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**Re. Draft National Adaptation Framework Mitigation (NAF)**

Dear Mr Ó Laoi,

The EPA recognises the unique challenges that climate change poses for Ireland and considers that a comprehensive national response is required if the national transition objective to a low emission climate resilient economy and society, as envisaged in the National Policy position, and the 2015 Climate Act, is to be achieved. Fundamentally the response must address both the causes and consequence of climate change. It should also provide the basis for Ireland to achieve the benefits of this transition and realise the opportunities that it provides.

The EPA has previously provided comments on the draft National Mitigation Plan (NMP) which provides the strategy for Ireland to address the causes of climate change, through mitigation actions to reduce greenhouse gas emissions. The EPA welcomes the opportunity to provide comments and observations on the draft National Adaptation Framework (NAF) which provides the framework for actions to manage the consequences of climate change through adaptation actions.

Mitigation and adaptation are complementary processes which should work together to advance effective actions. The EPA welcomes the recognition of this in the draft NAF which highlights that the implementation process for both the NMP and the NAF will be advanced in tandem. Ownership of the governance of the combined process at Ministerial level is particularly welcome.

More detailed comments and recommendations are provided in the sections below. They largely follow the structure of the draft NAF. These are designed to assist in strengthening the final NAF so that it can provide the required platform for development of national resilience to climate change.

## Comments and observations on the draft National Adaptation Framework

### 1. Protecting Ireland's Environment in the Transition to a Low Carbon and Climate Resilient Society and Economy

The draft National Adaptation Framework is a welcome contribution to advancing Ireland's policy goals in relation to climate change. It builds on the learning from the non-statutory National Climate Change Adaptation Framework, 2012. It is also positioned to avail of more information from research investments by the EPA and other bodies as well as learning at sectoral and local authority levels and from international research as provided in the 5<sup>th</sup> Assessment Report from the Intergovernmental Panel on Climate Change (IPCC).

The challenge facing Ireland in addressing the causes and consequences of climate change should not be underestimated. The EPA provided a submission on the draft National Mitigation Plan (NMP) in April, 2017. That plan aims to address Ireland's contribution to the causes of climate change. The NAF is designed to frame Ireland's response to the consequences of climate change. In combination they provide the pathway for achievement of the national low carbon climate resilient transition outlined in the National Policy position 2012 and given statutory basis in the Climate Action and Low Carbon Development Act 2015.

The Ireland's Environment; an Assessment 2016 (EPA, 2016) identifies Climate Change as one of three key systemic issues that need to be tackled in Ireland. That report highlights the need for us to accelerate mitigation actions to reduce greenhouse gas emissions as well as the need to implement adaptation measures to increase our resilience in the dealing with the adverse consequences of climate and weather related impacts. In the foreword to the report, the Director General of the EPA states that:

*'Ireland and the world are at a crossroads and the choices we make over the coming decade will have implications for the future of humanity for centuries to come. We are fast approaching the end of the fossil age and we now fully understand the consequences of the large-scale consumption of fossil fuels over the past two centuries for the future health and wellbeing of our planet.'*

*We must now, with a far greater sense of urgency, make the transition from a society and economy dependent on fossil fuels and the wasteful consumption of natural resources to one that uses renewable and clean energy and one that takes much greater care of our precious and non-renewable natural resources. Transformational change is urgently needed across our entire economy and society, change that will affect how we work, how we live, travel, heat our homes, produce our food and use our purchasing power as consumers and citizens.*

*We have nothing to fear though from these changes. Ireland, in fact, has much to gain by becoming a leader in this transition to a low carbon and resource efficient economy and by making sure that this transition is underpinned by a clean, healthy and well-protected environment."*

### 2. Protecting Ireland's Environment in the Transition to a Low Carbon and Climate Resilient Society and Economy

Our recent 'Ireland's Environment' report recognises that moving to a low carbon and resource efficient Ireland will require urgent (and continued) transformational change across our entire economy and society, transforming many aspects of how we work, how we live, travel, heat our homes, produce our food and use our power as consumers and citizens. While undoubtedly challenging, the EPA believes that if we capitalise on our natural advantages, Ireland has the potential to become a leader in the transition to a low-carbon and resource-efficient economy,

enabling us to share and promote effective adaptation and rapid decarbonisation solutions with other countries.

We equally recognise the fundamental importance of ensuring that the national transition is underpinned by a clean, healthy and well-protected environment. **It is therefore important that the NAF is developed and implemented in the context of a wider and more integrated approach to achievement of national sustainable development goals. The NAF implementation process should be achieved in a manner that minimises any negative impact on the wider environment and maximises the potential co-benefits for land use planning, human health, biodiversity, water quality, flood risk management and other interrelated areas.**

**Fully integrating the findings and recommendations of future environmental assessments (SEA and Appropriate Assessment) into the NAF will strengthen the framework while also ensuring that adverse effects on the environment are reduced.**

The *‘Ireland’s Environment’* provides a timely opportunity to inform preparation of the NAF and associated future SEAs. In particular, Chapter 13 identifies seven Key Environmental Actions for Ireland:

1. *Environment and Health and Wellbeing* - Recognition of the benefits of a good quality environment to health and wellbeing.
2. *Climate Change* - Accelerate mitigation actions to reduce greenhouse gas emissions and implement adaptation measures to increase our resilience in dealing with adverse climate impacts.
3. *Implementation of Legislation* – Improve the tracking of plans and policy and the implementation and enforcement of environmental legislation to protect the environment.
4. *Restore and Protect Water Quality* – Implement measures that achieve ongoing improvement in the environmental status of water bodies from source to the sea.
5. *Sustainable Economic Activities* – Integrating resource efficiency and sustainability ideas and performance accounting across all economic sectors.
6. *Nature and Wild Places* – Protect pristine and wild places that act as biodiversity hubs, contribute to health and wellbeing and provide sustainable tourism opportunities.
7. *Community Engagement* – Inform, engage and support communities in the protection and improvement of the environment.

These actions are also linked to a number of the UN’s Sustainable Development Goals and the goals established the EU’s 7<sup>th</sup> Environment Action Programme (EAP7) which guide policy to 2020 and provide its long-term direction to 2050: i.e. "In 2050, we live well, within the planet’s ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society’s resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society." Addressing and implementing these key actions will be important in delivering environmental protection and promoting sustainable development in Ireland in the years ahead.

While recognising that the NAF is primarily concerned with addressing Key Action 2, the Framework should also take into account the relevant aspects of the other key actions and the related sub actions outlined in Chapter 13. **Including a commitment in the NAF to progressing the seven Key Environmental Actions for Ireland identified in *‘Ireland’s Environment’* would emphasise a commitment to ensuring that, in achieving the national transition objective, the fundamental benefits of sustainable development, resource**

**efficiency and maintaining a good quality environment are recognised.** This approach has recently been adopted as part of the draft National Planning Framework.

### *3. Policy Context and Role of Research*

The NAF provides a comprehensive outline of the key concepts and policy context for adaptation actions as well as the socio economic rationale for taking early actions to anticipate impacts that avoid the worst effects of projected changes. There is a line of sight from actions under the UN Framework Convention on Climate Change, the EU strategy on adaptation and actions in Ireland. These are linked to the wider policies and process at these scales including the UN Sustainable Development Goals, EU Environment goals as well as national sustainable development goals, and local and regional development plans. The identification of Opportunities (Chapter 1, Box 2) as well as the adverse impacts of climate change for key sectors is welcome. This type of approach is essential for buy-in by sectors and citizens to the required actions. Awareness and engagement by civic society as is envisaged through the National Dialogue on Climate Action is particularly welcome and will be an important part of this process.

The NAF highlights the important role of climate change research and the work of the EPA in development and advancement of climate change research in Ireland via a well-structured thematic approach. The EPA research programme has provided much of the information and analysis referenced in the draft NAF. The further development of this research programme is essential together with linking it to related research at EU and broader European levels, for example, through JPI Climate and Horizon 2020. This is exemplified by projects such as European Research Area for Climate Services consortium (ERA4CS) to provide support and information to assist adaptation actions. Such joint research programmes provide an opportunity for Ireland's research community to work more closely with their international colleagues. The outcomes can then better inform actions in Ireland.

The provision of annual reports on research and assessment reports, on a five year basis, which has been identified as an action for the EPA in the NMP, will be equally important for the NAF process and the adaptation plan development process. The modalities of these reporting activities have not yet been fully determined but the EPA would envisage a strong link between this process and the establishment of the Climate Ireland information system as a national resource to support actions on climate change. To this effect, the EPA particularly welcomes the commitment in the draft NAF to place the Climate Ireland platform on a permanent operational basis.

### *3. Climate change now and into the future*

The draft NAF outlines how Ireland's climate is changing in line with global trends. The changes that are evident on all continents and oceans are apparent here. These are most evident in the temperature record, sea-level rise and changes in the nature and intensity of precipitation events. These have impacted on human health, water resources and management systems, ecosystems, food production and rates and levels of coastal flooding. Projections indicate that these changes will continue during this century and some such as sea-level rise beyond this century. The nature and scale of these changes will be determined by the effectiveness of global actions to achieve the goals of the Paris Agreement and balancing greenhouse gas emissions and removals during this century.

For Ireland the severity of the impacts of climate and weather extremes depends not only on the extremes themselves but also on exposure and vulnerability of human and natural systems to these extremes. The role of the NAF is to enable and frame effective adaptation actions in

Ireland which address current and emerging exposure and vulnerabilities with the aim being to increase the resilience of systems and activities to impacts. Central to this will be the provision of robust analysis of on-going and projected climate change as well as guidance on how to mainstream such information into management and planning systems, including how to address uncertainty issues which are highlighted in the draft NAF. This will require a strengthening of the institutional capacity within the Irish governmental system to conduct such analysis, supported by high quality research. **The strengthening of such institutional capability should be included as an objective of the NAF.**

#### *4. Framework approach*

The NAF provides the framework for development of adaptation planning at sectoral and local levels. The framework identifies, for key bodies and actors, both the challenges they face as well the opportunities that arise from effective actions which are informed by the best available scientific analysis. How successfully these key bodies and actors work together will be critical to the success of the national adaptation process.

In the context of the framework approach and its underlying structures, the EPA welcomes the new regional structures being established at local authority level which will allow for development of shared expertise across and between the regions. These will be a key part of the overall management and governance structure but it is not clear how they will be integrated with national structures. **A schematic diagram of how existing and emerging components are envisaged in the NAF could usefully illustrate these developments and their interconnections.**

#### *5. Governance and implementation*

##### **The National Transition objective and resilience**

The concept of climate resilience is central to the National Transition Objective established in the 2015 Climate Act. It is focused on the longer term transition process to 2050 with the National Adaptation Framework being the key enabling structure to manage and direct this process. The EPA considers that the NAF should provide a pathway for achievement of resilience by sectors and communities. This will be an iterative process involving the development of short, medium and long term objectives and implementation of responses that encompass learning, emerging information and analysis. The linkage to the NMP will be essential in enabling effective frontline actions.

Resilience is addressed in several sections of the NAF but it does not provide a clear definition of what this is. It may be premature to provide a precise definition at this point and any definition is likely to be open to future revision. However, the NAF can initiate a process by which Ireland advances its understanding of, and preparedness for, the impacts of climate change. In doing this it can further define, track and achieve progress towards resilience, at a range of scales. This process should enable key actors e.g. economic sectors and Local Authorities to assess their current positioning and identify ‘resilience pathways’ to address exposure and vulnerability to climate change impacts. **In this context, the provision of a broad working approach to achievement of resilience in the NAF would be welcome, e.g., “to ensure that national sustainable development objectives and the functioning of social, economic and environmental systems will not be compromised by the adverse impacts of climate change in 2050 and to the end of this century, in so far as global actions will allow for this”.** This would establish a concept of resilience that is based on ensuring that sectors, key infrastructures and Local Authorities can remain operationally functional while navigating the transition to reliance. This could also inform baseline assessments of current vulnerabilities to climate and weather related impacts, which provide the context of emerging and projected trends.

## Thematic structures

The proposed thematic approach which enables cross government actions and assessment of these is welcome. **However further development of the thematic areas may be warranted, in particular inclusion of “sustainable development” as an overarching thematic issue.** This may assist in framing the implementation of the NAF and linking it to other key national plans and programmes in particular the NMP, the National Planning Framework, the River Basin Management Plan and the Flood Management Plans. The on-going establishment and achievement of such development goals would become a necessary part of sectoral and local development plans which include climate change actions. Inclusion of such a thematic dimension would therefore assist in framing overall climate actions i.e. mitigation and adaptation.

The specific themes identified in the draft NAF are clearly important, however, some further development of these may be useful.

1. Natural Capital is included as a theme. Assessing and addressing environmental and ecosystem vulnerabilities should be a key component of the NAF process. **The particular vulnerability of natural systems to climate change is well known and could be more fully addressed in the NAF.** Also in the context of overall climate action addressing the specific vulnerability of carbon stocks and sinks to climate impacts can provide both an important cross over point to mitigation. This is linked to achievement of the national carbon neutrality goal for the land sector and can be a key indicator of climate impacts e.g. the unmanaged loss of carbon stock due to fires, flooding and heatwaves.
2. Critical Infrastructure is essential for a functional society and economy and warrants particular attention. However, the wider “built environment” may also be vulnerable to climate impacts and some elements may be critical at local levels, **hence inclusion of a wider thematic area such as ‘critical infrastructure and the built environment’ may usefully encompass these wider issues.**
3. River and coastal flood risk is identified as a theme. Clearly these are and will be key issues for Ireland, particularly in coastal areas. However, future climate conditions may also result in drought and water scarcity. **A more generic theme on ‘water resources and management’ including flood risk etc. may better encompass such concepts.**

## Economic analysis

The economic analysis of impacts and response options to climate impacts will be critical to investment. **It is therefore important that the NAF provides for a process for doing this that assesses current expenditure required to maintain existing systems in the context of current weather and climate related factors.** This type of analysis can inform decision making by both public and private actors. Some of these analyses will be available from local authorities and bodies such as the Office of Public Works (OPW). Many private actors in areas such as insurance or systems maintenance providers may also be conducting analyses of these issues and approaches by which synergistic sharing of information can be facilitated should be explored.

## Structures and Processes

The EPA believes that there are currently significant gaps and challenges in governance structures in the climate area and that the implementation phase of the NAF and NMP will present significant additional challenges. Implementation will, however, benefit significantly



from the statutory basis afforded to both the NAF and NMP through the Climate Action and Low Carbon Development Act 2015, the national progress review activities of the Climate Change Advisory Council and the clear targets for decarbonisation and climate resilience set out in the associated policy statement.

Appropriate, robust and resilient governance structures will be essential to ensure delivery of the implementation of NAF which includes monitoring and evaluation of progress. The NAF covers key economic sectors including Energy, Transport, and Agriculture as well as actions by Local Authorities. They have significant links and overlaps at a range of scales. Management of these in an effective and efficient manner is a significant challenge but will be central to a successful implementation process. The NAF provides an opportunity for a more coordinated approach to implementation of actions and plans in these sectors and linking these to the emerging National Planning Framework.

The EPA supports the approach proposed for overall governance at national level, in particular the proposal to establish a high level steering group chaired by the Minister that will oversee both the NMP and the NAF. This mirrors somewhat the approach that has been adopted for oversight of Foodwise 2025 which is proving to be a successful governance model with strong engagement at senior government level. Similarly, the approach adopted for the implementation of the Offshore Renewable Energy Development Plan (OREDPA) provides useful learning. The work of this high level steering group will be enhanced by the development and adoption of an implementation plan with clear objectives, targets, timeframes and allocations of responsibility. It is also important that such a high level steering group is sufficiently well supported and resourced both technically and administratively. The Foodwise model provides a useful template in this regard.

We note that a number of new national and regional level processes and structures are now emerging such as the Local Authority Regional Climate Change Offices, the National Dialogue on Climate Action, and 'Climate Ireland'. **Clarity on these structures and how they will operate as a collective to enable effective actions on climate change, and particularly on adaptation, is warranted in the NAF.** This could address issues of how the thematic objectives are being assessed and monitored and also identify lines of ownership and management. **A schematic illustrating the interconnections between these various structures and how they link into the high level steering group would be a useful addition to the NAF.**

On structures and processes it is noted that these will be developed to enable reporting, including to UN and EU bodies. The rationale for this is evident, however, further analysis of this approach and how it may both address national priorities and thematic approaches being adopted in the NAF may be warranted to ensure national issues are prioritised.

### **Monitoring, Reporting and Review**

We welcome that the NAF and associated adaptation plans will be subject to review and update every 5 years. Progress will be reported by the Minister to the Oireachtas in annual transition statements. The Climate Change Advisory Council is also expected to provide valuable advice on the NAF and its implementation as well as overall progress furthering the transition to climate resilient Ireland.

Where reviews of the NAF identify that additional measures/actions are required or amendments to existing Plans/Programmes/Strategies are needed to advance achieving the aims of the NAF, the wider environmental implications of implementing these actions/measures must be assessed. The requirements of the SEA and Habitats Directive will also need to be taken into account. Establishing a close link between the monitoring /review of the NAF and the SEA-related monitoring is therefore needed.

## Objectives

The EPA welcomes the clear elaboration of the summary of objectives and notes that this will form the basis of an overall implementation plan. The summary of objectives table provides a useful picture of the key roles and processes under the NAF. However, as indicated above the NAF should essentially address national issues as a priority rather than reporting requirements to the UNFCCC or EU. The objective may also be to enhance the dynamic in, and utility in, these reporting processes and structures to ensure that Ireland specific issues are recognised. This objective could be an end point, rather than starting point for the table.

A number of objectives on supporting the knowledge base are identified as EPA leads. These include; indicator issues, the climate Ireland platform and on research.

- The EPA recognises that the provision of indicators is more complex for adaptation than for mitigation. In that context, it is important that this will be an on-going process. Indicators are likely to reflect economic impacts as well as the scale and nature of disruptions caused, or avoided, as a result of weather and climate related events. Cross over points to mitigation actions and the vulnerability of ecosystems and ecosystem services will need to be assessed. As outlined earlier the unmanaged loss of carbon stocks or systems can provide a key indicator which can be developed based on existing GHG reporting and accounting systems. **The EPA will be able to support this objective through its research programme but the NAF needs to provide for the mainstreaming of a national indicator framework as an integral part of tracking implementation.**
- The Climate Ireland information platform is considered in some detail in the draft NAF. Page 73 of the NAF includes the statement that this facility should “be now placed on a permanent operational basis” which is a clear objective statement of what is required. The EPA considers that this is an issue that should be jointly led by DCCAE and the EPA and that the resources to enable this to happen should be allocated. **We recommend that the objective be re-worded to reflect that the facility ‘be now placed on a permanent operational basis’.**
- On research, the EPA again highlights that the NMP requires an annual update on relevant research activities and an assessment report on research findings every five years. These reports and assessments should cover both mitigation and adaptation research and would be a valuable input to the implementation of both the NMP and the NAF and could also be referenced in the NAF. The contribution of research in Ireland and elsewhere should inform the knowledge base for adaptation and mitigation actions.

## Long term and global context

It is recognised that the national policy position is focused on a 2050 timeline. The impacts of climate change are projected to continue to emerge up to the end of this century and beyond. Sea-level rise is the clearest example of this. The scale and rates of change will be largely determined by the effectiveness of global actions to address the causes of climate change via implementation of the Paris Agreement. The longer term issues and approaches to manage associated risks should also be addressed in the NAF. In particular, an effective risk management approach could be usefully adopted which can account for current and emerging vulnerabilities. These should include considerations of low probability high impacts events which can be important for strategic choices for investments and decision making.



## 6. SEA Determination

We note the determination by DCCAE, as described in *Appendix 4: SEA/AA Screening Document*, that the requirements of the SEA Directive do not apply to the National Adaptation Framework, on the basis that the administrative provisions of Article 9(1) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations, as amended, have not been fulfilled. In assessing the applicability of the SEA Directive to the NAF (and any possible future amendments/revisions/iterations of the NAF), the requirements of Art. 9(3) should also be referred to, to support your determination. Consideration should also be given to amending the title of Appendix 4 (and associated text), to reflect the fact that a pre-screening check (rather than an SEA screening) was undertaken by DCCAE which determined that the requirements of the SEA Directive were not applicable.

Engaging in the SEA process at the appropriate level provides a structured approach to:

- consider the relationship of adaptation strategies to other relevant plans/programmes,
- assess the potential for significant environmental effects (including cumulative effects) of any proposed adaptation measures to be implemented,
- consider ways in which any significant environmental effects can be avoided or minimised, and
- identify and prioritise those adaptation measures that will yield multiple environmental and societal benefits.

We understand the Framework will be implemented at sectoral (government department) and local authority level through the preparation of sectoral adaptation plans and local authority adaptation strategies, where detailed adaptation measures will be developed. The requirements of the SEA Directive (and Habitats Directive) will need to be considered in developing the sectoral and local authority adaptation plans, including screening for SEA and Appropriate Assessment in the first instance.

### **Other points**

Links to actions on disaster risk reduction: At an international level there is a movement towards the integration of elements of climate change adaptation with emergency response or disaster risk reduction. This type of approach may warrant further development in the NAF.

Guidelines and climate information: The recognition in the NAF of the importance of the adaptation guidelines e.g., Gray, 2016<sup>1</sup>, provided through the research programme is welcome. However, these are the outputs of EPA research and further steps are needed to adopt these as national guidelines.

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<sup>1</sup> Stefan Gray, EPA Research Report 164 - Local Authority Adaptation Strategy Development Guideline (2016)

Should you have any queries or require further information in relation to the above please contact the undersigned.

Yours sincerely,



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