green Offaly suggests an opportunity to incorporate sustainable practices into essential maintenance of trees and hedges along public roads in the form of coppicing trees and of traditional hedge laying; this could be done in partnership;</li><li>○ Action 2.3.1 &amp; 2.3.3 Green Offaly recommends alternatives such as biogas could be considered as a viable option and support a real public transport drive being endorsed; Local Link is there and could easily be expanded;</li><li>○ Action 2.3.1 Green Offaly advises on the difficulties to encourage the move towards green and sustainable home heating; smart finance in place to support the loans to avail of these schemes; landlords need real incentives to avail of these schemes. The uptake of renewable energy grants will not go mainstream until homeowners can see the financial sense in the form of a feed in to the national grid. Regulations regarding the installation of Solar panels also make the process more expensive, in spite of grant aid. To fully encourage the public to move away from fossil based heating and energy methods, we need to support</li></ul>	
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	<p>the idea of Renewable Energy Communities;</p> <ul style="list-style-type: none"> <li>○ Action 3.2.1 &amp; 3.2.2 Green Offaly suggests hydroponic growing and green living walls as solutions that can complement the urban design objectives. Greener cities programmes also Green Offaly valuable pointers in integrated and sustainable town planning;</li> <li>○ Action 3.3. &amp; 3.3.5 Green Offaly notes that Agriculture is not mentioned in the strategy and has a huge role to play along with forestry in the sustainable use of land in Offaly especially in regard to the mitigating effects of Carbon Capture;</li> <li>○ Action 3.3.5 &amp; 3.3.6 Green Offaly notes that rewetting and restoring peatlands is one of the most cost-effective ways of avoiding anthropogenic greenhouse gas emissions; rehabilitation and integrated management of peatlands can generate multiple benefits including maintaining biodiversity and mitigating climate change, as well as decreasing poverty and combating land degradation. Concerted action for the protection and wise use of peatlands should therefore be a national priority linking work at national, regional and local levels;</li> <li>○ Actions 4.4.1 Green Offaly advises the practice of Natural Flood Management is placed at the centre of Offaly's Flood Management Policy; Natural Flood Management (NFM) is a technique that uses natural processes to slow the flow of flood waters;</li> </ul>	
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	<ul style="list-style-type: none"> <li>○ Action 4.4.1 GL advises that rainwater harvesting systems should be included in all new builds and retrofit operations;</li> <li>○ Action 5.1.1 &amp; 5.1.2 &amp; 5.1.4 Green Offaly recommends when looking at Natural resources and cultural infrastructure It could be important to look at the way in which climate change affects food and food systems;</li> <li>○ Action 5.1.4 Green Offaly supports the action to research and identify suitable areas to support biomass growth and community based bioenergy projects;</li> <li>○ Action 5.2.1 &amp; 5.2.2 &amp; 5.2.3 The highlighted sections above are areas that Tidy Towns groups in Offaly are already working towards and in some cases are very proficient in them. Green Offaly will be working with Tidy Towns groups across the County in devising an environmental plan so that all groups are working towards the same aims within Biodiversity management; and</li> <li>○ Action 6.2.1 the highlighted sections above are all areas that Green Offaly, in its role as a Sustainable Development Trust will be assisting the Communities of Offaly to achieve.</li> </ul>	
<p>Mr. A. Mannering's</p>	<p>In response to the Offaly Strategy Mr A. Mannering's made a submission with a number of key elements:</p> <ul style="list-style-type: none"> <li>● Comments on climate change as a political issue and believes that the general public should be informed of the complex issues;</li> <li>● Recommended a need for a forum for debate and exchange of views at local level and it is the Local Authorities role to initiative meaningful discussion;</li> </ul>	<ul style="list-style-type: none"> <li>● Expand on Objective 1.1 to support the successful and practical implementation of climate change adaptation actions to incorporate the use of Offaly libraries to educate and inform on climate change;</li> <li>● Expand on Objective 5.1 to protect and enhance the natural environment to work positively towards climate action to incorporate an action on waste and food waste; and</li> <li>● Expand on Objective 6.3 to protect and encourage climate resilient community</li> </ul>

	<ul style="list-style-type: none"> <li>• Believes that local, national and international perspectives and networking is a key to understanding; studies and pilot projects for become templates for significant movement and development;</li> <li>• Recommends specific consensus / proper exposition on energy, transport, waste, food and land use and raises concerns over waste being managed by the commercial sector; the conflict between environmental requirements and commercial systems; transporting waste long distances. Mr. Mannerings recommends the need to involve communities in dealing with waste impacting on their environment; supports the recovery of metal. Mr. Mannerings expresses concerns over the effect of modern farming methods and pesticides on the environment; food miles and food waste ad would welcome a pilot project to develop a local food initiative.</li> <li>• States the primary importance of community initiatives and the inclusion in the Government Climate Action Plan 2019; advantages to be gained by economics of scale in retro fitting solar panels, insulation etc; the importance of Clara bog and interpretation centre and the unique qualities of peat as a carbon sink and wetlands worldwide; M. Mannering recommends using libraries to inform on climate change; and</li> <li>• Recommends specific examination of technological innovations potential and existing and their implementation.</li> </ul>	<p>infrastructure to incorporate an action on initiatives to improve energy efficiently in homes, economies of scale, community involvement.</p>
<p>Gas Networks Ireland</p>	<ul style="list-style-type: none"> <li>• Gas Networks Ireland (GNI) highlighted some of the carbon reduction initiatives that GNI itself is involved in. These include the development of Compressed Natural Gas (CNG1) infrastructure for gas in transport and renewable gas2 injection infrastructure;</li> <li>• GNI has considered the potential impact of climate change on the gas network and has worked with the Depart-</li> </ul>	<ul style="list-style-type: none"> <li>• Relevant recommendations or actions of the various sectoral adaptation strategies as they are published over the lifetime of the Offaly Strategy will be incorporated into the Strategy; and</li> <li>• Expand Objective 2.3 to incorporate a review of other carbon reducing measures, sustainable and renewable solutions available including the use of CNG.</li> </ul>



	<p>ment of Communications, Climate Action &amp; Environment to develop the 'Climate Change Adaptation Plan for the Electricity and Gas Network Sector';</p> <ul style="list-style-type: none"> <li>• GNI state that renewable gas, produced through anaerobic digestion (AD), is a carbon neutral and sustainable source of fuel that can be injected into the gas network and used in the same way as natural gas and that there are a number of significant benefits to using renewable gas:             <ul style="list-style-type: none"> <li>○ Carbon neutral fuel source;</li> <li>○ Benefits to Agriculture;</li> <li>○ Least cost method to decarbonise domestic heat;</li> <li>○ Utilises existing infrastructure;</li> <li>○ Indigenous energy source;</li> <li>○ Carbon neutral power generation;</li> </ul> </li> <li>• GNI propose that the development of renewable gas production in Offaly would support the Offaly Strategy action 2.2.2 to "Promote renewable heating in Offaly County Council housing stock &amp; office buildings";</li> <li>• GNI is currently working to develop new renewable gas injection points on the gas network with a target of 20% renewable gas on the network by 2030;</li> <li>• GNI states that CNG has the potential to address the transport emissions associated with Heavy goods vehicles with significantly reduced carbon emissions relative to diesel;</li> <li>• GNI recommend that the Offaly Strategy includes an action for CNG "Encourage policy to support and develop Compressed Natural Gas (CNG) Vehicle usage and refuelling infrastructure on sites owned and occupied by Offaly County Council and private sites through supportive policies and development of control standards in the County Development Plan";</li> <li>• GNI contends, based on research by National University of Ireland Galway, that there is a significant health threat posed by particulate matter from the burning of solid fuel biomass. GNI</li> </ul>	
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	<p>suggests that caution should be exercised when considering solid biomass as per Action 5.1.5 of the Offaly Strategy; and</p> <ul style="list-style-type: none"> <li>• GNI requests that Offaly County Council considers the role that renewable gas and CNG in transport can play in reducing carbon emissions in the region and their contribution to providing economic benefits to the local economy. County Council support for anaerobic digestion plants, CNG refuelling stations and renewable gas injection points would help establish these technologies in the region.</li> </ul>	
<p>Department of Agriculture, Food and the Marine</p>	<ul style="list-style-type: none"> <li>• DAFM notes that the report is informative report but it does not inform the reader of the complex issues the county faces from an agricultural/forestry/seafood viewpoint. Protecting natural and key cultural assets, flooding, empowering communities, developing a more sustainable green economy and resource management will all be heavily influenced by the successful engagement of the main land owners in the county which are farmers;</li> <li>• The report could also take note of the role of land use in the water system such as well planned and managed forests;</li> <li>• DAFM would like to highlight the climate change related impacts on the inland aquaculture industry which depends on the freshwater resource and the impact on seafood related infrastructure such as coastal harbours and piers;</li> <li>• DAFM highlighted impacts recognised as being of cross-sectoral concern for both the Department and the Local Authority. The Department is cognisant of these issues and will be addressing each of them in their draft Adaptation Plan. <ul style="list-style-type: none"> <li>○ Wildfires</li> <li>○ Slurry Storage and Land Spreading Issues</li> <li>○ Soil Quality</li> <li>○ Non-native Invasive Species;</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Expand Objective 5.1 to protect and enhance the natural environment to work positively towards climate action by incorporating engagement with key landowners agricultural, peat, forestry to protecting natural and key cultural assets, flooding, empowering communities, to develop a more sustainable green economy and resource management;</li> <li>• Expand Objective 5.1 to reflect impacts recognised as being of cross-sectoral concern for both DAFM and Offaly County Council such as wildfires, slurry storage and land spreading issues, soil quality and non-native invasive species; and</li> <li>• Offaly County Council will engage with DAFM and farming organisations on a number of actions in the Offaly Strategy.</li> </ul>

	<ul style="list-style-type: none"> <li>• DAFM recommended that Offaly County Council should engage with DAFM and farming organisations on a number of actions in the Offaly Strategy;</li> <li>• DAFM recommended that Offaly County Council should ensure that farming communities are educated of the impacts of climate change; and</li> <li>• DAFM advised that Offaly County Council could seek to better reflect the impacts and consequences of climate change on the agricultural and forestry sectors in their Strategy and seek to liaise with DAFM and other State and local bodies in areas of mutual concern. Pro-active and positive engagement with farmers is crucial to not only the design of the Strategy, but also its implementation.</li> </ul>	
<p>Fáilte Ireland</p>	<ul style="list-style-type: none"> <li>• Fáilte Ireland notes that as changes to the climate affect our heritage, then they will also have implications for Ireland's tourism industry. In response to this the Heritage Council and Fáilte Ireland commissioned a report in 2009, Climate change, Heritage and Tourism, Implications for Ireland's coast and inland waterways;</li> <li>• Fáilte Ireland advises that water-based activities on our inland waterways and coasts will be affected by unpredictable and stormy weather and tourism activities on inland waterways will be affected by higher freshwater temperatures combined with pollution; and</li> <li>• Fáilte Ireland advises that adaptation and mitigation measures carefully consider the impact on tourism and tourism amenities and to consider any unintended consequences for heritage and tourism that might arise. The construction of coastal defences and inland flood relief works can have negative impacts on aspects of our natural and cultural heritage; Hard engineering works to protect coastal tourism assets or infrastructure must be considered in light of natural</li> </ul>	<p>Expand Objective 5.3 to protect heritage and cultural infrastructure to reflect the implications for the tourism industry.</p>

	coastal processes and the potential long-term impacts on the heritage value, and indeed the tourism value of the area. It is vital that protection works do not exacerbate the problem, which may lead to the eventual undermining and possible complete loss of the tourism asset.	
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The Chief Executive Report attached with Offaly's Climate Change Adaptation Strategy provides a detailed response to each of the submissions.

## 2.5 Appropriate Assessment

An Appropriate Assessment Screening Report has also been prepared for this Climate Change Adaptation Strategy in line with Article 6(3) of the EU Habitats Directive (92/43/EEC). The Report concludes:

*In conclusion, further to a screening of Offaly County Council's Climate Change Adaptation Strategy for possible significant effects on Natura 2000 sites no significant effects were identified.*

*The screening outlined in this report included an assessment of possible in-combination effects. Based on the objective information contained in this report and applying the precautionary principle, it is concluded that the Climate Change Adaptation Strategy will not have a significant effect on Natura 2000 sites.*

The AA Screening Report accompanies Offaly's Climate Change Adaptation Strategy.

## 3 DETERMINING WHETHER AN SEA IS REQUIRED

The objective of the SEA Directive for the assessment of the effects of certain plans and programmes on the Environment is to

*"provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment."*<sup>3</sup>

Post the Environmental Authority and Public Consultation, the updated Climate Change Adaptation Strategy was screened for SEA requirements. The below details the SEA screening process carried out.

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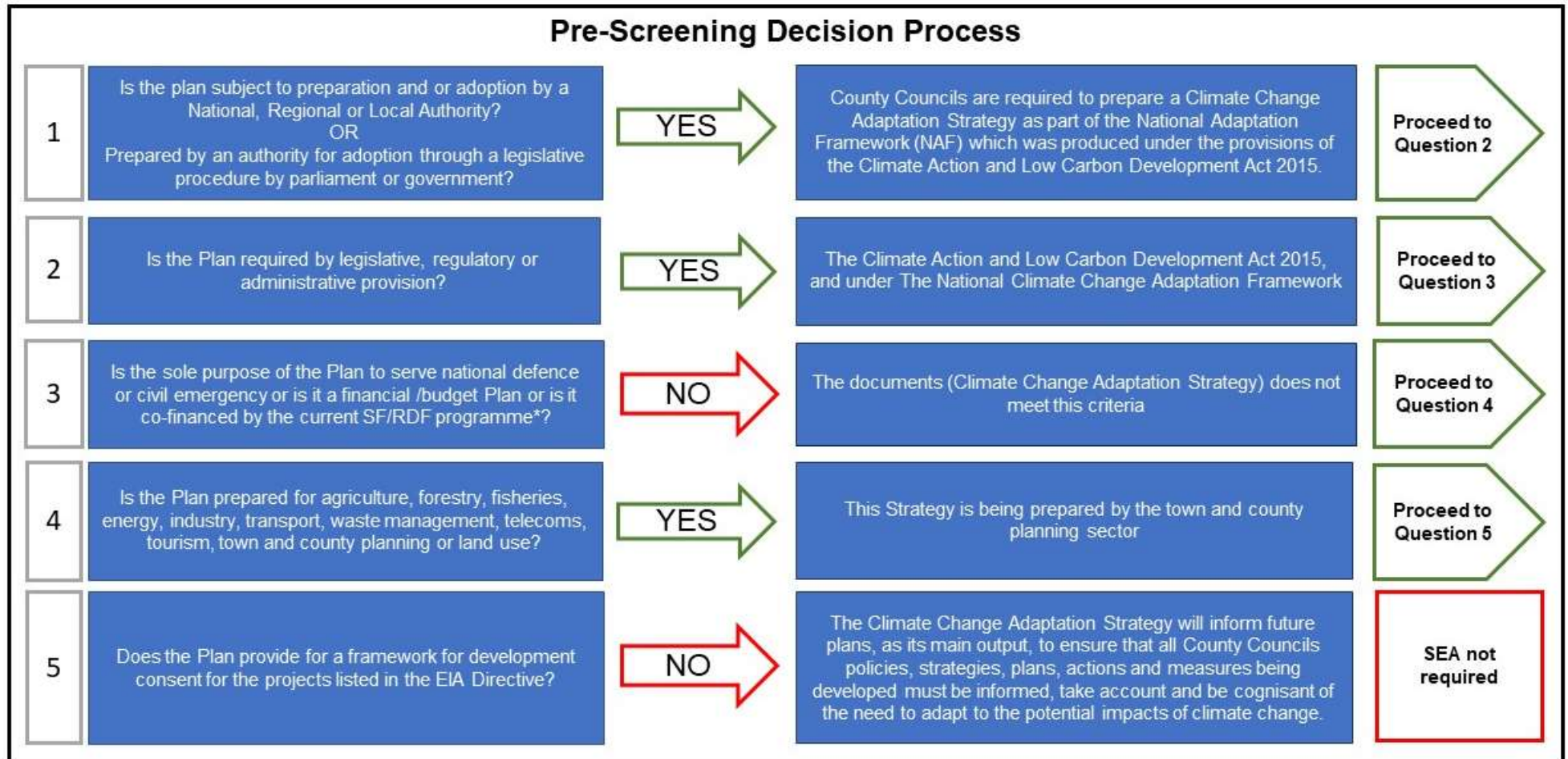
<sup>3</sup> Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment

### 3.1 The requirement to carry out SEA – Pre-Screening Checklist

In order to determine if this Strategy is considered a plan/programme under Article 3 of the SEA Directive, a pre-screening check is necessary. Figure 1 below provides details of the pre-screening checklist; this checklist is based on the decision tree published by the EPA in the *Development of SEA methodologies for plans and programmes in Ireland*.<sup>4</sup>

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<sup>4</sup> P. Scott & P. Marsden., 2001-EEP/DS-2/5 *Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland* Synthesis Report © Environmental Protection Agency 2003



\*SF/RDF: Structural Funds and Regional Development Funds under Council Regulation (EC) Nos. 1260/99 and 1257/99 which operate programming periods of 2000–2006 and 2000–2007, respectively.

FIGURE 1 PRE-SCREENING DECISION PROCESS

## 4 SEA SCREENING DETERMINATION

The Climate Change Adaptation Strategy was screened using the criteria contained in Annex II of the SEA Directive. Table 2 and Table 3 below, details the screening assessment using the *criteria for determining the likely significance of effects* as set out in the SEA Directive, Annex II.

**TABLE 3 SCREENING DETERMINATION FOR ANNEX II (1.), CRITERIA FOR DETERMINING THE LIKELY SIGNIFICANCE OF EFFECTS**

<b>The Characteristics of the Plan and Programmes having regard, in particular, to, the following criteria</b>	
<b>Criteria</b>	<b>Screening Determination</b>
The degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources.	<p>The purpose of this Climate Adaptation Strategy is to identify the risks to Offaly County associated with climate change, and to set strategic goals, objectives and actions to adapt to these changes.</p> <p>Offaly County Council's Climate Change Adaptation Strategy forms part of Ireland's national strategy for climate adaptation as set out in the National Adaptation Framework (NAF) which was produced under the provisions of the Climate Action and Low Carbon Development Act 2015.</p> <p>Offaly County Council's Climate Change Adaptation Strategy, if adopted, will not set a framework for future development consent of projects, i.e. projects listed in both Annex I and Annex II of the Environmental Impact Assessment Directive.</p>
The degree to which the plan or programme influences other plans and programmes including those in a hierarchy;	<p>This Climate Change Adaptation Strategy will inform other future plans, as its main output, to ensure that Offaly County Councils policies, strategies, plans, actions and measures being developed must be informed, take account and be aware of the need to adapt to the impacts of climate change.</p> <p>Future individual county development policies, strategies, plans and projects must be considered under the SEA, EIA and/or AA processes.</p>
The relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;	<p>As the Climate Change Adaptation Strategy is aimed at integrating climate change adaptation into Offaly County Councils plans, strategies and management team's agendas, the climate change adaptation measures will be implemented via future plans.</p> <p>This Climate Change Adaptation Strategy's main output is to ensure that all policies, strategies and plans for Offaly County Council must be informed</p>

	<p>of the need to adapt to the potential impacts of climate change.</p> <p>Individual county development policies, strategies, plans and projects must be considered individually under the SEA, EIA and/or AA process.</p>
Environmental problems relevant to the plan or programme;	<p>The Climate Change Adaptation Strategy looks to integrate climate change adaptation into Offaly County Council as a management function and/or an important criterion to be considering in developing Local Authority Plans or Actions. The climate change adaptation actions taken will be implemented via future plans as its main output is to ensure that all policies, strategies, plans and measures for Offaly County Council must be informed of the need to adapt to the potential impacts of climate change.</p> <p>Individual county development policies, strategies, plans and projects must be considered individually under the SEA, EIA and/or AA process.</p>
The relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste-management or water protection).	<p>As the Climate Change Adaptation Strategy is aimed at integrating climate change adaptation into identified Offaly County Councils Plans and Strategies and future Plans and Strategies, with some specific actions to help raise awareness of climate change both within management team and the wider public in Offaly County, these actions can support plans and programmes that are related to waste generation, management, flood resilience and protection.</p> <p>However, these climate change adaptation actions will be implemented via future plans as its main output is to ensure that all policies, strategies, plans and measures for Offaly County Council must be informed of the need to adapt to the potential impacts of climate change.</p>

**TABLE 4 SCREENING DETERMINATION FOR ANNEX II (2.), CRITERIA FOR DETERMINING THE LIKELY SIGNIFICANCE OF EFFECTS**

<b>Characteristics of the Effects and of the Area Likely to be Affected, taking account of the following criteria</b>	
<b>Criteria</b>	<b>Screening Determination</b>
The probability, duration, frequency and reversibility of the effects	Offaly County Council Climate Change Adaptation Strategy is aimed at integrating climate change adaptation into the Local Authorities plans, strategies and management agendas, this in itself will help develop climate resilience.
The cumulative nature of the effects	
The transboundary nature of the effects	



<p>The risks to human health or the environment (e.g. due to accidents)</p>	<p>The climate change adaptation actions will be implemented via future plans as its main output is to ensure that all policies, strategies, plans and measures developed by Offaly County Council must be informed of the need to adapt to the potential impacts of climate change.</p>
<p>The magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)</p> <ul style="list-style-type: none"> <li>- <i>special natural characteristics or cultural heritage;</i></li> <li>- <i>exceeded environmental quality standards or limit values; and</i></li> <li>- <i>intensive land-use.</i></li> </ul>	<p>Individual policies, strategies, plans and measures must be considered individually under the SEA, EIA and/or AA process.</p> <p>Any and all effects uncovered as part of this process will be considered in relation to the characteristics of the effects and of the area likely to be affected and the process will have regard, in particular, to the criteria as listed, according to the legislation.</p>
<p>The effects on areas or landscapes which have a recognised national, community or international protection status.</p>	<p>Any and all effects uncovered as part of this process will be considered in relation to the characteristics of the effects and of the area likely to be affected and the process will have regard, in particular, to the criteria as listed, according to the legislation.</p>

## 5 CONCLUSION

This SEA Screening Report was carried out in order to determine the need for a Strategic Environmental Assessment for Offaly County Council Climate Change Adaptation Strategy prepared under the National Climate Change Adaptation Framework. It has been concluded, based on the pre-screening check, and review against the environmental significance criteria as set out in Annex II of the SEA Directive, that a Strategic Environmental Assessment is not required. This is due to the fact that this Strategy does not provide a framework for development consent for projects listed in the EIA Directive. Furthermore, the purpose of this Climate Change Adaptation Strategy is to inform Local Authority policies, procedures and further plans on the need to incorporate climate change adaptation measures and it does not set out projects, plans or specific measures.

## **APPENDIX 1 CLIMATE CHANGE ADAPTATION STRATEGY - ACTIONS**

Local Adaptation for Governance and Business Operations	Actions
1.1.1	Establish a Climate Change Adaptation Steering Group with representatives from across key functions of Offaly County Council to ensure the successful implementation of the actions of the Offaly Climate Change Adaptation Strategy and to report on progress. The Group will be tasked with managing and overseeing the effective mainstreaming of adaptation measures into all plans, programmes, strategies and policies of Offaly County Council.
1.1.2	Include Climate Action policy in the Corporate Plan objectives providing for all Offaly County Council activities and the delivery of functions and services across the administrative area.
1.1.3	Include Climate Action policy into the Service Delivery Plans and provide for its translation to Team Development Plans and Personal Development Plans to enable actions to be directly pursued per operational area.
1.1.4	Include Climate Action policy into the next County Development Plan and ensure it is fully informed in relation to Climate Change mitigation and adaptation measures.
1.1.5	Liaise, collaborate and work in partnership with the sectors identified in the National Adaptation Framework, subject to funding, in the delivery of the Government approved sectoral adaptation actions, where they relate and are relevant to the functions and activities of the council at local level/in local communities.
1.2.1	Appraise the appointment of a Climate Change Adaptation Officer with responsibility for climate related activity within Offaly County Council to inform communities on local climate change issues and climate action measures, run awareness campaigns and manage funding for climate action projects.
1.2.2	Appraise the appointment of an Energy Efficiency Officer with responsibility for the preventative and reactive maintenance for all buildings in Offaly County Council, implementing energy efficiency & renewable energy measures and driving initiatives to meet the 2020, 2030 and 2050 targets and promote Offaly County Council as a leader and exemplar in energy efficiency through workshops and events.
1.2.3	Promote 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 and to represent both short-term and long-term value for money.
1.3.1	Review the Major Emergency Plan to identify and address specifically, the impacts associated with extreme weather events on all functions/services of Offaly County Council including preparing for critical services disruptions, mitigating against the impact of service disruption and improving the capacity to recover.
1.3.2	Review Offaly County Council's Health and Safety Statement to reflect climate related risks and ensure standard operating procedures are completed for job roles in each operational area taking into consideration the potential risks to workers from extreme weather events.
1.3.3	Review operational plans for outdoor and indoor workers around times of extreme events.
1.3.4	Review Blue Light Policy with the aim of increasing resilience to extreme weather events.
1.4.1	Identify gaps in data or information from an assessment of previous experiences of dealing with severe weather events and explore ways to maintain a high level of understanding of the risks and vulnerabilities of Offaly County Council in dealing with the future impacts of climate change.
1.4.2	Develop and manage a centralised repository for all information relating to climate hazards and extreme climatic events including reports of incidents, estimates of costs incurred in remediation works, no. of resources deployed during and post event, description of impacts on service delivery and funding recouped for remediation works, rapid response aerial survey / drone availability during or immediately after extreme events, GIS mapping of extent & severity of extreme events.
1.4.3	Evaluate and document resources deployed for the management, maintenance, repairs and clean up operations after extreme weather events taking full account of hours and costs involved and impact on service delivery and including increased operational, maintenance and contractor and out-of hours costs and additional funding sought and received.
1.4.4	Encourage and develop further inter agency and departmental collaboration to increase climate change resilience in County Offaly providing for emergency planning and coordination, sharing expertise and experience around adaptation actions, coordination around implementing adaptation actions and liaison with the relevant Departments and Agencies regarding the implementation of actions set out in sectoral climate change adaptation strategies.
1.4.5	Make provision for a contingency in the budget of each service / operational area to ensure continued or improved capacity of service in face of the projected increase in climate event intensity.
1.5.1	Provide climate change awareness training to staff, elected members and communities.
1.5.2	Review the mobilisation policy and staff transfers to benefit staff in the organisation and reduce travel time; Expand and encourage the use of Citrix and remote working subject to business case and operational effectiveness.
1.5.3	Quantity Offaly's CO2 emission and establish a target for first and subsequent cycles of the programme. Opportunity to link with tourism strategy and strategic projects in the County such as wind farms, loving bogs, constructed wetlands, public lighting LED retrofits. Promote carbon foot print savings within the County and potential future savings. Opportunity to promote Offaly as a Sustainable Energy County.
1.6.1	Support the National Conference on Green Energy Jobs - Economic & Business Opportunities of Climate Change (Tullamore, 9th October).
1.6.2	Support the North Offaly Development Fund to promote Rhode Business Park – 13 serviced sites with access to National Grid, and encourage energy companies and companies testing new technologies to avail of the facilities.
1.6.3	Support the Junction Business Innovation Centre, Tullamore – Co-working hub for businesses developing Green Energy Technologies, Software and Design businesses.
1.6.4	Support Micro-LEAN Programmes, assisting micro-enterprises improve efficiencies and reduce waste in their businesses.
1.6.5	Support the vision of Offaly as an alternative to Dublin, encourage green enterprise in Offaly, promote Offaly as a place offering a work life balance.

Infrastructure and Built Environment	Actions
2.1.1	Undertake a risk assessment of road infrastructure and vulnerable transport infrastructure in the area to identify the severity of climate change risks on their function and condition. The risk assessment should provide for an understanding and quantification of risks posed. The findings should be integrated into decision making processes, road infrastructure programmes and investment strategies.
2.1.2	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.
2.1.3	Support the implementation of the winter maintenance services programme annually and keep up to date with developments in best practice.
2.1.4	Carry out the pilot scheme, funded by the Department of Transport in 2019, following the drought period in 2018 which resulted in significant defects and cracking of the bog rampart roads in Offaly, to survey the extent of peat in Offaly which will inform Road Design of the extent and depth of peat in the Regional Roads in Offaly and will provide information for proposals and cost estimates for solutions.
2.1.5	Support the ongoing programme of upgrading Public Lighting to LEDs in Offaly in the interest of energy efficiency and ongoing maintenance of 7,000 public lights.
2.1.6	Carry out an inventory of Pedestrian Crossings for maintenance and programme of upgrading lights to LEDs.
2.1.7	Develop and implement a tree policy in Offaly and inform landowners of Statutory duty to maintain trees and hedgerows along public roads incorporating sustainable practices into essential maintenance.
2.2.1	Increase the resilience of Offaly County Council owned building stock to climate change impacts. Assess the vulnerability of building stock to climate risks and identify, prioritise and implement alleviation measures.
2.2.2	Promote renewable heating in Offaly County Council housing stock & office buildings.
2.2.3	Ensure all housing development in Offaly County Council projects and private development achieve required energy ratings.
2.2.4	Assess back-up communication systems to ensure communication for emergency responders is maintained in the event of disruption to main communication system.
2.3.1	Work with Stakeholders to develop and promote increased public transport in Offaly, upgrading the public transport infrastructure, expanding the services across the County, ensuring accessibility for all and informing the public of availability.
2.3.2	Promote transport schemes in Offaly such as the Go Car scheme and a pickup / drop off bike scheme.
2.3.3	Encourage policy to support and develop energy efficient vehicles usage and charging infrastructure on sites owned and occupied by Offaly County Council and private sites through supportive policies and development control standards of the County Development Plan.
2.3.4	Review OCC fleet to incorporate energy efficient vehicles including a review of carbon reducing measures available such as electric vehicles and CNG.
2.3.5	Promote and inform public on renewables and grants available to encourage the move away from coal and turf heating in homes to solar and more green methods.

Landuse and Development	Actions
3.1.1	Identify and integrate climate change as a critical consideration and guiding principle informing all chapters of the County Development Plan 2021 - 2027
3.1.2	Engage with the Department of Housing Planning and Local Government and the Eastern and Midland Regional Assembly during the review process of the Offaly County Development Plan to develop a sustainable approach to landuse, consistent with the National Strategic Outcomes of the National Planning Framework and the Regional Strategic Outcomes of the Eastern and Midland Regional Spatial and Economic Strategy.
3.2.1	Integrate and promote climate-smart building and urban design performance outcomes in development standards through the development management process.
3.2.2	Promote the integrated planning, design and delivery of green infrastructure including urban greening through appropriate provisions in planning policies, development standards, infrastructural, public realm and community projects.
3.2.3	Incorporate sustainable settlement and transportation strategies in urban and rural areas including the promotion of measures to reduce energy demand in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources.
3.3.1	Engage with key landowners in agricultural, peat, fostery, to protecting natural and key cultural assets, empowering communities, developing a more sustainable green economy and resource management. Offaly County Council will engage with DAFM and farming organisations on a number of actions in the Offaly Strategy.
3.3.2	Explore the identification and protection of areas that are subject to flooding across County Offaly to allow for natural uninhibited floodplain areas. Consider land acquisition to preserve these areas.
3.3.3	Ensure that climate change considerations are integrated to inform the location of burial grounds and are zoned appropriately thereafter.
3.3.4	Explore and make provision for the need to plan and provide more indoor sporting facilities and outdoor all weather facilities for recreation and sporting use on appropriately zoned land.
3.3.5	Support the water framework directive in its key objectives and core principles and the Local Authority Waters Programme to develop and implement River Basin Management Plans in Ireland and achieve common water quality goals.
3.3.6	Promote conservation, regenerating and planting of natural woodland and hedgerows through interagency collaboration and planning policy.
3.3.7	Support the ongoing programme to develop the Grand Canal Greenway cycling route to promote Offaly as a major cycling destination in the midlands of Ireland.
3.3.8	Support Bord na Mona by co-funding a feasibility study to explore the expansion of Lough Boora Discovery Park, winner of best environmental tourism innovation award at the biennial Irish tourism industry awards.
3.3.9	Support the work of Green Offaly in their Geothermal Mapping project to see what geothermal energy potential lies beneath and explore the opportunity to work with them to develop ideals and future actions.

Drainage and Flood Management	Actions
4.1.1	Develop drainage and flood management policy in the next County Development Plan and ensure it is fully informed in relation to development in floodplains.
4.1.2	Ensure that existing and future flood information in the Flood Risk Assessments (FRA) are used to inform suitable adaptation requirements and planning in line with the Guidelines for Planning Authorities on Flood Risk Management (DECLG & OPW, 2009).
4.2.1	Support the OPW in delivering the measures identified in the CFRAM study, tranche 1 flood protection scheme in Rahan and tranche 2 scheme in Birr, considering the impact of climate change into proposals to ensure that measures proposed are adaptable to future changes.
4.2.2	Incorporate considerations of the impact of climate change into proposals submitted under the Minor Works Programme to ensure that measures proposed are adaptable to future changes.
4.2.3	Support the OPW in further Flood Risk Assessment Studies and pilot projects such as Natural Water Retention Measures to managing flood risk.
4.3.1	Develop a surface water management plan for Offaly identifying the requirement for future management of the surface water network. Prioritise projects to reduce surface water flood risk and provide for detailed mapping of areas prone to surface water and groundwater flood risk.
4.3.2	Assess the need for upgrades of drainage systems including separation of sewer and surface water required to reduce risk of capacity pressure on drainage systems.
4.3.3	Review current operations around drainage channel maintenance to take into account increased siltation and continued plant growth.
4.3.4	Develop a policy for the design, specification and management of Sustainable Urban Drainage Systems, incorporating the requirement for SUDS in Local Authority projects and private development site taking account of the potential future impact of climate change.
4.4.1	Encourage rainwater harvesting learning from experience in other Countries. Explore best practice in harvesting and storing water during the winter months to be used during the summer when less rain is projected.

Natural Resources and Cultural Infrastructure	Actions
5.1.1	Promote an awareness campaign that encourages and informs communities of the benefits of an active tree planting programme in improving air quality, offsetting carbon emissions, promoting biodiversity, limiting flood risk, reducing urban heat and aesthetic value.
5.1.2	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.
5.1.3	Support the management and control of invasive species in Offaly to reduce the spread of invasive species by managing the movement of soil and promote public awareness and education.
5.1.4	Research and identify areas considered beneficial for use as local carbon offset through carbon sequestration and support green infrastructure.
5.1.5	Research and identify suitable areas to support biomass growth.
5.1.6	Review the rivers in Offaly and work with and support agencies responsible for their management.
5.1.7	Continue to work with all Stakeholders in managing waste in a sustainable manner working towards new initiatives and developments in this area.
5.1.8	Consider the impact of climate change on food and food systems.
5.1.9	Engage with key landowners agricultural, peat, forestry to protecting natural and key cultural assets, empowering communities, developing a more sustainable green economy and resource management. Offaly County Council will engage with DAFM and farming organisations on a number of actions in the Offaly Strategy.
5.1.10	Support the Department of Agriculture, Food and Marine in their Strategy. Recognise impacts as being of cross-sectoral concern for both DAFM and Offaly County Council such as wildfires, slurry storage and land spreading issues, soil quality, non-native invasive species.
5.2.1	Review Offaly County Council's biodiversity policy to ensure that risks from adverse climate change have been identified and future changes are assessed and measures employed to address issues identified and carbon capture within habitats is considered.
5.2.2	Support biodiversity in plans for the maintenance of grass areas and develop a grass cutting policy with training and guidance provided to interested staff across all areas including a pair back approach to grass cutting, with many areas allowed to grow naturally, with appropriate signage to inform people.
5.2.3	Support the implementation of the Pollinator Policy in Offaly, including the maintenance of grass areas and grass cutting policy.
5.2.4	Support an Offaly Swift project identifying where they are nesting and threats to their environment.
5.3.1	Undertake a risk assessment of the heritage and cultural assets in the County to assess the vulnerability and the risk to the historical environment from the impacts of climate change and to help build resilience to these important assets.
5.3.2	Support the Heritage Council and Fáilte Ireland in their aims to identify and address the effects of climate on heritage and implications for Ireland's tourism industry.
5.3.3	Consider the impact of proposed adaptation and mitigation measures on the impact on tourism and tourism amenities and any unintended consequences for heritage and tourism that might arise.

Community Health and Wellbeing	Actions
6.1.1	Identify vulnerable communities across the County in the context of their vulnerability to the impacts of climate change and assess the risks to the community.
6.1.2	Develop and implement a programme to enhance vulnerable Communities' capacity to respond to and recover from extreme weather events, provide advice on the risk of extreme events affecting their locality, devise mitigating actions to enhance preparedness and provide support to develop appropriate resilience arrangements to enable response and recovery.
6.2.1	Raise awareness of the impacts of climate change through the Public Participation Network and ways for communities to increase response and resilience to these impacts through adaptation & mitigation.
6.3.1	Facilitate education about climate change to community groups, schools, secondary schools, tidy towns
6.3.2	Incorporate the consideration of climate change in the design and development of community schemes such as town and village renewal and rural regeneration.
6.3.3	Promote and inform public on renewables and grants available to encourage the move away from coal and turf heating in homes to solar and more green methods. Support initiatives to avail of the advantages to be gained by economics of scale in retro fitting schemes.