



THIRD CLIMATE CHANGE ADAPTATION SCORECARD

FINAL REPORT

JULY 2023

Executive Summary

Tackling climate change within Ireland is dependent on a coordinated response from all sectors and levels of government which incorporates both adaptation and mitigation. The Climate Change Advisory Council has previously highlighted the need for a greater emphasis on adaptation within Irish policy to enable a move towards climate resilient development. The National Adaptation Framework (NAF) was developed in 2018 to facilitate this approach.

The NAF mandates the priority sectors that are to assess climate change risks, mainstream adaptation considerations into policy and implement resilience actions. The sectors are clustered around the themes of natural and cultural capital, critical infrastructure, water resources and flood risk management and public health. The Adaptation Scorecard is based on a questionnaire, developed and adopted by the Council in 2021, that is sent to the priority sectors identified in the NAF as well as local government and the Department of Environment, Climate and Communications. This is the third edition of the Adaptation Scorecard, which is carried out on an annual basis.

The 11 sectors¹ that participate in the scorecard are:

1. Agriculture, Forestry and Seafood – Department of Agriculture, Food and Marine (DAFM)
2. Biodiversity – Department of Housing, Local Government and Heritage (DHLGH)
3. Built and Archaeological Heritage – Department of Housing, Local Government and Heritage (DHLGH)
4. Transport Infrastructure – Department of Transport (DoT)
5. Electricity and Gas Networks – Department of Environment, Climate Change and Communication (DECC)
6. Communications Networks - Department of Environment, Climate Change and Communication (DECC)
7. Flood Risk Management – Office of Public Works (OPW)

¹ This is based on the 12 sectors identified in the NAF, which are grouped into 9 Sectoral Adaptation Plans. The scorecard also assesses the Local Authority Adaptation Plans / Climate Plans as well as the Department of Environment, Climate and Communications in terms of its coordination of NAF implementation.

8. Water Quality and Water Services Infrastructure – Department of Housing, Local Government and Heritage (DHLGH)
9. Health – Department of Health (DoH)
10. Local Government – County and City Management Association (CCMA) and Climate Action Regional Officers (CAROs)
11. National Adaptation Framework - Department of Environment, Climate Change and Communications (DECC)

The main aim of the Scorecard is to measure the progress of sectoral and local adaptation plans and to monitor implementation of the NAF itself. This report outlines how the 2023 Scorecard process was conducted. The assessment of the questionnaire responses is based on the degree to which progress is being made in the implementation of adaptation policy and increasing resilience under three key adaptation topics:

1. **Risk, prioritisation and adaptive capacity** - identified risks are being addressed and monitored, adaptive capacity is increasing, knowledge gaps are being addressed and regular monitoring of performance of the Sectoral Adaptation Plans (SAPs) is taking place.
2. **Resourcing and mainstreaming** – appropriate human and financial resourcing is being applied, human capacity is being developed, long term decisions are taking account of future climate and adaptation is being mainstreamed into policies, plans, strategies, programmes and frameworks.
3. **Governance, coordination and cross cutting issues** - systemic coordination is in place across sectors, impactful actions within the National Climate Action Plans are being integrated and implemented, emerging and cross-cutting issues are being addressed and good coherence with other policies is shown.

The questionnaire was distributed to sectors in early February 2023 with a deadline for return of 29th March 2023. Responses were received from all sectors and excellent engagement was observed from sectors overall. Specific engagements were held with four sectors prior to submission based on request. The responses were evaluated using the assessment framework and criteria following on from the previous year. The assessment was carried out by staff members of the Climate Change Advisory Council secretariat with support from experts assigned by the Adaptation Committee. A detailed assessment of the progress of each sector is provided according to the sub-categories in table 1 below.

Table 1: Summary of 2023 adaptation scorecard results per sector and category.

Sector	Risk, prioritisation & adaptive capacity	Resourcing & mainstreaming	Governance, coordination & cross cutting issues	Overall	Trend ²
Flood Risk Management (OPW)	Advanced	Good	Good	Good	↔
Transport (DoT)	Advanced	Moderate	Good	Good	↑
Built and Archaeological Heritage (DHLGH)	Good	Good	Good	Good	↑
Local Government	Good	Good	Good	Good	↔
Agriculture, Forestry and Seafood (DAFM)	Moderate	Good	Moderate	Moderate	↑
National Adaptation Framework (DECC)	Moderate	Moderate	Moderate	Moderate	↔
Water Quality and Water Services Infrastructure (DHLGH)	Limited	Moderate	Moderate	Moderate	↔
Communications Networks (DECC)	Limited	Moderate	Limited	Limited	↔
Electricity and Gas Networks (DECC)	Moderate	Limited	Limited	Limited	↑
Health (DoH)	Limited	Limited	Limited	Limited	↔
Biodiversity (DHLGH)	No progress	Limited	Limited	Limited	↑

Four sectors received an overall rating of good, three received a rating of moderate and four received an overall rating of limited. This was an improvement from the 2022 scorecard where two sectors received a rating of good, four received a rating of moderate, three a rating of limited and two a rating of no progress / insufficient evidence.

Across all sectors, the most advanced progress was seen within the category of risk, prioritisation and adaptative capacity with two sectors receiving a rating of advanced progress. The sectors of

² Compared to overall progress in 2022 scorecard.

flood risk management (OPW) and transport (DoT) demonstrated a detailed understanding of the evolving climate risks facing their sectors and reported that data gaps are being addressed with active research that is feeding into policies and reaching end users. However, the availability and application of climate data to inform decision making and planning was identified as the most common challenge faced by sectors overall and the impacts of climate change on productive sectors, natural resources and ecosystems, health and critical infrastructure are still not well understood.

An improved focus on mainstreaming adaptation by some sectors into policies, plans, programmes, strategies and frameworks was observed. It was clear that many new climate change-related policies, plans and strategies have been developed by sectors but impacts from these policy adjustments are only likely to be realised over the medium and longer term. Moreover, resourcing remains a consistent constraint across almost all sectors with inadequate financing and staff for adaptation reported across departments and local authorities. Only a few departments have dedicated funding streams in place for adaptation, while some others have been able to incorporate adaptation into existing funding schemes and programmes that they operate.

There was evidence of slight overall improvement in the area of governance, coordination, and cross-cutting issues although 4 out of 11 sectors received only a limited rating. The multi-sectoral and stakeholder nature of addressing climate change adaptation remains a challenge and effective coordination and cross-sectoral engagement was identified as the most important enabler for success by the different sectors. Several important issues such as drought, coastal zone management and nature-based solutions cut across sectors and require a coordinated approach, while emerging issues such as maladaptation received only limited attention.

Analysis of progress has facilitated the identification of key areas to focus future progress, which will be further discussed in a workshop to be held in September 2023 with all stakeholders to review and improve the robustness of the scorecard in 2024. This will also provide an opportunity to improve knowledge on adaptation and promote further cross-sectoral collaboration. Overall observations from the Third Adaptation Scorecard are presented in Section 5 of this report.

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Acronyms

CAROs - Climate Action Regional Officers (CAROs)

CCMA - County and City Management Association (CCMA)

DAFM - Department of Agriculture, Food and Marine (DAFM)

DECC - Department of Environment, Climate Change and Communication (DECC)

DHLGH - Department of Housing, Local Government and Heritage (DHLGH)

DoH - Department of Health (DoH)

DoT - Department of Transport

HSE – Health Service Executive

IPCC - Intergovernmental Panel on Climate Change

KPIs – Key Performance Indicators

LA CAPs - Local Authority Climate Action Plans

NAF - National Adaptation Framework

NCAP - National Climate Action Plan

OPW - Office of Public Works

SAPs - Sectoral Adaptation Plans

1. Introduction

1.1 Background and Context

Ireland's climate is already changing and has become warmer and wetter over the past thirty years and projections predict wetter and warmer weather for Ireland in the years ahead as well as an increase in extreme weather events [1]. Increased sea level rise, heatwaves, droughts, storms and flooding all pose a considerable risk to Ireland.

With global average temperatures expected to reach or surpass 1.5°C above the 1850–1900 pre-industrial baseline in the first half of the 2030s, the IPCC calls for climate resilient development and deep, rapid and sustained mitigation action and accelerated implementation of adaptation action in this decade to reduce projected losses and damage for humans and ecosystems[2]. In Ireland, the Climate Change Advisory Council has previously called for a greater emphasis on adaptation and the urgent need for improved adaptation and resilience measures [3].

To move towards climate resilient development, there is a need to identify actions for adaptation, measure progress on the implementation of adaptation policy and inform the development of future policies. Under the 2015 Climate Act, Ireland's first statutory National Adaptation Framework (NAF) was prepared and published in 2018. This framework allows 12 priority sectors and local authorities to assess climate change risks, implement resilience actions and mainstream adaptation considerations into policy [3].

An Adaptation Scorecard was adopted in 2021 and used in 2021 and 2022 to measure the progress of sectoral and local adaptation plans against the NAF and monitor implementation of the NAF itself. For 2023, the Adaptation Scorecard was used to measure progress in implementing adaptation policy and increasing resilience and to compare this with previous years.

1.2 Overview of process

After outsourcing the scorecard in 2022, it was decided to undertake the assessment in-house in 2023. It was considered that this would allow for better engagement with the sectors and also provide more time to complete the questionnaire, as these two issues were identified as weaknesses in the 2022 scorecard.

The design of the scorecard has remained the same for 2023 to allow for consistency and comparison with the results from the previous years. The engagement with sectors, assessment and finalisation of the 2023 scorecard was carried out by staff members from the secretariat of the Climate Change Advisory Council with support from assigned experts from the Adaptation Committee. The final assessment is based on the degree to which progress is being made in the period April 2022 - March 2023 in the implementation of adaptation policy and increasing resilience with respect to the following three adaptation topics:

- **Risk, prioritisation and adaptive capacity** - identified risks are being addressed, adaptive capacity is increasing, knowledge gaps are being addressed and risks are being monitored.
- **Resourcing and mainstreaming** - appropriate resourcing is being applied, long term decisions are taking account of future climate and adaptation is being mainstreamed.
- **Governance, coordination and cross cutting issues** - systemic coordination is in place, cross-cutting and emerging issues are being addressed and there is good coherence with other policies.

The following key timelines informed the process for undertaking the scorecard:

1. **31st January 2023:** Presentation of approach and timelines to the National Adaptation Steering Committee.
2. **3rd February 2023:** Questionnaires issued to all sectors.
3. **March 2023:** Consultations held with various sectors (based on requests received).
4. **29th March 2023:** Final responses to the questionnaires returned to the Climate Change Advisory Council secretariat.
5. **25-26th April 2023:** Internal assessment and evaluation of responses by staff members of the Climate Change Advisory Council secretariat.
6. **2-8th May 2023:** Discussion of draft internal assessment with experts from the Adaptation Committee.
7. **17th May 2023:** Finalization of assessment and presentation of results to the Adaptation Committee.
8. **18th May – 1st June 2023:** Incorporation of inputs into the assessment from the Adaptation Committee and sharing the assessments with the sectors.
9. **8th June 2023:** Incorporation of main findings from the Adaptation Scorecard into the Council's Annual Review 2023.

The blank questionnaires are provided in Appendix A.

1.3 Assessment Criteria and Scoring

The questionnaire was sent to responsible authorities for priority sectors, local government and the NAF (to relevant personnel in DECC) to provide an update on adaptation progress across the previous year (April 2022 – March 2023). An assessment framework was used to grade responses. This framework was consistent with the approach taken in 2021 and 2022 and used the progress categories shown in Figure 1.3. Once the questionnaire had been distributed to sectors, an optional opportunity to meet with the assessors to discuss their response and the scorecard process more generally was provided to each sector.



Figure 1.3. Scoring system used to track adaptation progress in the CCAC 2022 Annual Review.

Grading was achieved through detailed review and screening of responses against the assessment criteria developed through the process outlined below. Progress categories were allocated for each of the three areas through a qualitative assessment based on the degree to which responses met the criteria expected of sectors demonstrating advanced progress. The criteria were consistent with the approach taken in 2022 and the main criteria used per category were as follows:

Risk, prioritization and adaptive capacity

- ✓ Evidence of progress in monitoring and building knowledge of risks.
- ✓ All/majority of identified risks being addressed.
- ✓ Ability to focus and prioritize addressing more defined vulnerabilities and risks.
- ✓ Evidence that adaptive capacity is increasing and knowledge gaps being addressed with effective interface between research and end user needs.
- ✓ Regular monitoring and evaluation of SAP and taking remedial measures where needed.

Resourcing and Mainstreaming

- ✓ Appropriate resourcing is being applied to achieve policy goals, including staff and financial resourcing.
- ✓ Proactive training of staff and stakeholders.
- ✓ Integration of adaptation issues into new frameworks, policies, plans, programmes, strategies and guidelines.

- ✓ Evidence of developing and implementing new coherent policies and planning frameworks for climate change.
- ✓ Evidence long term decisions are accounting for the future climate

Governance, Coordination and Cross Cutting Issues

- ✓ Systematic coordination of sector with clear ambition for adaptation and leadership buy-in.
- ✓ Pursuit of synergies between adaptation and mitigation.
- ✓ Demonstration of impacts of the sector's interventions in terms of infrastructure resilience, livelihood improvements and ecosystem health.
- ✓ Evidence of understanding and actions being taken to address emerging and cross-cutting issues relevant to the sector (such as nature-based solutions, maladaptation and just resilience).
- ✓ Integration of impactful actions in the National Climate Action Plan (NCAP) and execution thereof.

Once scores were allocated for each of the three adaptation topics, an overall score was determined for each sector. It is important to note that the assessment applies to progress made over the past year only. Actions completed before this timeframe for which no further progress was noted in 2022-2023 were therefore not considered during the scoring process. The assessment was also only based on the information provided within the scorecard response.

A summary of results is presented per sector is presented in Section 2 below.

2. Summary of Results

2.1 Overall Summary of Results

Following the detailed review of sector responses against assessment criteria, progress categories were allocated for the three adaptation topics for each sector, as shown in table 1. An overall score was also determined for each sector, giving a high-level overview of adaptation progress in Ireland for 2022. More detailed justifications for the Adaptation Scorecard results per category and sector are outlined in Sections 3 and 4.

Table 1: Summary of 2023 adaptation scorecard results per sector and category.

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Flood Risk Management (OPW)	Advanced	Good	Good	Good	↔
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National Adaptation Framework (DECC)	Moderate	Moderate	Moderate	Moderate	↔
Water Quality and Water Services Infrastructure (DHLGH)	Limited	Moderate	Moderate	Moderate	↔
Communications Networks (DECC)	Limited	Moderate	Limited	Limited	↔
Electricity and Gas Networks (DECC)	Moderate	Limited	Limited	Limited	↑

³ Compared to overall progress in 2022 scorecard.

Sector	Risk, prioritisation & adaptive capacity	Resourcing & mainstreaming	Governance, coordination & cross cutting issues	Overall	Trend ³
Health (DoH)	Limited	Limited	Limited	Limited	↔
Biodiversity (DHLGH)	No progress	Limited	Limited	Limited	↑

The assessment shows that four sectors demonstrated good overall progress, while three showed moderate progress towards adaptation and four sectors showed limited progress. This was an improvement compared to the scorecard results in 2022 with two new sectors receiving an overall good rating (transport and built and archaeological heritage) in addition to flood risk management (OPW) and Local Government (see figure 2.1). DAFM and DECC (NAF implementation) received a moderate overall rating as did the DHLGH for the water quality and water services infrastructure sector. It is notable that no sector received an overall rating of no progress / insufficient evidence for the first time. Progress in the communications networks sector (DECC), electricity and gas sector (DECC), biodiversity (DHLGH) and health (DoH) was found to be limited.

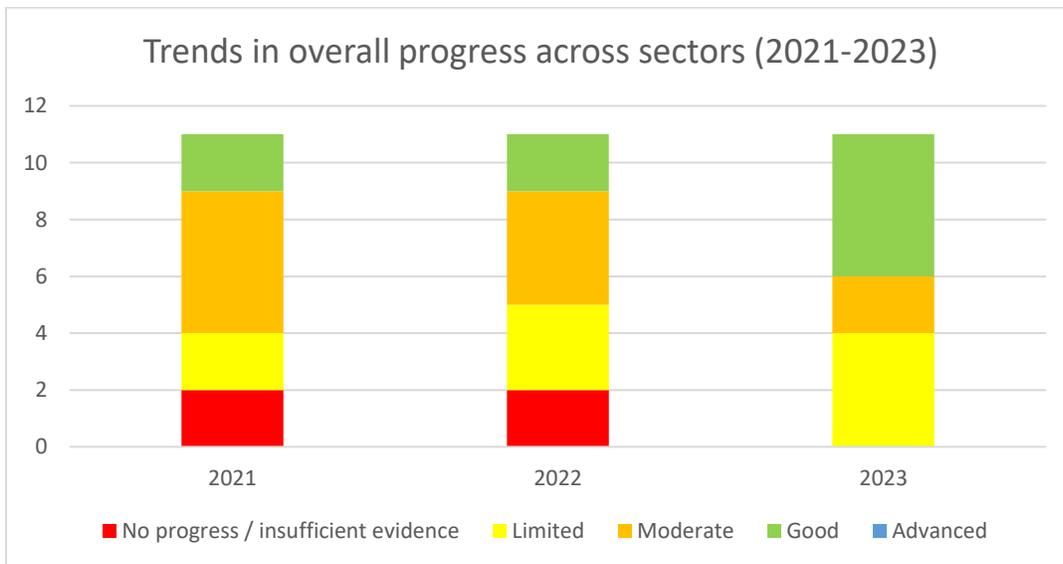


Figure 2.1. Trends in overall progress across sectors (2021-2023).

2.2 Analysis of Trends per category

The strongest progress was evident in the 'risk, prioritization and adaptive capacity' category, with two of the sectors (flood risk management (OPW) and transport (DoT) receiving an advanced

progress rating (see figure 2.2a). No sectors received this rating in the 2022 scorecard. This shows that these sectors have developed a detailed understanding of the evolving climate risks facing their sectors, data gaps are being addressed with active research, research outcomes are feeding into policies and reaching end users and progress in SAP implementation is being regularly monitored and addressed. Good progress was achieved by built and archaeological heritage (DHLGH) and the local government sector. DAFM received a moderate rating for agriculture, forestry and seafood in this area as did the DECC for the implementation of the NAF and for the electricity and gas networks. Limited ratings were given to health (DoH), communications networks (DECC) and water quality and water services infrastructure (DHLGH) with the biodiversity sector (DHLGH) showing no progress.

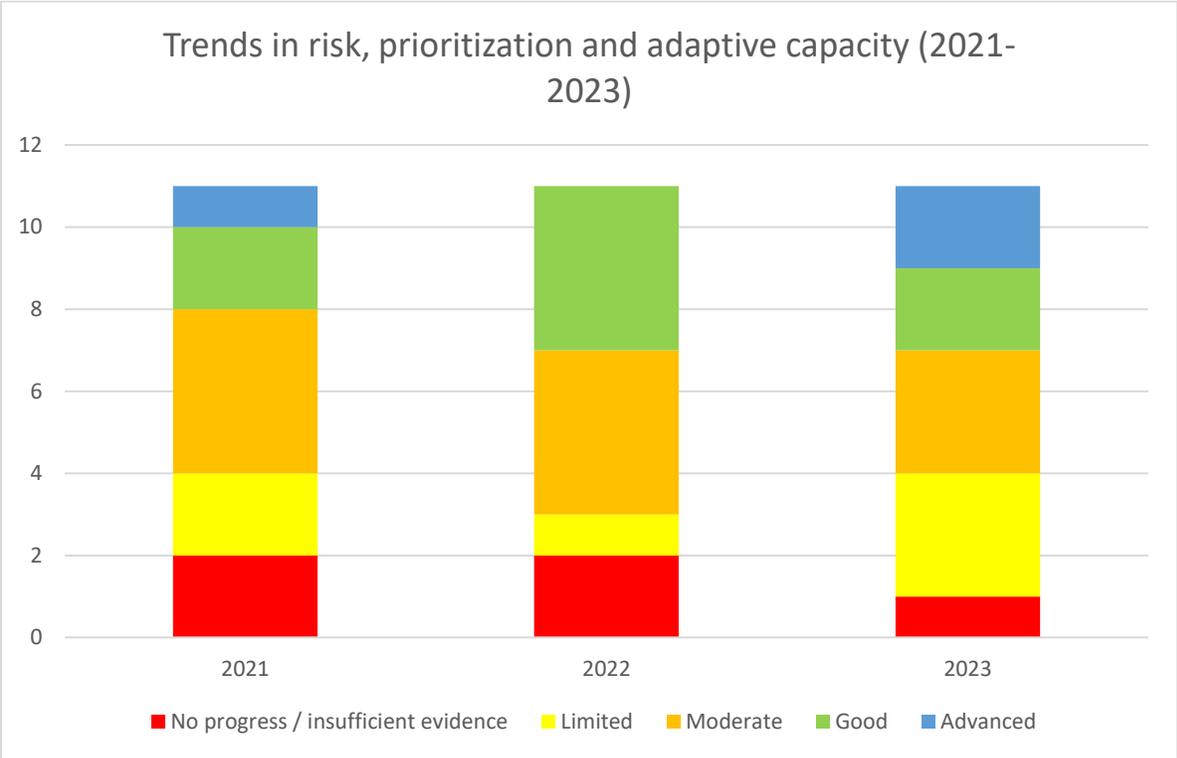


Figure 2.2a. Trends in progress across sectors in risk, prioritization and adaptive capacity (2021-2023).

The mainstreaming of adaptation remains a significant challenge. Improved performance was evident in terms of mainstreaming adaptation into policies, plans and frameworks across some sectors and the development of new frameworks to tackle climate change in many sectors. It is hoped that this will translate into the urgent positive actions and impacts over the coming years. However, the lack of resourcing for adaptation, including financial and human resources within departments and local authorities, continues to be a particular challenge. Four sectors received

a rating of good in this category – flood risk management (OPW), built and archaeological heritage (DHLGH), agriculture, forestry and seafood (DAFM) and local government. This compares favorably against the 2022 scorecard when only one sector received a good performance rating (see figure 2.2b). None of the sectors received a no progress rating but three of the sectors each received a limited and moderate performance rating.

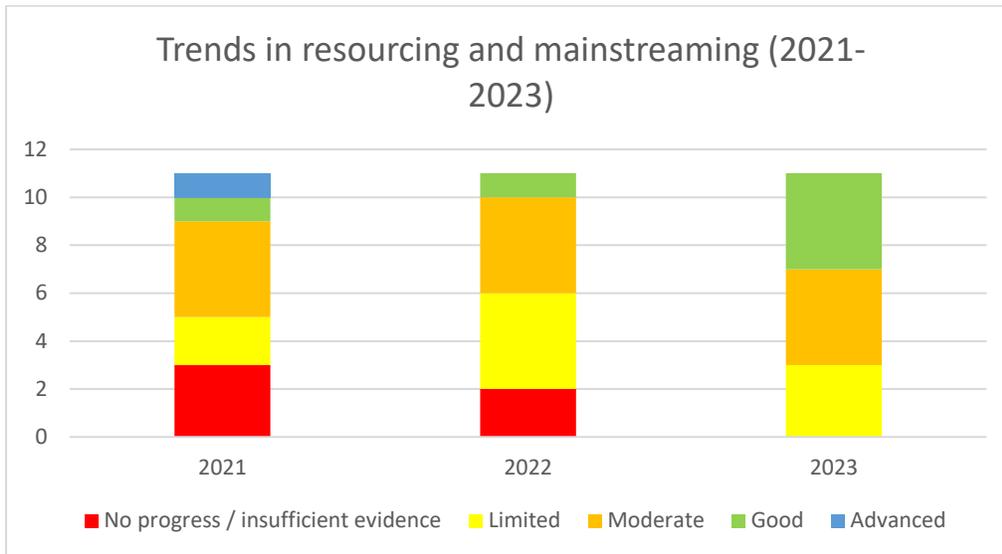


Figure 2.2b. Trends in progress across sectors in resourcing and mainstreaming (2021-2023).

The least progress was demonstrated within the governance, coordination and cross-cutting issues category. Seven of the sectors showed a performance of moderate to good, which was broadly similar to previous years although the three good ratings were more than the one good rating obtained in the 2022 scorecard, although less than the five good ratings obtained in 2021 (see figure 2.2c). None of the sectors received an advanced rating or a no progress rating.

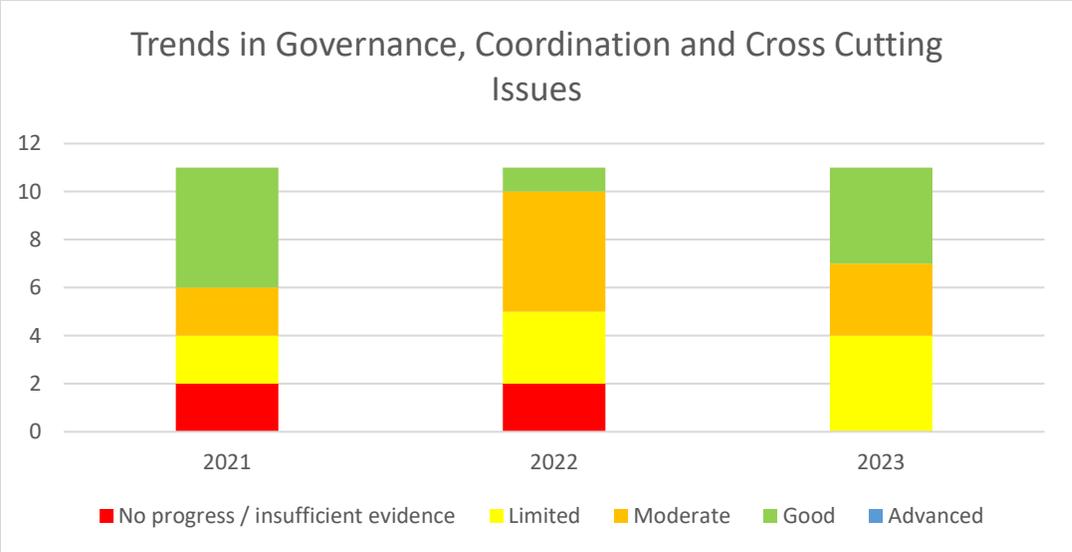


Figure 2.2c. Trends in progress across sectors in governance, coordination and cross-cutting issues.

2.3 Summary of Challenges and Enablers

The main challenges and enablers for success reported by the different sectors have been compiled and are displayed in the figures below. Factors relating to the availability and use of climate data, staff capacity and financial resources were the main challenges identified (see figure 2.3a). Several sectors also highlighted difficulties in mainstreaming adaptation issues (particularly with external stakeholders) and in engaging effectively with other sectors. Two of the sectors identified competing priorities and delays due to COVID-19 as challenges.

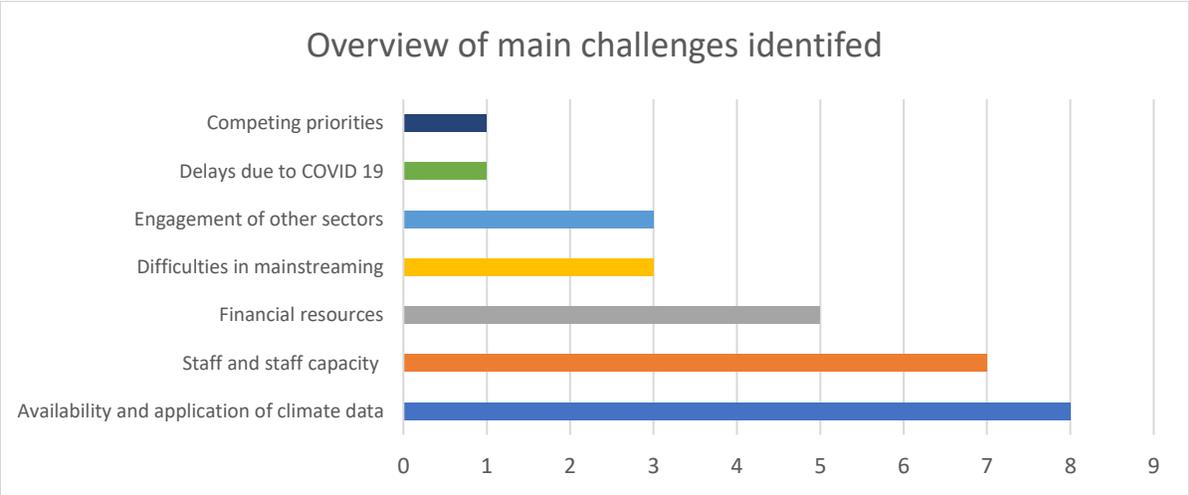


Figure 2.3a. Overview of the main challenges identified by sectors.

The enablers were clustered into 9 groups. The presence of effective coordination structures and cross-sectoral engagement and efforts to secure resources for adaptation activities were most referenced as enablers (see figure 2.3b). Three sectors each mentioned carrying out gap analyses and internal reviews on performance as well as legal obligations and NCAP reporting frameworks. The next most referenced enablers were leadership buy-in, networks and sharing of information as well as recruitment and capacity building. One sector each mentioned the importance of the CCAC scorecard recommendations and having effective implementation frameworks in place for policies.

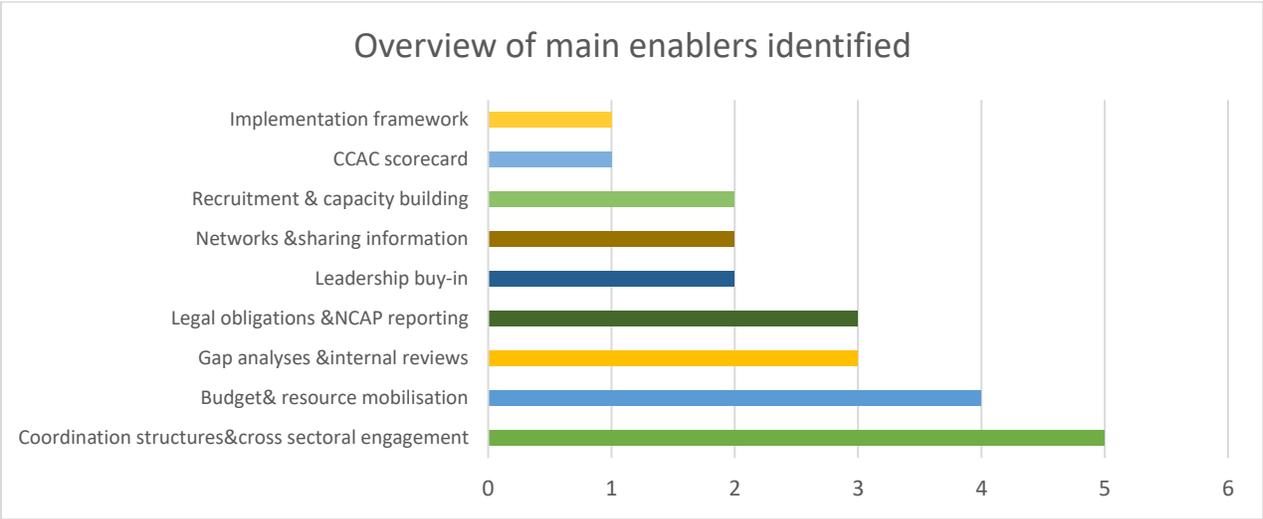


Figure 2.3b. Overview of the main enablers for success identified by the sectors.

3. General Findings and Observations per Category

3.1 Risk, prioritization and adaptive capacity

The best performance among sectors was in the category of risk, prioritization and adaptive capacity with most sectors showing improvement in identifying risk, monitoring and building knowledge of risk and taking measures accordingly.

The need for a National Climate Risk Assessment was identified by several sectors and it is noted that it is underway although delayed. It is considered that this will feed into local authority adaptation actions and facilitate common understanding and greater collaboration between sectors that have key assets at risk and local authorities in whose jurisdiction those assets lie.

The need for better understanding of vulnerabilities to risks and the impacts of climate change remains evident, particularly relating to the effects of climate change on critical infrastructure, health, listed species and ecosystems, productive agricultural systems, forests, wetlands and the marine environment in terms of fish distribution, harmful algal blooms and plankton. Several sectors reported challenges relating to the availability of climate projections data at the needed scale and the likely timeframes of impacts.

The transport (DoT) and flood risk management (OPW) sectors demonstrated advanced progress and show how risk identification and understanding is informing policy change and leading to impactful actions. The OPW's flood portal is used by several sectors and new economic appraisal guidance under OPW is impressive as it uses scenarios to quantify future flood risk and the allowance for future change in the design of flood relief schemes.

Several sectors have identified and prioritized their main risks as well as the remediation measures needed to protect critical infrastructure however there is an urgent need overall to unlock the financial resources needed to make identified critical infrastructure and assets more resilient to the changing climate.

The implementation of Sectoral Adaptation Plans (SAPs) remains mixed overall. Although all sectors provided feedback on the implementation of their SAPs, there are clear deviations in terms of the standard of the action plans contained within the SAPs. There is in most cases an

absence of key performance indicators (KPIs) and timelines to allow for quantifiable measurements of the overall performance of the various departments. This aspect should be strengthened in the next set of guidelines for the SAPs and regular monitoring and evaluation of SAP implementation should be carried out. The next set of SAPs should be a step change towards large scale, urgent and transformative actions which have positive impacts on enhancing the resilience of infrastructure, systems and people to climate change.

Strong internal governance structures were found to be an important factor for the successful implementation of the SAPs. Steering groups and other coordination structures are of fundamental importance to oversee the implementation of the SAPs and meet regularly to monitor progress, take remedial measures (where needed), identify new priorities and start planning for the development of new SAPs. There was encouraging evidence of several sectors taking proactive measures such as gap analyses and SAP reviews to address emerging issues and opportunities. The absence or non-functionality of strong internal coordinating structures was closely linked to poor performance and non-achievement of the actions outlined in the SAPs. The shift towards a project management approach to monitoring, reporting and evaluation of adaptation actions was noted in the transport sector and is to be encouraged.

3.2 Resourcing and mainstreaming

The inter-linked challenges of resources and mainstreaming continue to be factors hindering successful adaptation. While most sectors pointed to challenges relating to financial and human resources for adaptation, limited evidence was provided in terms of the budget and staff compliment that are dedicated to adaptation. More detailed information is needed on financing for adaptation through the various departments as well as the costs and investment requirements for improved climate resilience.

An improved focus on mainstreaming adaptation into new policies, plans, frameworks and programmes was particularly evident from the DAFM, OPW, DHLGH (heritage), DoT and DoH. Measures to promote the co-benefit space between climate change adaptation, mitigation and improved biodiversity are visible in the CAP Strategic Plan (2023-2027), Forestry Programme (2023-2027) and the National Horticulture Strategy that is under development. The successful implementation of these programmes has an important role to play in delivering improved action for adaptation and biodiversity in the Agriculture, Forest and Other Land Use (AFOLU) sector. The DoH has developed the HSE Climate Strategy, new Public Heatwave Plan and guidelines to

cope with extreme weather events such as heat waves and contributed towards the development of the Clean Air Strategy for Ireland. The publication of the report on Climate Change and its Effect on Network Resilience was an important development in the communications sector.

Several sectors have been able to put funding streams in place for adaptation while others have successfully integrated adaptation into their support schemes and programmes. These include the DoT (roads development and maintenance), OPW (flood risk management), DHLGH (built and archaeological heritage as well as for peatland restoration). It is notable that impactful projects are being implemented where these funding streams and schemes have been established. However, government funding for adaptation still needs to be scaled up across the board, especially given the urgency and nature of the challenge.

Inadequate human resources were identified by most departments as a continued challenge to effective adaptation. Several departments such as the DoT and DHLGH (built and archaeological heritage) have taken steps to address this and DHLGH made use of innovative measures such as contracting external assistance and adding adaptation to existing job descriptions. However, it is considered that permanent positions are needed, especially for key institutions that are responsible to provide information on risks and projections to broader stakeholders.

3.3 Governance, Coordination and Cross Cutting Issues

While each sector has its own unique set of stakeholders and relationships, issues of climate change adaptation and resilience are highly interdependent and require a coordinated approach across sectors and society. Several departments were able to demonstrate positive results and progress on adaptation based on hands-on internal coordination structures and proactive coordination and effective engagement with other sectors. Examples of sectors playing a lead role in terms of coordination and cross-sectoral engagement include the DoT, DHLGH (built and archaeological heritage), OPW and local government.

Given the misalignment in terms of the timelines for the new NAF, SAPs and Local Authority Climate Action Plans (LA CAPs), there will need to be strengthened collaboration between local authorities, DECC and the different sectors to ensure due coherency between these key policy frameworks for coordinating adaptation actions.

Leadership buy-in was identified as an important enabler for meaningful change and commitments, with OPW citing this as being key for the establishment of a multi-million Euro programme to develop Scheme Climate Change Adaptation Plans for all existing flood relief schemes by the end of 2027 as well as for all new flood relief schemes. Where internal coordination structures were strong and with the involvement of or linkages to senior decision makers, there was evidence of securing dedicated funding streams for adaptation, such as in the agriculture sector.

To ensure long term sustainable outcomes of adaptation actions and to support building resilience and adaptive capacity across sectors, the need for a mix of bottom up and top-down approaches is called for. There is limited evidence of involving households and communities in adaptation planning and there is a further a need to better engage with the private sector and Non-Governmental Organizations (NGOs) in cross-sectoral coordination structures.

There is still a need for the sectors to pursue actions that integrate mitigation and adaptation and to ensure that cross-cutting issues are adequately addressed. These include issues such as coastal change, drought preparedness and management, sustainable food production and security and the pursuit of nature-based solutions.

An increasing emphasis on the development and adoption of nature-based solutions was observed in several sectors. The restoration of peatlands is progressing well and nature-based solutions for tackling the biodiversity and climate emergency in an inter-connected way are incorporated in the CAP Strategic Plan. The OPW has commenced the implementation of a Nature-based Solutions for Catchment Management (NbS-CM) Strategy (2022-2025). The DoT is also exploring the use of nature-based solutions and DHLGH is developing an implementation strategy for nature-based Sustainable Urban Drainage Systems and has produced a best practice interim guidance document for nature-based solutions to the management of rainwater and surface water run-off in urban areas.

4. Breakdown of Findings per Sector

4.1 Agriculture, Forestry and Seafood

The agriculture, forestry and seafood sector was rated as moderate overall.

There was evidence of a substantive research focus on climate change in the sector. The launch of the Teagasc Climate Action Strategy (including immediate actions for biodiversity and adaptation), inclusion of adaptation in DAFM short studies and the development of the National Marine Research and Innovation Strategy are important achievements. However, it was noted that significant research gaps exist on climate risks, impacts and options for adaptation. There is a need to prioritize research into:

- The impacts of climate change on fish stock distribution, harmful algal blooms, ocean acidification and ocean plankton and the broader socio-economic effects.
- Predicting impacts and opportunities for adapting to climate change (particularly droughts, heatwaves, changing growing seasons, pests and diseases and extreme weather events) on pasture-based and crop farms (productive agricultural systems).
- Future proofing the output of goods and services from Irish forests (forest genetics, forest design, forest management and forest monitoring) from shifting climate variables.
- Improving data and models to derive carbon stock changes for forest land.

Good progress was observed in mainstreaming adaptation into new policies, planning and financing frameworks but the success of these frameworks in delivering concrete adaptation actions will depend on their effective and sustained implementation. The development of training plans and modules on climate action was noted and further engagement and outreach is needed to mainstream adaptation across the three sub-sectors given the many stakeholders involved and need for behavioural change.

It was noted that DAFM reviewed its progress in mainstreaming adaptation in policy and there is good evidence of mainstreaming adaptation and pursuing co-benefits through recent policies, programmes and plans in the sector. Many of these policies, programmes and plans are new and their success in mainstreaming adaptation will depend on their effective and sustained implementation. Key examples include:

- Shared National Vision for Trees and Forests and Forestry Programme (2023-2027)
- European Maritime, Fisheries and Aquaculture Fund Seafood Development Programme
- New Coillte Strategic Vision with a focus on delivering multiple benefits from forestry
- National Strategic Plan for Sustainable Aquaculture Development
- CAP Strategic Plan (2023-2027) – clear funding for and inclusion of adaptation measures and measures positive for biodiversity as well as good agricultural and environmental condition requirements
- Near finalization of National Horticulture Strategy and focus on developing more biological and environmental resilience to pest and diseases
- Consideration of potential impacts from climate change in the design and construction of fishery harbour center infrastructure
- Integration of climate adaptation actions into NCAP23

The inclusion of measures positive for adaptation and biodiversity under the CAP Strategic Plan and ACRES scheme and participation of approximately 50,000 farmers is significant. The inclusion of measures such as hedgerow planting, tree planting, development of riparian buffer zones and low input and extensive grassland management approaches should have positive impacts based on a more integrated approach to adaptation and mitigation and benefits to biodiversity. It is expected that the effective implementation of the Forestry Programme (2023-2027) should lead to similar positive outcomes.

There is a need to expand and scale up adoption of measures with co-benefits for adaptation, mitigation and biodiversity so that targets (afforestation and diversification of forestry, organic farming, tillage, reduced fertiliser use, multi species swards etc.) are met and lead to improved impacts on soil, water and biodiversity. Adaptation measures are needed in the agriculture sector given the changing climate conditions being experienced and its impacts on food production and livestock.

Limited focus on adaptation measures in fisheries and aquaculture (besides fishery harbour centers) was observed as well as on nature-based solutions (such as marine protected areas and restoration of carbon sinks) in the marine environment.

Good evidence was provided of regular monitoring and review of the SAP implementation and DAFM adaptation actions in the NCAP21 and 23. Active and functional coordination structures

are in place with leadership buy-in, including Internal Adaptation Steering Group, Climate Action Management Board chaired by Secretary General and Seafood Climate Action Group that is meeting monthly to monitor and assess implementation of SAP and NCAP.

4.2 Biodiversity

The biodiversity sector was rated as limited overall.

It was noted that there is a lack of capacity and programmes in place to monitor and oversee the implementation of the actions outlined in the SAP. It is reported that the majority of actions in the SAP have not progressed to date and the lack of staff, both administrative and specialized, was highlighted as a key challenge.

The NPWS underwent structural reform in 2022 and it is hoped that this will lead to improved mainstreaming of biodiversity and that staff in the newly established Directorates of Scientific Advice and Research (SARD) and Conservation Measures (CM) will spearhead the greater pursuit of synergistic actions between conservation, restoration and adaptation and mitigation.

Besides monitoring linked to the restoration of peatlands and the establishment of an ecosystem monitoring network, significant data gaps have largely not been addressed in terms of understanding the impacts of climate change on biodiversity and research into the social and ecological effectiveness of nature-based solutions / ecosystem-based approaches and informing policy and end user actions accordingly.

The progress on peatlands restoration is welcomed as an integrated approach to adaptation, mitigation and biodiversity conservation. It was noted that significant financing has been mobilized for the restoration of peatlands.

Biodiversity provides co-benefits across sectors and climate actions with benefits for biodiversity and ecosystem services are increasing in other sectors. This is evident when examining the key stakeholders involved in implementing the biodiversity SAP actions and notable progress being made in the agriculture, forestry, marine resources management and water management sectors. However, it is notable that biodiversity is an issue where responsibility for protection, management and restoration spans multiple government departments as well as local authorities and non-state actors. The fact that NPWS is not empowered or resourced to implement actions or oversee the

actions of other sectors is an ongoing challenge that requires close coordination between sectors. This coordination is needed ever more going forward so that any negative impacts of climate action on biodiversity are minimized and positive co-benefits and impacts can be fostered through nature-based solutions and the broader restoration of a variety of degraded ecosystems.

4.3 Built and Archaeological Heritage

The built and archaeological heritage sector was rated as good overall.

It was observed that a wide range of activities and research were undertaken to build knowledge of risks and vulnerabilities and practical projects to build the resilience of heritage assets to climate change were observed. The appointment of a GIS data manager for hazard mapping, development of semi quantitative risk assessment tools, the application of the Fingal Cultural Heritage and Climate Risk Assessment approach in other county councils and informing the development of a standard national approach with EPA were significant developments.

Regular monitoring and evaluation of SAP actions and good overall performance in implementing the SAP was evident. Positive changes noted were the establishment of working groups to coordinate information, promote research and drive implementation of the SAP. It was noted that there were regular meetings on progress, communication platforms were established, and consultants are being used to provide coordination assistance, expert advice and delivery of some work packages associated with the SAP.

There was evidence of actions undertaken to overcome human resources challenges including skills development, appointment of critical staff and use of consultants. However, staffing is identified as a key constraint at all levels and needs to be addressed.

There is good evidence of mainstreaming climate change considerations into new policies but the impacts of this on building resilience needs to be monitored and evaluated. Good evidence was provided of mainstreaming climate considerations into funding schemes and budget structures. Specific policies and plans that have integrated adaptation include the National Heritage 2030 Plan, National Architecture Policy and the National Vernacular Strategy. Funding streams mainstreaming climate change considerations include the Built Heritage Investment Scheme, the Historic Structure Fund, Historic Towns Initiative Grant Scheme Community Monuments Fund. These are leading to the better identification of risk and practical projects to build the resilience of

heritage assets to withstand the effects of climate change. Continued reporting on the budget, costs and requirements for adaptation is encouraged for tracking needs and trends.

Good evidence was given of increased coordination, collaboration and information sharing with other stakeholders including Met Éireann, the CAROs and local Authorities, SEAI, OPW and United Kingdom and European Union networks. The sector has made positive progress in building relationships with other sectors through increased communication and in raising awareness.

Interesting work is being pioneered in the adaptation and mitigation co-benefit space including the retrofitting of historical buildings, life cycle assessments, work with SEAI on research, training, upskilling, grants, as well as the development and certification of suitable retrofitting materials. It is encouraged to incorporate adaptation measures within ongoing measures to retrofit historic buildings and to integrate nature-based solutions into broader measures to protect and make heritage more resilient.

4.4 Transport

The transport sector was rated as good overall.

The DoT is playing a strong role in identifying and overcoming risks and developing indicators for climate resilience. There was evidence that risks are being prioritized and translated into actions to prevent damage to infrastructure and of considerable research feeding into strategies and policies in the sector. Active planning, implementation, monitoring and review of the SAP is being undertaken as well as coordination of broader adaptation actions across the sector, including the strategies, plans actions implemented by other agencies, local authorities and transport operators.

Uneven progress and adaptive capacity were evident in terms of the transport sub-sectors (roads, rail, maritime, aviation). There was limited evidence of targeted training in the sector and capacity should be further developed in the rail, aviation and maritime sub-sectors, learning from lessons in the roads sub-sector.

Significant progress was demonstrated in the mainstreaming of adaptation into appraisal frameworks and in the development of new long-term strategies and policies, including the Transport Appraisal Framework, Transport Infrastructure Ireland Climate Adaptation Strategy,

Climate Guidance for National Roads, Light Rail and Rural Cycleways as well as processes underway to mainstream adaptation in the Regional Airports Programme and National Ports Policy. However, the impacts of this on actions to build the resilience of infrastructure needs to be monitored and evaluated going forward.

Ongoing projects relating to improving the resilience of roads and the rail network were noted but the need to address adaptation within funding structures and scale up financing of transport infrastructure resilience (especially the climate change adaptation grant) was identified. Continued reporting on the budget, costs and requirements for adaptation is encouraged for tracking trends and needs in financing adaptation in the sector.

Good evidence of engagement and strengthened relations with other departments and agencies was provided and the planned use of a project management approach to monitoring, reporting and evaluation of adaptation actions is welcomed. Given the significant environmental impacts from the transport sector, the further expansion of nature-based solutions and green methods and technologies is recommended.

4.5 Electricity and Gas Networks

The electricity and gas networks sector was rated as limited overall.

Risks facing existing electricity infrastructure were identified, categorised and prioritised as well as the remediation measures needed to protect critical infrastructure from the most significant risk (flooding). It was observed that there is limited research being undertaken by the sector and greater use should be made of expert studies and regulator experience globally in overcoming the identified challenge of continuously having to develop policy and standards. Limited evidence was provided of regular tracking of SAP implementation and statements of progress in implementation were generalized.

There is a need to unlock financial resources through the Commission for the Regulation of Utilities (CRU) price review mechanism to make identified vulnerable critical infrastructure and assets more resilient to climate risks. It is not clear from the submission what the main stumbling blocks to unlocking these resources were.

It is noted that climate change adaptation is being mainstreamed into investment planning and project development by the electricity regulator and network companies as well as in the ESB Networks for Net Zero Strategy.

A lack of human resources was observed, and it was noted that the establishment of a new Energy Technical Advisory Division within DECC is awaited and that this has delayed several NCAP actions. The need for improved coordination was observed. Although a sector climate change adaptation working group was mentioned, there was no indication of its functionality and effectiveness.

There was limited specific information given of actions that demonstrated positive impacts or co-benefits from actions taken during the reporting period. There was a heavy overall focus on the electricity sector and limited information was given on the resilience issues facing the gas networks sector aside from the intention to bring the issue of improving infrastructure resilience into the Gas and Electricity National Development Plan.

4.6 Communications Networks

The communications networks sector was rated as limited overall.

Good understanding of the climate change risks facing the communications networks sector was demonstrated and appropriate data was used in terms of climate projections. The need for operators to access more information on how climate change will affect the sector over the long term was noted but no indications of actions being taken to address this need were given. There is a need to develop meaningful KPIs to allow for better monitoring of SAP implementation and to measure the outcomes and impacts of actions undertaken. Private operators were noted as the lead actors for the implementation of many of the SAP actions and information sensitivity is a challenge in the sector. Limited evidence was provided of regular tracking of the SAP implementation.

The finalization of the report “Climate Change and its Effect on Network Resilience” was noted and has led to improved engagement with key stakeholders (Met Éireann, Climate Ireland) beyond the sector. Efforts to disseminate the findings from the report on Climate Change and Network Resilience are encouraging as part of mainstreaming. The sector needs to build on this

and coordinate the implementation of the report's findings to ensure the future resilience of this sector in line with Action AD/23/12 under NCAP2023.

Limited human and financial resources to coordinate the sector is a continued concern and there was no evidence of specific formal and targeted training being provided. The need for improved coordination of the sector is evident and no indication was given of steering or working groups to oversee the SAP implementation and broader coordination of climate action in the sector. Improving collaboration with private operators in the sector and stakeholders from broadcasting and postal services is recommended.

A number of power consumption reduction strategies are reported to be under implementation and are linked to increasing resilience and mitigating the negative environmental impacts of electronic communication networks. Engagement by DECC with Office of Emergency Planning is welcomed to develop a mobile phone-based public warning system for emergencies.

4.7 Flood Risk Management

The flood risk management sector was rated as good overall.

The OPW has strong internal coordination structures in place to coordinate the planning, implementation and monitoring of its SAP and broader evolving adaptation actions across the sector. These include regular reviews of progress and identification of proactive measures. Effective cross-sectoral working relationships are in place and retained with a broad range of stakeholders. Leadership buy-in is in place.

The OPW is playing an important role serving other sectors and local authorities with its online portal used to understand the risk of flooding on transport infrastructure connectivity, vulnerability assessment of heritage assets and consideration of future flood risk in spatial planning. In terms of flood risk, the OPW demonstrates the scenario-based approach it uses based on increases in fluvial flow and sea level rise as indicators. The ongoing development of a Predictive National Flood Risk Assessment (PNFRA) was also noted and considers the current and future impacts of flooding on people, property, businesses, critical infrastructure, the environment and cultural heritage.

In terms of resourcing and mainstreaming, the challenge of staffing within OPW was noted as an ever-present challenge. The use of proactive training of own staff and staff from other sectors with detailed information on the types of training given and numbers of people trained is commended and a good example for other sectors to follow. It is recommended to expand staffing dedicated to adaptation given the new strategies and programmes that have been developed or pending finalization through OPW (Climate Change Adaptation Schemes Programme and National Coastal Change Management Strategy, Nature-Based Solutions Catchment Management Strategy and Biodiversity Action Strategy).

There was significant evidence of mainstreaming climate change adaptation into broader policies and frameworks. It was indicated that OPW is placing increased focus on the review of policy with the overriding objective of mainstreaming adaptation considerations and the following specific examples of mainstreaming were given:

- Integrating future flood risk in economic appraisal guidance
- Review of minor works programme to integrate climate change
- Embedding climate change in the design process for new flood relief schemes (Scheme Climate Change Adaptation Plans)
- Consideration of future flood risk in spatial planning
- Review of economic appraisal of flood relief schemes

Further information on budget, costs and investment requirements for adaptation is recommended to monitor needs and trends in adaptation financing in future scorecards.

In terms of cross cutting issues, the development of the Nature-based Solutions Catchment Management Strategy was noted and the use of nature-based solutions in flood risk management should be further explored and expanded. A greater demonstration of the broader impacts of OPW's flood relief work is recommended such as evidence of how towns and vulnerable areas or communities are being prioritized and made more resilient to floods. Consultation with communities and households most vulnerable to flooding and the broader use of a mix of top down and bottom-up approaches is also essential in this sector.

4.8 Water Quality and Water Services Infrastructure

The water quality and water services infrastructure sector was rated as moderate overall.

There is limited evidence of the use of risk identification and prioritization and modeling predicted climate changes that will affect the sector. Research gaps were observed in terms of improving understanding of climate change impacts and the development of appropriate measures and solutions in the sector, including for drought preparedness. The poor and declining status of Ireland's water resources as per the EPA Water Quality report of 2022 is of concern and was not referenced in the submission. Limited progress was noted in terms of addressing previously identified risks and challenges facing the sector.

There is a need for the development of measurable KPIs to allow for better monitoring of the SAP implementation and a lack of detail was observed in monitoring the progress of SAP implementation. Reference is made in the DHLGH submission to coordination structures for SAP implementation. However, there was a lack of specific information relating to the effectiveness of these structures in planning, implementing and monitoring its SAP and broader resilience actions across the sector.

It is noted that considerable resources are available to ensure water resources remain resilient to the effects of climate change, with budget information given for capital investment in water and wastewater infrastructure and improving wastewater treatment capacity and network functions. It is not clear if these resources are sufficient to address the challenges facing the sector.

There was limited evidence of mainstreaming adaptation across departments, local authorities and agencies. Considerable reference was made to relevant policies and plans either developed or under development that incorporate climate resilience aspects to some degree, including:

- The Fifth Nitrates Action Programme (2022-2025) - designed to prevent pollution from agricultural sources and improve water quality.
- The National Water Resources Plan (under development through Uisce Éireann) and is to outline how Ireland will move towards a safe, secure, reliable and sustainable water supply over a 25-year timeframe. It is expected to include planning for droughts and water scarcity and develop resilient solutions, including leakage reduction, smarter supply and demand reduction.
- Four Regional Water Resources Plans (under development through Uisce Éireann) and set out how to balance the supply and demand for drinking water over the short, medium and long term.

- River Basin Management Plan for 2022-2027 – which contains water quality objectives and a programme of measures to achieve those objectives in line with the Water Framework Directive.
- Advisory note for the use of nature-based solutions in road and street drainage.

These plans, policies and programmes are of key importance given the impacts that climate change will have on water quality and quantity. Regular monitoring, reporting and evaluation of the impact of implementation of these plans and programmes will be important to ensure resilience is being achieved (including the 46 Catchment Management Plans planned under the River Basin Management Plan).

There was some positive evidence of building resilience through collaborative actions with other stakeholders in the pursuit of multiple benefits such as a pilot project on nature-based solutions and references to the ACRES scheme and other programmes linked to the Fifth Nitrates Action Programme to reduce pressures on water quality from agriculture. However more systematic coordination of the sector and the SAP is needed to ensure the implementation of solutions at catchment scale with co-benefits for water quality, biodiversity and resilience. There is an opportunity for this through the project delivery office being formed for the implementation of the new River Basin Management Plan.

4.9 Health

The health sector was rated as limited overall.

Previous scorecards highlighted the likelihood that the climate crisis would lead to a health crisis and emphasized that climate action is also health action. Delays in some of the SAP actions due to the COVID-19 pandemic were noted, as was the challenge of lack of resources (though no specific details given) and the sector acknowledged that many areas need advancement.

There was limited use of risk identification and prioritization and the use of projections and impacts of climate change to influence actions and decisions in the health sector. It was noted that predictive modelling is identified as a strategy to predict emerging risks using tools such as the Health Protection Surveillance Center. A scoping assessment of the impacts of severe weather events on health infrastructure is also under development. There is limited use of KPIs and

measures of progress towards climate resilience by the sector although a range of metrics are being developed for the HSE Climate Plan.

Some positive evidence of progress was provided in mainstreaming climate change and the development of long-term plans and policies on climate action. Examples include the imminent launch of the HSE Climate Strategy, National Skin Cancer Plan, launch of the National Clean Air Strategy, new Public Heatwave Plan and guidelines to cope with extreme weather events such as heat waves. Resources will need to be secured and different sectors engaged to ensure the effective implementation of these plans and strategies. It was noted that a resource plan is to be submitted by the HSE for the implementation of its Climate Strategy. Further information on budget, costs and investment requirements for adaptation is recommended to monitor needs and trends in adaptation financing in future scorecards. Limited information is given on staffing constraints in the sector.

It was noted that the Climate Change Oversight Group is established but there was limited information on its effectiveness and outputs. Limited evidence was given of co-benefits and impacts from actions outlined in the SAP with most focus being on the development of policies and plans. Limited evidence of the integration of health adaptation actions across other sectors was observed. Given the strong correlation between climate impacts and health, the need for integration is imperative. The need to better understand the impacts on health across vulnerable groups in the context of climate change is necessary to support equity and fairness in the transition towards climate neutrality.

4.10 Local Government

The local government sector was rated as good overall.

Annual progress reports are prepared on the implementation of Local Authority Adaptation Strategies / Climate Action Plans. The annual report from 2022 showed good progress with almost 89% of the 2,478 actions across the 31 local authorities reported as ongoing or completed. The high volume of actions shows a need for better prioritization and use of more outcome oriented KPIs. This should form part of the process to identify new streamlined KPIs for the LA CAPs.

Good collaboration was evident on risk identification and measures with several sectors, particularly heritage, transport, flood risk as well as Met Éireann. Specific risk identification tools

were developed including the semi-quantitative climate risk and vulnerability (SQRVA) methodology and WIRE App as well as evidence that climate change risks are being considered in the planning and design stage of infrastructure projects. These are innovative approaches and the possibility of expanding the WIRE App to cover vulnerability aspects and the outcomes of adaptation interventions should be explored.

Local authorities are highly engaged in planning and implementing adaptation and mitigation actions. However, the human and financial resourcing of the CAROs and local authorities still needs attention, especially given the need to develop the LA CAPs and to ensure their successful execution. The funding of two temporary climate change positions within local authorities (through the DECC) is welcomed but greater capacity and investment is still needed. The two positions also need to be permanent to provide continuity and build capacity.

There is a need for systematic mainstreaming of climate issues / integration of LA CAPs into Council Development Plans and Local Economic and Community Plans so that climate action is better mainstreamed, and opportunities are identified in the planning and design of development plans.

The LA CAPs, which will cover both adaptation and mitigation measures, provide a critical opportunity to plan and implement actions that integrate adaptation and mitigation at local level. Decarbonising zones should have a strong focus on demonstrating nature-based solutions and other win-win approaches.

There is a misalignment in terms of the timelines for the new NAF, SAPs and LACAPs. Strengthened and continued collaboration is needed to ensure due coherency between these key policy frameworks for coordinating adaptation actions.

4.11 National Adaptation Framework

DECC was rated as moderate overall in coordinating the implementation of the National Adaptation Framework (NAF).

DECC has a key role to play in overseeing and coordinating adaptation actions in Ireland through the National Adaptation Framework and the annual National Climate Action Plans. The Council commends DECC for the review process that was undertaken on the NAF. It is hoped that the

new NAF will result in a more transformational and smarter, faster and systemic approach to adaptation as per previous Council recommendations.

Challenges in terms of the availability / accessibility of climate data to inform planning and decision making were identified by many sectors, including lack of data on impacts and vulnerabilities. There is a need to address this shortcoming through the provision of information through the National Framework for Climate Services and Climate Ireland. The National Climate Risk Assessment will be an important source of standardized data for the different sectors and local government to assist their planning and adaptive capacity, although this process has been delayed and may be too late to inform the development of the LA CAPs and SAPs. The ongoing lack of a national set of indicators on climate resilience remains a concern, although the pilot project to develop these with Transport Infrastructure Ireland for the transport sector was noted.

Some concerns were observed from other sectors relating to the updating and accessibility of information through the Climate Ireland platform. The significant potential of Climate Ireland is still to be realized and resourcing constraints in agencies under DECC (Environmental Protection Agency and Geological Survey Ireland) were noted to have delayed important actions under NCAP21 including the development of national indicators to measure resilience, studies on coastal vulnerability mapping and landslide mapping. Considerable research is also ongoing, and it is critical for the outcomes of this research to feed into policy change and to reach end users.

DECC is also key to ensure that resourcing (human and financial) and mainstreaming shortfalls identified across the sectors for adaptation in the questionnaire are overcome. Detailed information on the budget, costs and investment requirements for adaptation remains limited across sectors and this needs to be addressed.

DECC has provided strong coordination and support to local authorities. This is clear from the new guidelines developed for the LA CAPs, support to the CAROs and funding of posts within local authorities. Strengthened and continued support and close coordination with Local Authorities and the different sectors is needed given that the LA CAPs are already under development before the finalization of the new NAF and SAPs.

A mixed performance of sectors in the implementation of SAPs and mainstreaming adaptation issues has been observed. Although all sectors provided feedback on the implementation of their

SAPs, there are clear deviations in terms of the standard of the action plans contained within the SAPs. There is in most cases an absence of KPIs and timelines to allow for quantifiable measurements of the overall performance of the various departments. This aspect should be strengthened in the next set of guidelines for the SAPs and regular monitoring and evaluation of SAP implementation should be carried out.

Building and maintaining public support and action is critical to help Ireland address its climate challenge in both an urgent and just way. Initiatives such as the National Dialogue on Climate Action, Climate Change in the Irish Mind and the National Youth Assembly are important and should have a stronger adaptation focus so that the whole of society understands and takes action for better and just resilience.

5. Overall Observations

The main observations from the Third Adaptation Scorecard are that:

- An overall improvement is evident in terms of the performance ratings of the sectors across the different categories of the scorecard. The strongest progress is evident in terms of risk, prioritization and adaptive capacity but also in the area of mainstreaming, particularly mainstreaming climate change adaptation into plans, policies, programmes and strategies.
- While the improved focus on mainstreaming adaptation by some sectors in plans, policies, programmes and strategies is to be welcomed, the impacts and results of this will only be realised in the coming years and will depend on the effective implementation of these frameworks. There is limited evidence of the necessary levels of urgency in respect of implementing concrete adaptation actions and delivering impacts.
- Inadequate human and financial resources for adaptation are key challenges reported by the sectors and local authorities in their responses to the questionnaires. Detailed information on the budget for, costs of and investment requirements for adaptation remains limited across sectors and local authorities and this needs to be addressed.
- The need for better understanding of vulnerabilities to risks and the impacts of climate change linked to modeling remains evident. Considerable gaps exist in understanding the effects of climate change on species and ecosystems, productive agricultural systems, forests, wetlands and the marine environment, as well as on human systems.
- The performance of sectors in the implementation of SAPs is mixed. Although all sectors provided feedback on the implementation of their SAPs, there are clear deviations in terms of the standard of the action plans contained within the SAPs. There is in most cases an absence of KPIs and timelines to allow quantifiable measurements of the overall performance of the various departments. This aspect should be strengthened in the next set of guidelines for the SAPs and regular monitoring and evaluation of SAP implementation should be carried out.
- Strong internal governance structures, with leadership buy-in, were found to be an important enabler for the successful implementation of the SAPs, resource mobilisation and effective cross-sectoral engagement. Steering groups and other coordination structures are of fundamental importance to oversee the implementation of the SAPs,

monitor progress, take remedial measures (where needed), identify new priorities and start planning for the development of new SAPs.

- The absence or non-functionality of strong internal coordinating structures was closely linked to poor performance and non-achievement of the actions outlined in the SAPs. The shift towards a project management approach to monitoring, reporting and evaluation of adaptation actions was noted in the transport sector and is to be encouraged.
- There was encouraging evidence of several sectors taking proactive measures such as gap analyses and reviews of SAPs to address emerging issues and opportunities. Several sectors demonstrated initiatives to explore and capitalize on nature-based solutions and actions to help conserve biodiversity. These are for the most part at an early stage and need to be expanded. Limited consideration of distributional impacts is also evident across the sectors and this needs to be addressed so that those most vulnerable to climate change are prioritized in interventions.
- There is a greater need for a mixture of top down and bottom-up approaches and for involving communities, NGOs and private sector in adaptation planning and implementation.
- The review of the 2018 NAF undertaken by DECC is commended. The new NAF, LA CAPs and next set of SAPs provide an opportunity for the needed step change towards large scale, urgent and transformative actions which have positive impacts on enhancing the resilience of infrastructure, systems and people to climate change.

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Appendix A

Questionnaire - Sectoral Adaptation Plans

Risk, prioritisation and adaptive capacity

- 1 What activities were carried out in the last year⁴ to monitor and evaluate the implementation progress of your Sectoral Adaptation plan and/or its outputs and outcomes? (*Suggested word count: 350*)
- 2 Please provide an update on the progress of all applicable Sectoral Adaptation Plan actions over the past year (i.e. each of the actions set out against each of your objectives). Please include completed and on-going multi-year actions (if applicable).
Suggested Table for response below (add additional rows as required).

Action	Timeline	Stakeholders	Progress to action	Comment/ justification

- 3 How were risks which were identified in the plan, the 2022 scorecard response provided by your sector, and comments in the [2022 Annual Review Adaptation Scorecard⁵](#), addressed in the last year? (*Suggested word count: 200*)
- 4 Identify and explain the main challenges and enablers supporting delivery of your plan which were encountered over the past year when implementing actions in the adaptation plan. (*Suggested word count: 350*)
- 5 What actions implemented in collaboration with or solely by other organisations have been implemented in the past year that have resulted in building adaptive capacity and preparedness to your sector? (*Suggested word count: 200*)

Resourcing and mainstreaming

- 6 What data and indicators (e.g. KPIs, climate model projections) are currently used to influence your actions and decisions when implementing adaptation measures? What data and knowledge gaps are currently present and therefore preventing the achievement of adaptation actions set out in the plan? How have these data gaps been addressed? (*Suggested word count: 350*)
- 7 What training (informal and formal) is provided to staff within your sector to increase skills and capacity within climate adaptation? Additionally, please identify any training (informal or formal) you are aware of within your sector. (*Suggested word count: 200*)

⁴ Please refer to the period April 2022 – March 2023 inclusive.

⁵ See Chapter 9 in the report.

- 8 Demonstrate where the plan resulted in adaptation being mainstreamed or integrated into rules, policies, or regulations within your sector. What factors do you believe specifically contributed to this integration? *(Suggested word count: 350)*

Governance, coordination, and cross-cutting issues

- 9 Provide an update on any adaptation actions identified for your sector in the National Climate Action Plan 2023. Suggested Table for response below (add rows as required).

Action	Timeline	Stakeholders	Progress to action	Comment/ justification

- 10 Have any challenges to implementing adaptation (including building adaptive capacity) at different scales (local, regional, national) been identified? Have any challenges to implementing adaptation across sectors been identified? And what actions, if any, have been taken to address these challenges? *(Suggested word count: 350)*
- 11 Demonstrate where adaptation actions have resulted in progress on mitigation. *(Suggested word count: 200)*
- 12 Describe any other positive impacts or co-benefits generated by your adaptation plan and its implementation that were not covered above. Describe any unanticipated challenges (e.g. conflicting priorities) or negative effects generated by your plan and its implementation. *(Suggested word count: 200)*

Questionnaire - Local Adaptation Strategies

Risk, prioritisation and adaptive capacity

- 1 Please give an update on the progress on the high-level goals or action areas (if applicable) across the local adaptation strategies. Suggested Table for response below (add additional rows as required).

Action	Timeline	Stakeholders	Progress to action	Comment/ justification

- 2 What activities were carried out to actively monitor and evaluate the implementation progress of the strategies and/or their implementation, outputs and outcomes? *(Suggested word count: 350)*
- 3 How were risks (which were identified in the local adaptation strategies, in the previous scorecard response, and comments in the [2022 Annual Review Adaptation Scorecard⁶](#)) addressed in the past year⁷? *(Suggested word count: 200)*
- 4 Identify and explain the main challenges and enablers supporting delivery of the strategies encountered when implementing any actions over the past year. *(Suggested word count: 350)*
- 5 What actions implemented in collaboration with or solely by other organisations have been implemented in the past year that have contributed to the strategies or have resulted in building adaptive capacity and preparedness?
(Suggested word count: 200)

Resourcing and mainstreaming

- 6 What data and indicators (e.g. KPIs, climate model projections) are currently used to influence actions and decisions, and implement adaptation measures? What data and knowledge gaps are currently present and therefore preventing the achievement of adaptation actions set out in the strategies? How have these data gaps been addressed? *(Suggested word count: 350)*
- 7 Please provide details on the training (informal and formal) which has been provided to local authority staff to increase skills and capacity within climate adaptation. Please also provide details on the training provided to elected members. *(Suggested word count: 200)*
- 8 Provide an overview of the dedicated staff (e.g. Climate Action Teams) and resources within local authorities tasked with delivering climate adaptation. *(Suggested word count: 200)*
- 9 *What policy is currently used to influence actions and decisions and implement adaptation measures? What policy gaps are currently presents and therefore preventing the achievement of adaptation actions*

⁶ See Chapter 9 of the Annual Review 2022.

⁷ Please refer to the period April 2022 – March 2023 inclusive.

set out in the plan?
(Suggested word count: 200)

Governance, coordination, and cross-cutting issues

- 10 Provide examples of where procedures, policies, and regulations have changed in local authority development plans as a result of the adaptation strategies and their implementation. (Suggested word count: 200)
- 11 What are the mechanisms to ensure the ‘windows of opportunity’ to integrate adaptation in updated policies, procedures, and plans within the policy and planning cycles have been identified and acted on? (Suggested word count: 350)
- 12 Provide an update on actions identified in the local adaptation strategies relative to those identified in the National Climate Action Plan 2023. Suggested Table for response below (add rows as required).

Action	Timeline	Stakeholders	Progress to action	Comment/ justification

- 13 Demonstrate where adaptation actions within the adaptation strategies have resulted in progress on/integration with mitigation. (Suggested word count: 200)
- 14 Describe any other positive impacts/co-benefits generated through adoption of the adaptation strategies that were not covered above. Describe any unanticipated challenges (e.g. conflicting priorities) or negative effects. (Suggested word count: 200)

Questionnaire - National Adaptation Framework

Risk, prioritisation and adaptive capacity

- 1 Please provide an update on the key actions (1-12) under the National Adaptation Framework. Suggested Table for response below (add additional rows as required).

Action	Timeline	Stakeholders	Progress to action	Comment/ justification

- 2 Please provide an update on each of the 13 identified Supporting Objectives in implementing the Framework. Suggested Table for response below (add additional rows as required).

Action	Timeline	Stakeholders	Progress to action	Comment/ justification

- 3 Outline actions taken in the last year⁸ to actively monitor and evaluate the implementation progress of the Framework, and identify and address knowledge gaps. *(Suggested word count: 350)*
- 4 Identify and explain the main challenges and enablers encountered over the past year when implementing the Framework. *(Suggested word count: 350)*

Resourcing and mainstreaming

- 5 Outline actions taken in the last year to address the recommendations on the NAF which were included by the Council in the [2022 Annual Review](#). *(Suggested word count: 350)*
- 6 Discuss how communication and consultation on adaptation has been undertaken across government at the national, regional, and local scales. *(Suggested word count: 350)*

⁸ Please refer to the period April 2022 – March 2023 inclusive.

7 Provide examples and innovations that have been introduced (over the past year) that have facilitated integration of adaptation into practices and policies. *(Suggested word count: 200)*

8 Provide examples of where resourcing has enabled implementation and where resourcing is acting as a barrier to implementation. *(Suggested word count: 200)*

Governance, coordination, and cross-cutting issues

9 Discuss how adaptation has been integrated and mainstreamed into other government policy as a result of the implementation of the Framework. *(Suggested word count: 350)*

10 Identify and discuss how adaptation policy has resulted in any changes in governance. *(Suggested word count: 350)*

11 Demonstrate how the Framework has been integrated with the National Climate Action Plan 2023 and provide an update on additional national adaptation actions identified in the Plan. Suggested Table for response below (add additional rows as required).

Action	Timeline	Stakeholders	Progress to action	Comment/ justification

12 Describe any other unanticipated challenges or benefits that were not covered above. *(Suggested word count: 200)*