

# PUBLIC SECTOR CLIMATE ADAPTATION CAPABILITY FRAMEWORK

## Acknowledgements

Adaptation Scotland has greatly benefited from the time, skills, and expertise generously contributed by many individuals and organisations in developing the *Public Sector Climate Adaptation Capability Framework*.

The updated Framework (Version 2.0, Published 2024) was created with a strong commitment to collaboration, drawing on input from a Task and Finish Group made up of Public Sector Climate Adaptation Network members and an Expert Advisory Panel. We extend our sincere thanks to the following contributors:

**Task & Finish Group:** Bishnu Bhattarai, Aberdeen City Council; Louise Comrie, Glasgow City Council; Esther Gibson, North Ayrshire Council; Roddy Hamilton, Falkirk Council; Cheyne Hamm, East Lothian Council; Gemma Stenhouse, Forestry & Land Scotland; Liam Singleton, University of Strathclyde; Tara Murray, Aberdeenshire Council.

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The concept and content for the Adaptation Capability Framework draws on inspiration from the Adaptation Scotland programme's work with many organisations and was also informed by an extensive review of research and tools. Further guidance is available on the Adaptation Scotland programme website: <https://adaptation.scot/take-action/adaptation-capability-framework/>

Version 2.0

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**Adaptation  
Scotland**  
supporting climate change resilience

**·venture**



**Scottish Government  
Riaghaltas na h-Alba**

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# Ministerial foreword

**The climate is changing globally. Scotland is already feeling its tangible effects. Despite substantial progress on reducing greenhouse gas emissions in Scotland, we know the planet's temperature is set to increase, with some climate change trends already locked-in for the next two decades.**

Unprecedented change, requires an equally unprecedented response.

The strategic aim of the Scottish National Adaptation Plan 2024-29 is to build Scotland's resilience to these climate impacts— such as increased flood risk, more intense rainfall, dry periods, heatwaves, coastal erosion, and their affect on people, places, businesses and biodiversity.

The public sector have a crucial leadership role to play in driving this response for a more climate resilient Scotland. They are the organisations with direct control of significant assets, land, influence over decision-making and place-making; they are also large employers and anchor organisations for wider regional partnerships.

I strongly encourage all public bodies to make use of the Scottish Government funded Adaptation Scotland resources. These resources can be used to integrate climate adaptation into your work and support compliance with your statutory duties on climate change.

Successful preparation and response to climate impacts requires a clear understanding of the challenge, an alignment with organisational culture and resources, planning and monitoring processes, and working in partnership with other public and private stakeholders who will often share exposure to the same climate risks.

Adaptation Scotland's Adaptation Capability Framework reflects this. It takes a holistic approach to developing capacity to adapt and supports organisations through a series of practical tasks.

Since being first launched in 2019, this Framework has supported more than 60 public bodies in Scotland to enhance their own adaptation activities. This updated version has been developed with the support of these public bodies, working through Adaptation Scotland's 'Public Sector Climate Adaptation Network' to ensure it reflects the latest advice and development in climate adaptation policy design and implementation.

Despite the very real impacts of climate change in our society, economy and environment, collaboration and support, through tools like this Adaptation Capability Framework, show that we can build a more climate resilient Scotland now and for generations to come.

**Gillian Martin MSP**

Acting Cabinet Secretary for Net Zero and Energy

# Adaptation Scotland programme foreword

The public sector has a central role to play in enabling Scotland to adapt to the impacts of climate change. The Public Sector Climate Adaptation Capability Framework is packed full of practical tasks, guidance, tools and case studies that will help organisations adapt.

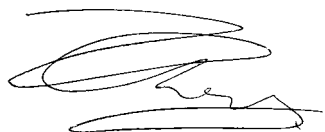
The Adaptation Scotland programme is grateful to the many networks, organisations and individuals who have worked with us to develop the Framework, sharing their time and expertise to produce a resource that is grounded in reality and focused on building an inclusive and equitable climate ready future.

Since publication of the first version of the Framework in 2019, more than 60 organisations have used the Framework to build their capabilities and benchmark their progress. We are proud that the Framework won the 2020 IEMA Sustainability Impact Award for Climate Resilience and Adaptation, and has gone on to inspire many similar adaptation capability approaches.

Since 2019, we have seen a number of new regional adaptation partnerships flourish in Scotland, paving the way for further collaborative, place-based action. We have also seen organisations progress towards the 'mature' levels of the Framework, and demonstrate leadership on collaborative adaptation action. For example, Network Rail in Scotland has spearheaded an industry-led Climate Ready Infrastructure Forum, while Fife College has championed adaptation measures to be embedded in the Net Zero Public Sector Buildings Standard in Scotland.

Adapting to climate change is not a standalone challenge – the actions that we take to adapt should deliver many benefits for society including addressing inequalities, supporting sustainable economic growth and nurturing a healthy natural environment. The Framework supports organisations to consider how adaptation support progress against wider societal outcomes and maximise co-benefits.

We recognise that there is huge variety in the range and stage of adaptation work taking place across Scotland. The Framework and accompanying resources provide support for all – those just starting out and those who are at the cutting edge of adaptation action in Scotland and globally. By working together we will address the challenge of adapting to climate change and play a leading role in delivering on the vision of a well-adapted Scotland.



**Jonny Casey**

Adaptation Scotland Programme Manager, Head of Climate Ready Leadership | Verture





# Purpose

This handbook is an introduction to climate change adaptation for Scotland's public sector. It provides an overview of the Climate Adaptation Capability Framework (CACF), which identifies four capabilities for a climate ready public sector.

This booklet should be used alongside online Supporting Guidance which contains additional information about each task in the Framework.

# Resources and support

This handbook is part of a set of Adaptation Scotland programme resources and support created for Scotland's public sector.

Visit the Adaptation Scotland programme website to access all of our resources: [adaptation.scot/take-action/public-sector/](https://adaptation.scot/take-action/public-sector/)



## The handbook

– introduction to climate change adaptation for Scotland's public sector.



## Further guidance and tools

– access detailed task information, tools, resources and case studies.



## Webinars and case studies

– develop adaptation skills and expertise.



## Starter pack

– for organisations and individuals who are new to adaptation.



## Benchmarking tool

– assess progress and plan adaptation work.



## PSCAN

– Public Sector Climate Adaptation Network

# Introduction

**Scotland's climate is already changing. We are experiencing more extreme weather, including heatwaves and drought during the summer months, and over the past decade we've experienced wetter, warmer winters. Sea level rise is accelerating and threatening our coastal communities and habitats.**

The consequences of climate change have been felt across our society and environment: from damage to infrastructure, to disruption of vital services, and a shift in growing seasons. These impacts affect the most vulnerable in society the hardest, especially those that have the least resources.

Together we have an opportunity to address challenges by managing climate risk effectively, and deliver multiple 'wins' for health, wellbeing, equity and jobs. This is central to Scotland's approach to a Just Transition for a net-zero, climate resilient economy that tackles inequality and injustice.

The public sector is subject to legal drivers, including the Climate Change (Scotland) Act 2009 and the Public Bodies Climate Change Duties, which require annual reporting of progress on climate action. The public sector needs to consider how it can help deliver Scotland's objectives and adaptation outcomes in the Scottish National Adaptation Plan.

At the heart of Scotland's approach to adaptation is collaboration and place-based partnership working. This is reflected in many of our shared successes to date, including regional partnerships, the Climate Ready Infrastructure Forum, and Climate Action Hubs.

This collaborative approach has been put into practice to develop the Adaptation Capability Framework. It draws upon the collective knowledge and experience of practitioners from across the public sector, and builds on the

insights and experiences of more than 60 organisations that have used the Framework to build their capabilities and benchmark their progress since 2019.

The Framework has been developed on the principle that successful adaptation is not simply a case of improving understanding through analysing climate data and risk models. Effective leadership, governance arrangements, inclusive planning approaches and working beyond organisation and sectoral silos, are of equal importance for successful adaptation.

The resulting framework is a pioneering capability-maturity approach that aims to support organisations adapt to climate change. It identifies four capabilities, and recommends tasks that support progress for organisations starting out to those leading the way.

- ▶ Understanding the Challenge
- ▶ Organisational Culture and Resources
- ▶ Strategy, Implementation and Monitoring
- ▶ Working Together

The Framework supports a flexible approach, one that can be tailored to each organisation's circumstances. No matter what your current level of understanding and action on adaptation is, the Framework has a range of tasks that can support you and your organisation to progress with inclusive and effective action.

# Scotland's changing climate

We are already seeing evidence of Scotland's climate changing. Over the last few decades there has been a warming trend, shifting rainfall patterns and rising sea level. We have also been impacted by severe weather events, from storms to heatwaves, that pose risks to the public sector in Scotland.

- ▶ 9 of Scotland's 10 warmest years on record have all been since 2002. The average temperature in the last decade (2014–2023) was 1.02°C warmer than the 1961–1990 average. The warmest year on record was 2022.<sup>1</sup>
- ▶ In the past few decades there has been an increase in rainfall over Scotland. The annual average rainfall in the last decade (2014–2023) was 10% wetter than the 1961–1990 average, with winters 29% wetter. The wettest summer on records for some parts of Scotland was 2024.<sup>2</sup>
- ▶ Mean sea level rise around the UK is accelerating, and rising by an average of 4.6mm per year.<sup>3</sup>

<sup>1</sup> Adaptation Scotland. *Climate change trends and projections*. Retrieved November 2024, from <https://adaptation.scot/scotland-and-climate-change/climate-change-trends-and-projections/>

<sup>2</sup> BBC News. (2024). *Official: Parts of Scotland had record-breaking wet summer*. Retrieved from <https://www.bbc.co.uk/news/articles/cr5n7nn289do>

<sup>3</sup> Met Office. (2023). *State of the UK climate*. Retrieved from <https://www.metoffice.gov.uk/research/climate/maps-and-data/about/state-of-climate>

Climate projections indicate that the climate trends observed over the last century will continue and intensify over the coming decades. Our efforts to reduce greenhouse gas emissions, along with the international community, will limit the extent of future climate change. But they cannot prevent significant changes from occurring.



Image courtesy of Scottish Canals, 2022.

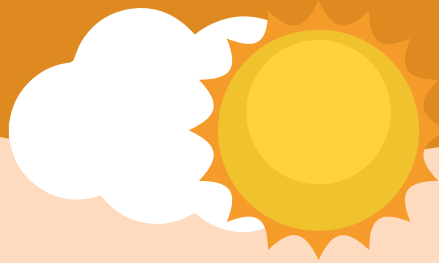
We can expect future changes in Scotland's climate to be far greater than anything we have seen in the past. You can explore more about the climate trends and projections for Scotland on the Adaptation Scotland programme website:

[adaptation.scot/scotland-and-climate-change/climate-change-trends-and-projections/](https://adaptation.scot/scotland-and-climate-change/climate-change-trends-and-projections/)

The Met Office Local Authority Climate Service provides tools and resources that have been specifically designed to help you better understand climate change trends and projections in your local area and support your adaptation journey:

[climatedataportal.metoffice.gov.uk/pages/lacs](https://climatedataportal.metoffice.gov.uk/pages/lacs)





**9 of Scotland's 10 warmest years on record have all been since 2002.**

**The average temperature in the last decade (2014–2023) was 1.02°C warmer than the 1961–1990 average.**

**The warmest year on record was 2022.**



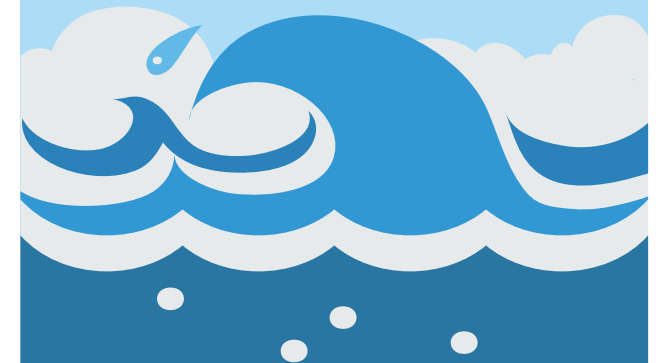
**In the past few decades there has been an increase in rainfall over Scotland.**

**The annual average rainfall in the last decade (2014–2023) was 10% wetter than the 1961–1990 average, with winters 29% wetter.**

**The wettest summer on records for some parts of Scotland was 2024.**



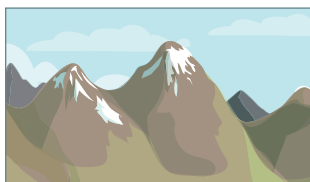
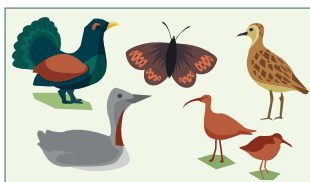
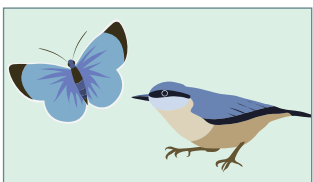
**Mean sea level rise around the UK is accelerating, and rising by an average of 4.6mm per year.**



# What does climate change mean for Scotland?

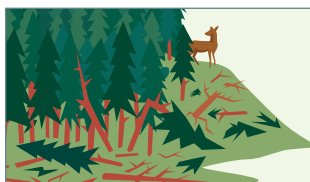
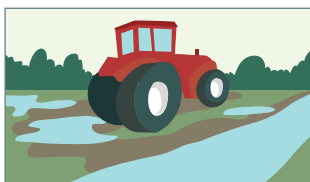
Climate change will have profound impacts for all aspects of life in Scotland. The public sector has a responsibility to understand potential impacts and respond. There is a growing evidence base on climate impacts that is available to inform us – including UK Climate Change Risk Assessments. Based on available evidence, 15 Key Consequences for Scotland were highlighted in the Scottish Climate Change Adaptation Programme (2014). The public sector is diverse in its functions – some may be more directly relevant to your organisation's remit – although most will impact on your organisation in some way.

## THE HEALTH OF OUR NATURAL ENVIRONMENT



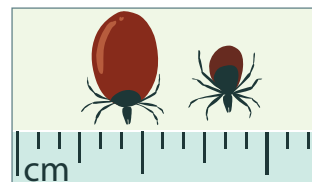
Climate change is affecting the delicate balance of Scotland's ecosystems and transforming Scotland's habitats and biodiversity, adding to existing pressures. Some distinctive Scottish species may struggle and could be lost, invasive non-native species may thrive, while a degraded environment may not be able to sustain productive land or water supply.

## THE PRODUCTIVITY OF OUR AGRICULTURE & FORESTS



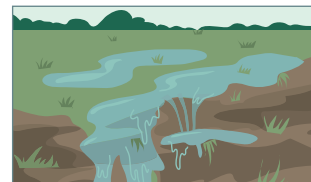
A warming climate has the potential to improve growing conditions in Scotland and increase the productivity of our agriculture and forestry. However, climate change also poses a number of threats, from more variable and extreme weather to the spread of pests and diseases, which may limit this potential.

## THE OCCURRENCE OF PESTS AND DISEASE



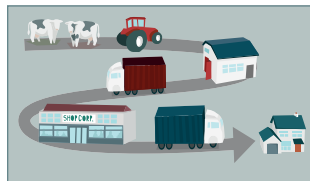
As our climate changes, it will create conditions that may allow existing pests and disease to spread and new threats to become established in Scotland. This may impact on the health of our people, animals, plants and ecosystems if risks are not properly managed.

## THE QUALITY OF OUR SOILS



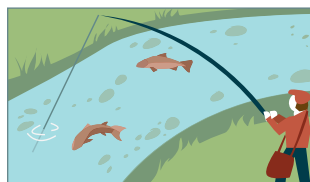
We rely on soils to sustain biodiversity, support agriculture and forestry, regulate the water cycle and store carbon. Soils also preserve archaeological deposits and artifacts. Soils and vegetation may be altered by changes to rainfall patterns and increased temperatures – as well as by the way we use the land.

## THE SECURITY OF OUR FOOD SUPPLY



Climate change may have an impact on global food production. Although Scotland may be able to grow more food, this will not offset the impact global disruption has on us. Increased volatility in the global commodity market due to exposure to extreme climatic events has an impact on supply and cost of food.

## THE AVAILABILITY AND QUALITY OF WATER



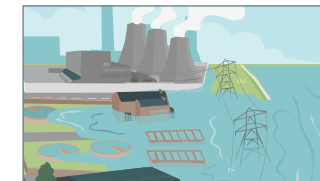
As our climate warms and rainfall patterns change, there may be increased competition for water between households, agriculture, industry and the needs of the natural environment. Summer droughts are becoming more frequent and more severe, causing problems for water quality and supply.

## THE INCREASED RISK OF FLOODING



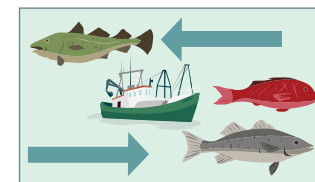
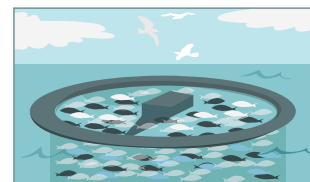
Flooding can already have a devastating effect on those affected. With climate change altering rainfall patterns and bringing more heavy downpours, we expect flood risk to increase in the future. This could impact on properties and infrastructure – with serious consequences for our people, heritage, businesses and communities.

## THE CHANGE AT OUR COAST



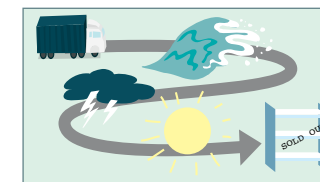
Sea level rise is already having widespread impact on parts of Scotland's coast. With this set to accelerate over the coming decades, we can expect to see more coastal flooding, erosion and coastline retreat – with consequences for our coastal communities and supporting infrastructure.

## THE HEALTH OF OUR MARINE ENVIRONMENT



Our marine ecosystems – from plankton through to fish, mammals and seabirds – are already being affected by climate change alongside other pressures, particularly fishing. Rising temperatures are likely to change species and their distributions. The changes will present both threats and opportunities to our commercial fisheries and aquaculture.

## THE RESILIENCE OF OUR BUSINESSES



Climate change and associated extreme weather may disrupt transport, energy and communication networks in Scotland and around the world. This could impact on markets, affect supply chains and raise insurance costs.

## THE HEALTH AND WELLBEING OF OUR PEOPLE



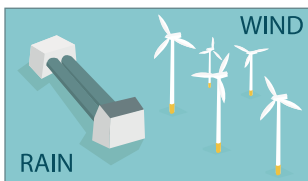
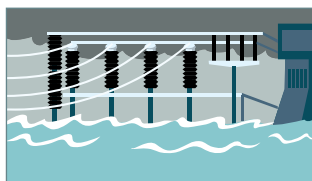
A warming climate may provide more opportunity to be outdoors and enjoy a healthy and active lifestyle, while reducing mortality in winter. However, it could affect patterns of disease and other health issues such as heat stress. Climate change and associated extreme weather may disrupt the lives of individuals and communities, limiting access to vital services and impacting on people's physical and mental health.

## OUR CULTURAL HERITAGE AND IDENTITY



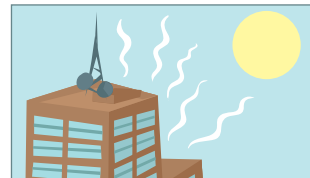
The changing climate is already altering our unique Scottish landscape and threatening our historic environment through coastal erosion, flooding and wetter, warmer conditions. The increased pace of climate change presents challenges to all those involved in the care, protection and promotion of the historic environment.

## THE SECURITY AND EFFICIENCY OF OUR ENERGY SUPPLY



Climate change may compromise Scotland's capacity to generate weather-dependent renewable energy. For example, varying water availability will affect hydro electric generation, and the frequency and intensity of storms could affect wind power. Climate change can also impact power distribution, with impacts ranging from damage caused by extreme weather events, to reduced transmission efficiency occurring as a result of temperature fluctuations. Impacts on global energy markets may also affect energy supplies in Scotland and consequently our overall energy security.

## THE PERFORMANCE OF OUR BUILDINGS



Climate change will have an impact on the design, construction, management and use of our buildings and surroundings. Whether retrofitting existing or building new, it is likely that there will be issues with water management (in flood and drought), weather resistance and overheating.

## INFRASTRUCTURE – NETWORK CONNECTIVITY AND INTERDEPENDENCIES



Our energy, transport, water, and IT networks support services are vital to our health and wellbeing, and economic prosperity. An increase in disruptive events such as flooding, landslides, drought and heatwaves will have varied impacts on these systems. Our infrastructure is closely inter-linked and failure in any area can lead to wider disruption and cascading impacts across these networks.



# Adaptation in Scotland's public sector

## What is climate adaptation?

The Intergovernmental Panel on Climate Change defines adaptation as *“the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities.”*

Adaptation is a process of on-going adjustments in response to observed and projected climate change impacts. This includes being prepared for increasing risks posed by climate change hazards, and identifying new opportunities our changing climate may bring.

Adapting to climate change will be necessary regardless of how much we manage to cut our carbon emissions. Even if we were to reach net-zero tomorrow, historic greenhouse gas emissions have already changed our climate and will continue to do so in the decades to come. This means we need to change how we manage our land and infrastructure, manage water during periods of drought, ensure our buildings are resilient to heatwaves and storms, and communities can build resilience to flooding.

Adaptation takes place at all scales. From incremental measures, like adjusting working practices for severe weather, to large-scale investments, like a new flood protection scheme.

Adaptation involves us preparing for both extreme weather such as storms, and more gradual changes such as when growing seasons start and end.

## The role of the public sector

The public sector is playing a crucial role in delivering action to enable

Scotland to adapt to the impacts of climate change. There are many good examples of public sector adaptation being delivered in Scotland. This includes new homes and infrastructure being built to be resilient to current and future climate; working with communities for locally-led action; and new partnerships forming to enable collaboration as the pace and scale of adaptation increases.

It is vital that we understand how climate change differently impacts people and places across Scotland. Adaptation action should be inclusive, and targeted towards addressing the most vulnerable people and places. By progressing adaptation, organisations can achieve a range of benefits, including:

- ▶ **Positive vision for the future** – adaptation needs to work towards delivering a long-term vision and outcomes. This is most effective when it aligns with wider societal outcomes including health, inequality, housing, net zero and economic development.
- ▶ **Improve efficiency** – there are many missed opportunities where climate impacts are not being factored into decision making. This could result in increased risk and cost, both now and in the future. Embedding adaptation does require you to commit resources, but it can also help support efficient use of resources, minimise future recovery or retrofit costs, and maximise co-benefits.
- ▶ **Partnership and collaboration** – the delivery of many adaptation actions will need to involve partners. By working together we can do more to achieve shared adaptation outcomes. Look across your organisation and to others for opportunities to identify shared risks and implement adaptation solutions.

# Scottish National Adaptation Plan 2024–2029

## Actions today, for a climate resilient future

Adapting to climate change is at the heart of the Scottish Government's mission to improve the wellbeing of people living in Scotland, now and in the future.

To tackle climate change in a way that is equitable, inclusive and builds on the strengths of a place, needs leadership and collaboration on shared outcomes. Ensuring people can access the public services they need will involve adaptation action across Scotland's places and public bodies.

The Scottish National Adaptation Plan 2024–2029 (SNAP3) sets out a range of objectives and commitments to build the capacity of all Scotland's public services and infrastructure networks to understand climate risks, adapt as organisations, and act collaboratively with others.

Adaptation also needs to be aligned with a public sector organisation's strategic outcomes and priorities, including achieving net-zero targets and resilient, biodiverse natural environments. By doing this, adaptation becomes integral to the functions of an organisation and its ability to achieve outcomes.

## Scottish National Adaptation Plan: 5 outcomes, 23 objectives



### Nature Connects

Nature-based solutions

Development planning

Nature Networks

Marine, coastal and the blue economy

Natural carbon stores and sinks

Landscape Scale solutions



### Communities

Place-based collaboration

Community support

Preparedness for extreme events

Built environment

Culture and historic environment

Coastal communities prepared



### Public services and Infrastructure

Public service providers

Access to public services

Resilience of transport system

Water, sewage and drainage services



### Economy, Industry and Business

Business awareness of climate risk

Support for farming, forestry, fishing and aquaculture sectors

Innovation

Economic development opportunities



### International Action

Supporting vulnerable communities globally

International advocacy

Knowledge exchange

# Climate Adaptation Capability Framework (CACF)

The Adaptation Capability Framework is based on the principle that successful adaptation is not simply a case of better understanding climate data and risk models. Effective leadership, governance arrangements, inclusive planning approaches and working beyond organisation and sectoral silos are of equal importance for successful adaptation.

## Structure of the Framework

The Framework has been developed by the Adaptation Scotland programme in collaboration with practitioners from across Scotland's public sector. It draws upon our shared experience delivering adaptation, while overcoming barriers to action.

The Framework aims to promote a holistic approach to adaptation. Based on local and international experience, we have developed a 'capability-maturity' approach that draws upon the characteristics of well-adapting organisations. These are clustered into four adaptation **capabilities** for organisations, which can be developed by completing recommended **tasks** as you progress through four **maturity stages**.

**Capability:** the Framework is based on the idea that an organisation has adaptation 'capability' that determines its ability to deliver adaptation. This capability is multi-faceted – and in the Framework we have categorised it into four adaptation capabilities:



### Understanding the Challenge

develops the robust evidence base on risk and vulnerability to inform decision-making



### Organisational Culture and Resources

is focussed on organisational priorities, governance structures and resource availability



### Strategy, Implementation and Monitoring

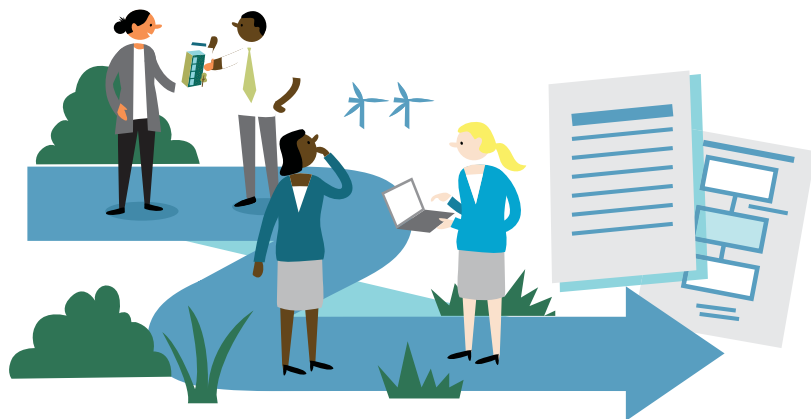
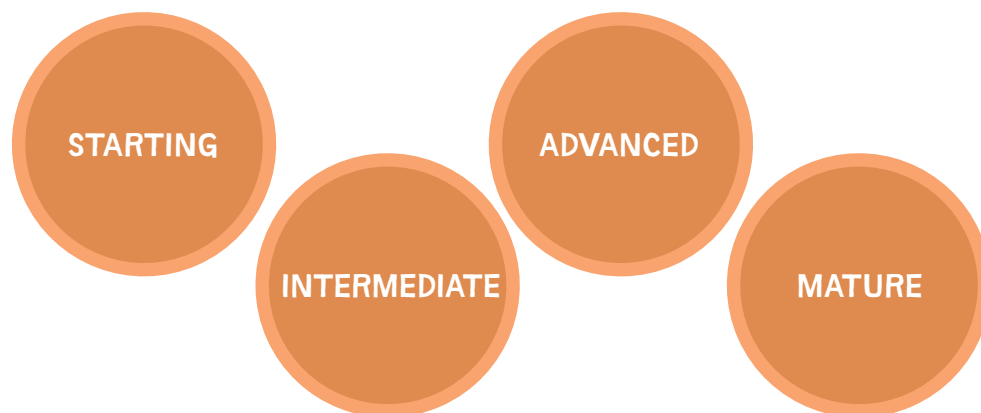
aligns adaptation with objectives, options appraisal, adaptation strategy development and delivery



### Working Together

fosters networking and collaboration for joint adaptation action to achieve shared adaptation outcomes.

**Maturity stages:** adaptation requires sustained, long-term commitment from an organisation – and adaptation capability can develop over time. The Framework includes maturity stages for each of the four capabilities:



**Tasks:** the Framework includes recommended tasks for each capability, and at each maturity stage. By completing these tasks, your organisation will be developing capabilities – and delivering adaptation.

There is no one-size-fits-all approach to adapting to climate change. The Adaptation Capability Framework will enable you to develop an adaptation journey that is right for your organisation. The Handbook includes a high-level description of tasks, Supporting Guidance and Templates are available on the Adaptation Scotland programme website:

[adaptation.scot/take-action/adaptation-capability-framework/](https://adaptation.scot/take-action/adaptation-capability-framework/)



UNADAPTED

ADAPTING

UNDERSTANDING  
THE CHALLENGE



LEARN ABOUT  
CLIMATE CHANGE



UNDERSTAND RISK  
& VULNERABILITY



RECORD AND ASSESS  
RECENT WEATHER EVENTS

MAP OUT IMPACTS  
ON ORGANISATION



CONSIDER  
FUTURE  
CLIMATE  
SCENARIOS



ENGAGE WITH  
STAKEHOLDERS



CLIMATE CHANGE  
RISK ASSESSMENT



ADAPTATION  
KNOWLEDGE  
AND TRAINING



UNDERSTAND  
STAKEHOLDER NEEDS



PROJECT-LEVEL  
RISK ASSESSMENT



MAINSTREAM  
UNDERSTANDING  
OF CLIMATE RISKS



LEARNING, RESEARCH  
AND INNOVATION



ORGANISATIONAL  
CULTURE & RESOURCES



EXAMINE  
ORGANISATIONAL  
STRUCTURE



IDENTIFY EXISTING RESOURCES  
AND KEY COLLEAGUES



TALK  
about  
ADAPTATION



ENGAGE  
WITH  
COLLEAGUES



ESTABLISH GOVERNANCE  
ARRANGEMENTS



DEFINE RESOURCES REQUIRED



TASK OWNERS FOR  
ADAPTATION ACTIONS



INVESTMENT PLAN  
FOR ADAPTATION



SECURE RESOURCES  
FOR ADAPTATION



REVIEW AND  
REFRESH GOVERNANCE



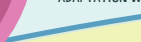
STRATEGY,  
IMPLEMENTATION  
AND MONITORING



SCOTLAND'S ADAPTATION PLAN



IDENTIFY EXISTING  
ADAPTATION WORK



DEFINE VISION  
AND OUTCOMES



IDENTIFY RELEVANT PLANS,  
POLICIES AND PROCEDURES



LIST ADAPTATION OPTIONS



DELIVER INITIAL ACTIONS



APPRAISE ADAPTATION OPTIONS



MONITORING  
AND EVALUATION



ADAPTATION STRATEGY  
AND ACTION PLAN



IMPLEMENT  
ADAPTATION ACTIONS



IMPLEMENT  
ADAPTATION ACTIONS



ADAPTIVE  
MANAGEMENT  
CYCLE



WORKING  
TOGETHER



IDENTIFY RELEVANT GROUPS,  
PARTNERSHIPS AND FORUMS



JOIN ADAPTATION  
NETWORKS



ENGAGE WITH NEW PARTNERS



DELIVER INITIAL ACTIONS  
WITH PARTNERS



FORMALISE PARTNERSHIP WORKING



SHARED  
COMMUNICATION  
ACTIVITIES



LONG TERM  
PARTNERSHIPS



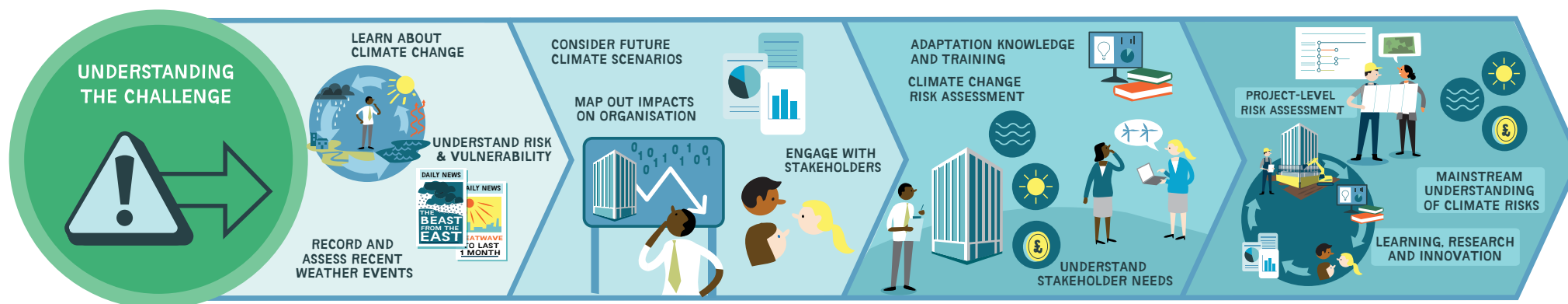
LEAD IN NETWORKS



ADAPTATION CAPABILITY FRAMEWORK

# CAPABILITY: UNDERSTANDING THE CHALLENGE

Adaptation is our adjustment to climate change, by understanding the challenge we can make informed decisions based on actual or expected change. By developing this capability you will gather evidence on climate risks and vulnerabilities, then integrate these into internal systems and procedures.



## Key aspects include:

- **Knowledge** – build an understanding of climate change and different approaches to adaptation. This needs to be translated into your specific context, with the knowledge shared across your organisation. You will continue to learn and adjust as you make progress with adaptation.
- **Evidence** – you need an evidence base to inform decision-making in your organisation. As you progress you will develop evidence for long-term impacts under a range of possible futures – and make sure that you can use this to inform climate change risk assessment.
- **Engagement** – A commitment to involve a diverse range of stakeholders will allow you to better understand your organisation's specific vulnerabilities, risks and interdependencies.
- **Research & innovation** – adaptation is still a relatively new as a process, especially where it is put into practice in the 'real world'. As part of a global community learning to adapt you have an opportunity to connect with external expertise to fill knowledge gaps and drive innovation.

## MATURITY STAGE: STARTING

Your organisation is learning about climate change and its potential impacts in Scotland. You will have pulled together key information that is most relevant to your organisation – and this is being used to develop a common understanding of potential consequences. Exploring recent weather events provides insight into how climate change is already affecting your organisation.

### UC1A LEARN about Scotland's changing climate and impacts

**Description:** An understanding of past climate trends and future projections is a necessary foundation for adaptation. Understanding the consequences for Scotland and locally will help you understand the impacts on your organisation. Learn about these by accessing UK Climate Projections and key synthesis reports.

### UC1B DEVELOP understanding of climate risk and vulnerability

**Description:** Risk and vulnerability are key concepts for understanding the potential impacts of climate change on your organisation. To inform robust decision-making, these need to be understood in your specific context. Access relevant sources of evidence and map out your key stakeholders.

### UC1C RECORD and CONSIDER the impact of recent weather events on your organisation

**Description:** Your organisation will have been affected by recent weather events. Exploring the consequences of specific events with colleagues is a way to explore climate-related vulnerabilities in more depth. These can be useful narratives for raising awareness, as well as some providing initial evidence of potential costs.

## MATURITY STAGE: INTERMEDIATE

Your organisation is building an understanding – and evidence – of potential climate impacts that are specific to your context and linked to strategic and operational priorities. You are building an evidence base for long-term climate impacts under a range of possible futures. By engaging stakeholders, you can better understand vulnerabilities specific to your organisation and the communities you work with.

### UC2A MAP OUT how your organisation's functions might be affected by climate change

**Description:** Your organisation will have many functions that might be affected by climate change. To identify these you will need to engage with colleagues across your organisation to explore the connection between strategic and operational priorities and climate impacts.

### UC2B CONSIDER scenarios for future climate change impacts

**Description:** Climate projections provide a range of possible future climates to understand potential impacts. It is also important to consider how changes in socio-economic conditions could alter our vulnerability and influence our adaptation responses. The use of scenarios and storylines approaches can enable you to explore a range of possibilities under future conditions.

### UC2C ENGAGE with stakeholders using participatory approaches

**Description:** You should seek to involve a diverse range of relevant stakeholders in your adaptation planning e.g. communities, service users, customers etc (Identified in Task UC1B). Inclusive engagement can help you better understand and identify new opportunities, synergies with existing activities, and help target key drivers of climate vulnerability.

## MATURITY STAGE: **ADVANCED**

You are completing a climate change risk assessment for strategic organisational risks. Your organisation is embedding knowledge on climate and adaptation into internal systems, enabling routine use by people in their day-to-day roles. You have an ongoing commitment to stakeholder engagement as your adaptation work progresses.

### **UC3A** UNDERTAKE climate change risk assessment

**Description:** A climate change risk assessment is used to evaluate climate risks across your organisation or for key service/asset portfolios. This strategic 'scan' helps to understand the changing likelihood and consequence of a range of potential risks for your organisation and stakeholders. It enables you to prioritise climate risks, allowing you to better focus resources.

### **UC3B** INTEGRATE climate adaptation knowledge into internal training and procedures

**Description:** As internal knowledge of climate adaptation grows, it will need to be made accessible to many more people in your organisation in a form that is easily utilised in their work. Look for opportunities to integrate knowledge into internal systems and procedures, so that adaptation is no longer seen as an 'add-on' task.

### **UC3C** IMPROVE understanding of stakeholder needs

**Description:** It is important to sustain engagement with stakeholders to better understand climate impacts, risks and vulnerabilities, as well as to secure buy-in for your plans. Develop a stakeholder engagement plan to ensure on-going commitment as your adaptation work progresses.

## MATURITY STAGE: **MATURE**

Your organisation is assessing climate risk within a wider risk management framework. You continue to learn and adjust to the climate adaptation challenge, connecting with a wide range of partners to co-produce adaptation solutions. You are now able to identify knowledge gaps and are working with others to address them.

### **UC4A** UNDERTAKE project-level risk assessment

**Description:** A project-level risk assessment is focussed on climate risks for a specific project, policy, asset, or location. These are typically justified if they have been identified as 'at-risk' in a strategic assessment, provide a critical function of your organisation, or are major investments/assets. The narrow scope allows for an appropriately detailed analysis of climate risks.

### **UC4B** MAINSTREAM climate change risk assessment

**Description:** Ensure that your climate change risk assessment is embedded within your wider risk management framework (such as the Corporate Risk Register). Ensure that there is senior ownership of key risks and that these are effectively communicated within your organisation.

### **UC4C** IDENTIFY knowledge gaps, seek expertise and foster links with research and innovation

**Description:** To meet the challenge of adaptation, your organisation will need to continually learn and adjust. As work on adaptation advances, you should seek to identify knowledge gaps that are important to your decision making. Research and innovation can be harnessed to co-produce adaptation solutions, alongside local or international partners.





# CASE STUDY: CLIMATE RISK ASSESSMENT FOR NEW FIFE COLLEGE CAMPUS

Fife College, Balfour Beatty and a design team used Adaptation Scotland programme resources to better understand project level climate risks and adaptation opportunities during the development and construction of the new Dunfermline Learning Campus. Consideration of the current and potential future climate hazards facing the campus and its users at an early stage in the project allowed adaptation measures to be incorporated into the design and building use plans.

Fife College and Balfour Beatty used the Adaptation Scotland programme's **A Changing Climate for Development** toolkit to assess the risks and resilience implications of its new campus under construction (**UC2A, UC4A**).

A workshop with all partners involved in the build – Fife College, Balfour Beatty and the design team, including Reiach and Hall Architects, Woolgar Hunter, and Atelier Ten, supported by the Adaptation Scotland programme – explored the recent and projected changes to the climate in the Fife area (**UC1C**), and how these climate hazards would likely impact the new campus (**UC2B**). The workshop also explored the climate hazards facing construction workers on the development, using the Adaptation Scotland programme's **Climate Hazards and Resilience in the Workplace** toolkit (**UC1B**).

The workshop encouraged participants to work together to identify potential adaptation actions and to prioritise those that could be implemented at this stage of construction. Information from the workshop, and desk-based analysis, were used to complete a project level climate change risk assessment (**UC4A**) for the new campus.

Fife College have been able to identify and implement practical measures that will be critical to ensuring a safe learning environment at the new Dunfermline Campus, including:

- Considering landscape design with climate resilient planting in mind
- Consider prevailing wind directions and storm directions when designing rotating/automatic doors.
- Positioning of critical infrastructure such as IT servers away from areas potentially more at risk from flooding.

- Considering where internal drainage downpipes are located and leak detection to prevent damage to buildings/IT equipment etc. in extreme wet weather.
- Optimise building use planning to minimise impacts from climate hazards

Lessons from this project have provided the basis for Balfour Beatty and Fife College to integrate considerations of key climate risks across future infrastructure and construction projects (**UC4B**), including a planned College-wide climate risk assessment of the whole Fife College estate, and at least two further climate risk and adaptation workshops for existing projects being delivered by Balfour Beatty.

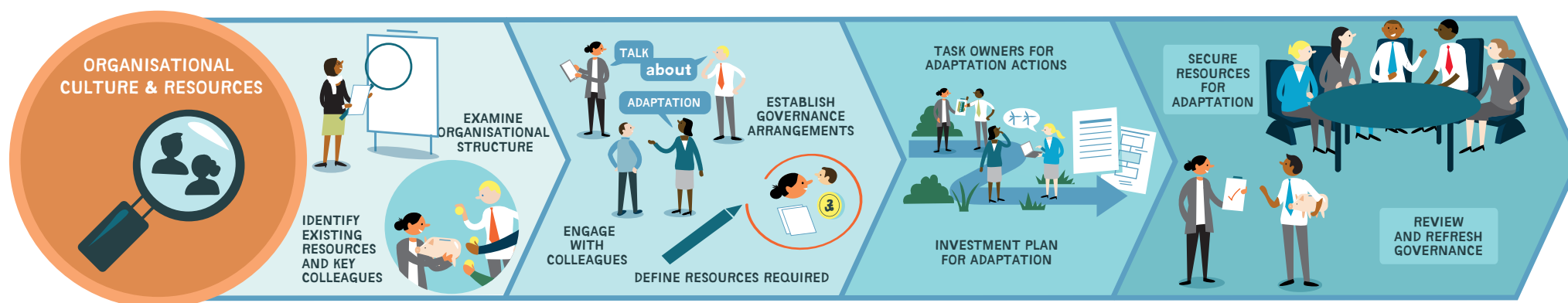
***"We want to provide inspirational learning spaces for our future students, and we know we have to adapt and be resilient to the effects of climate change."***

Jim Metcalfe, Fife College Principal



# CAPABILITY: ORGANISATIONAL CULTURE & RESOURCES

For adaptation to be successful, it must be supported by your organisational culture and be sufficiently resourced. By developing this capability you will find ways to align adaptation activities with your organisation's priorities. Over time they will become mainstreamed into plans, policies and procedures – becoming part of business-as-usual for your organisation.



## Key aspects include:

- ▶ **Resources** – you will need to commit resources to progress adaptation. These will vary depending on task, but include people, money, assets, data and processes. Some of these can be allocated or developed internally, others will need to come from external sources.
- ▶ **Leadership** – the support of senior leaders can accelerate adaptation in an organisation. It is important to include adaptation responsibility within roles, and within the competencies of the key decision makers, ensuring named leads and responsibilities for adaptation actions.
- ▶ **Governance** – your organisation will have distinct structures, ways of making decisions and of delegating responsibilities. For adaptation to be effective it will need to fit with your overall governance arrangements but also have clear project governance that allows it to deliver change.
- ▶ **Reflection & flexibility** – space needs to be made to try new approaches, to learn from experience, and to improve procedures, strategies and actions in response. There also needs to be flexibility to recognise that the landscape may change as adaptation progresses.

## MATURITY STAGE: STARTING

Your organisation is able to communicate why adaptation matters by linking it to your strategic objectives. You have considered where adaptation fits in your organisation and identified key opportunities to begin your adaptation work – as well as what resources are available to support it.

### OC1A CONSIDER how adaptation fits with your organisation's objectives

**Description:** Identify how adaptation supports delivery of your organisation's strategic objectives. Use this to communicate why adaptation matters. You will need to map where adaptation is best placed in your organisation and start to identify relevant groups and decision-making processes that will need to consider it.

### OC1B IDENTIFY resources already available for adaptation

**Description:** Adaptation is a process requiring different types of resources, including people, money, assets, data and processes. Survey the resources that already exist within your organisation to enable you to plan and deliver future work now and into the future.

### OC1C IDENTIFY key internal stakeholders for adaptation

**Description:** Planning adaptation will require you to interact with colleagues from across your organisation. Identify key people to engage with based on emerging priorities and areas of on-going adaptation action. This step will help you to carry out tasks **OC2A**.



## MATURITY STAGE: INTERMEDIATE

Your organisation now has governance arrangements in place to deliver adaptation, and you have taken steps to understand the resource requirement for initial adaptation actions. You are engaging with colleagues to identify opportunities to include adaptation in plans, policies and procedures.

### OC2A ENGAGE with colleagues to optimise adaptation opportunities

**Description:** Engage with colleagues to identify adaptation opportunities across functions. Your organisation will (or could) be delivering adaptation measures through many of its functions (or service areas), although this work may not currently be identified as 'adaptation'. By actively engaging colleagues across your organisation, you can identify opportunities to include adaptation and identify key teams to lead on specific actions.

### OC2B DEFINE resource requirements to plan and deliver adaptation

**Description:** Your organisation will need committed resources: people, money, assets, data, processes to progress adaptation. Clearly define adaptation activities that require resourcing and estimate resource requirements.

### OC2C ESTABLISH governance arrangements for adaptation

**Description:** Setting up governance arrangements for adaptation is essential to enable effective decision-making and collaborative delivery across your organisation. Good governance will provide oversight for a work programme, define roles and responsibilities, and will have

## MATURITY STAGE: **ADVANCED**

Your organisation now has defined roles, responsibilities, and governance arrangements in place to deliver adaptation. There is an emerging set of people in your organisation who can see opportunities to deliver adaptation. You are developing an investment plan to mobilise additional resources to support your adaptation plans.

### **OC3A** ENSURE key people are responsible for adaptation actions

**Description:** Include adaptation responsibility within roles, and within the competencies of the key decision makers. The governance arrangement you have in place (**OC2C**) should have a role to maintain co-ordination and oversight across adaptation actions. Establish communication and reporting processes for adaptation across functions/service areas.

### **OC3B** DEVELOP an investment plan to mobilise resources for adaptation

**Description:** Whilst you may be able to access some internal budget to resource your initial adaptation actions, it is likely that a more comprehensive adaptation plan will require additional resourcing. To support mobilisation of additional resources, you will need to develop an investment plan for climate adaptation, including developing a strong business case for your selected adaptation actions, and researching a range of internal and external funding options.



## MATURITY STAGE: **MATURE**

Your organisation has secured and allocated the resources required to deliver a broad range of action on adaptation. Your governance arrangements are kept up-to-date and are able to reflect changing demands as more people become involved.

### **OC4A** REVIEW and update governance arrangements for adaptation

**Description:** Your organisation should review, reflect and update adaptation governance arrangements. This will help you take opportunities that arise and account for changing demands due to observed climate change impacts and as adaptation progresses.

### **OC4B** ENSURE resources to plan and deliver adaptation

**Description:** Using your investment plan (**OC3B**), strategically pursue both internal and external funding and financing options to support adaptation efforts, ensuring alignment with relevant policies and stakeholder priorities. Emphasise the broader benefits of adaptation actions and how they contribute to multiple agendas, including net-zero targets, place planning and health outcomes, and biodiversity.







## CASE STUDY: DEVELOPING A BUSINESS CASE FOR ADAPTATION

Craigleith Retail Park, in northwest Edinburgh, is privately owned. Through the Adaptation Scotland programme, Verture and Paul Watkiss Associates worked with a 'partner ecosystem' of NatureScot, Royal Botanic Gardens Edinburgh, Hydro Nation, Green Action Trust, City of Edinburgh Council, SEPA and Scottish Water to support the previous owners of the site, Nuveen, to explore the retrofit of blue-green infrastructure at the site.

Craigleith Retail Park was experiencing a series of issues of pooled water/standing water. There are differing perceptions about who should pay to address this issue (public or private). This project demonstrates the potential for a private-public sector partnership to develop a business model to finance work to reduce current and future flood whilst increasing property values, footfall, biodiversity and air quality **(OC1A)**.

The process involved reviewing concept design for adaptation interventions, and assessed benefits, beneficiaries, and revenue streams, as well as exploring:

- Possible funding and financing sources.
- The strategic case for the private sector to invest based on financial risk.
- Existing business model typologies that could be transferrable.

The study found that the types of benefits and beneficiaries for installation of the blue-green infrastructure were many, including moderation of extreme events damage to drainage infrastructure, air quality regulation, and wider amenity benefits.

The findings were used to develop a business model and Strategic Outline Case for implementation **(OC3B)**. The rationale was to test if there are sufficient incentives for the private sector to invest without public sector support, and if not, the degree to which public support might be needed.

The team quantified the cost difference between traditional resurfacing (£586,000) and the enhanced BGI concept (£1.219 million), identifying a gap of approximately £633,000 **(OC4B)**.

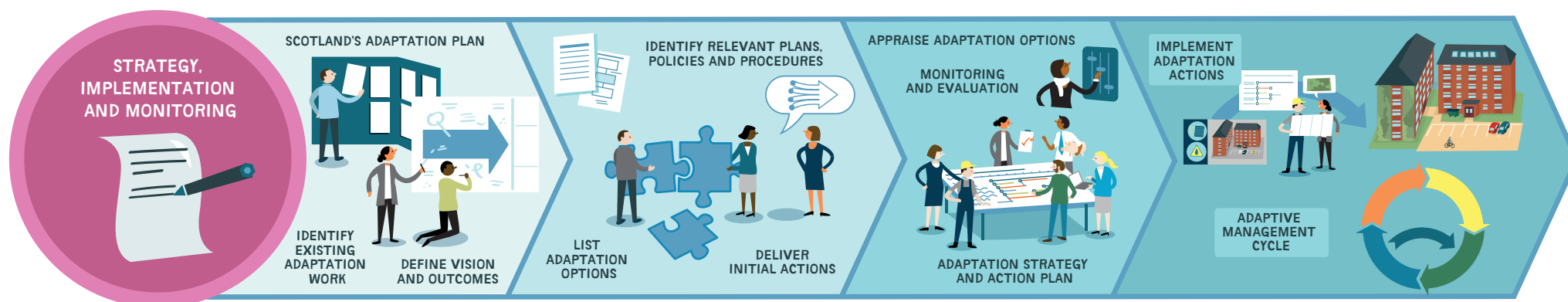


To bridge the gap, a blended finance model was proposed, combining public and private capital. Revenue streams, including increased property value and reduced drainage system pressure, were explored to justify private sector investment.

Adaptation Scotland's **Guide to Adaptation Finance** and demonstrator case studies (e.g., Newcastleton flood management, Uist Community Climate Resilience) offer further insights into 15 different financing options, including revenue schemes from carbon sequestration, tourism revenues, crowdfunding, equity financing, and a range of grant funds. [www.adaptation.scot/our-work/climate-adaptation-finance/](http://www.adaptation.scot/our-work/climate-adaptation-finance/)

# CAPABILITY: STRATEGY, IMPLEMENTATION AND MONITORING

Adaptation requires strategic planning and implementation to achieve outcomes. By developing this capability you will set appraised options into an adaptation strategy and action plan, adopting an approach that maintains flexibility and seeks pathways to resilience.



## Key aspects include:

- ▶ **Strategic approach** – you can help embed adaptation by aligning with the functions and purpose of your organisation. Set a clear vision and long-term outcomes to guide planning as you develop an adaptation strategy and action plan. Looking at the bigger picture will help make the most of opportunities.
- ▶ **Appraisal & prioritisation** – you want to identify robust, acceptable, efficient and effective measures that can be taken forward in an action plan. Develop an evidence-based appraisal process to select options that will help you achieve strategic adaptation outcomes.
- ▶ **Take action** – you learn by doing. From initial actions to a comprehensive programme, your organisation will build momentum by taking action. You also need to reflect, monitor and evaluate actions to ensure they are efficient and effective in achieving adaptation outcomes.

## MATURITY STAGE: STARTING

Your organisation is able to look at the big picture and see where it can make a contribution to a climate-resilient Scotland. You have recognised ways that you are already delivering adaptation actions. Your organisation has developed a clear vision for climate resilience and has defined adaptation outcomes that align with your organisation's purpose.

### **SIM1A** CONSIDER how you contribute to Scotland's adaptation outcomes

**Description:** The public sector has a key role in delivering the **Scottish National Adaptation Plan (SNAP3)** which sets out actions to build Scotland's resilience to climate change. Show how your organisation fits in the bigger picture by considering how you might contribute to a climate-resilient Scotland.

### **SIM1B** IDENTIFY existing adaptation work within your organisation

**Description:** Your organisation will already be taking actions that deliver adaptation, even if they are not always recognised. By identifying some of these actions you can demonstrate alignment with your organisation's functions – and show that you have already begun an adaptation journey.

### **SIM1C** DEFINE strategic adaptation outcomes and/or vision

**Description:** Adaptation is a strategic challenge that you will need to align with your organisation's purpose. You should develop a vision for climate resilience and define adaptation outcomes that allow you to strategically plan an effective adaptation response.

## MATURITY STAGE: INTERMEDIATE

You are considering an emerging set of potential adaptation actions and can pull these together into an action plan – while implementing early practical actions.

### **SIM2A** IDENTIFY a range of potential adaptation actions

**Description:** As you increase awareness of climate impacts, you need to start planning an adaptation response as aligned with your vision. Compile a set of options for actions that your organisation could take – either alone or with partners. It is important to consider a wide range of actions, both short- and long-term, easy and difficult.

### **SIM2B** IDENTIFY plans, policies and procedures that can include climate adaptation

**Description:** Take a systematic look across the breadth of your organisation's activities/functions to identify opportunities to include and embed adaptation in plans, policies and screening processes.

### **SIM2C** DELIVER initial adaptation actions

**Description:** Take early practical action on adaptation by building upon existing projects or implementing no-regret/quick-wins actions identified in **SIM2A**. These help raise the profile of adaptation by building internal support and helping to spur further action. This may involve making an initial plan with a more comprehensive appraised plan to follow as a subsequent task (**SIM3B**).

## MATURITY STAGE: **ADVANCED**

Your organisation has used an appraisal process to prioritise adaptation actions and develop an adaptation strategy and action plan aligned with your organisation's adaptation goals/outcomes. This coordinates and integrates adaptation into relevant projects, policies and plans across your organisation and with partners. You have developed a monitoring process to track your progress on implementing actions.

### **SIM3A APPRAISE adaptation options**

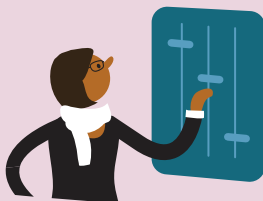
**Description:** An appraisal process will allow your organisation to consider a range of factors when selecting and prioritising from an emerging set of adaptation options. This will help identify the most appropriate measures that can be taken forward in an action plan.

### **SIM3B DEVELOP an adaptation strategy and action plan**

**Description:** Drawing together your organisation's strategic outcomes, climate risk and appraised adaptation options, develop a comprehensive adaptation strategy and action plan. This can be a standalone plan or included within a wider Climate Change strategy. Ensure each action has clear ownership, targets, measures of success and timelines for implementation.

### **SIM3C DEVELOP a monitoring approach for achieving your adaptation outcomes**

**Description:** It is essential to monitor delivery to ensure it achieves adaptation outcomes. Monitoring supports effective evaluation and learning and can inform adjustments to strategies and actions. Draw together a list of indicators relevant to your adaptation outcomes.



## MATURITY STAGE: **MATURE**

Your organisation is now taking a strategic approach to adaptation, which is becoming business-as-usual as it is mainstreamed into plans, policies and procedures. You are able to be flexible and allow for uncertainty, adopting an iterative adaptive management cycle and planning into the long-term.

### **SIM4A IMPLEMENT a programme of adaptation actions**

**Description:** You should now be ready to implement a range of prioritised adaptation actions – with appropriate resources allocated. Produce a detailed work plan/programme based on your adaptation strategy and action plan identifying tasks and deliverables. Communicate successful implementation to support momentum for adaptation.

### **SIM4B ADOPT an adaptive management cycle for adaptation planning**

**Description:** Assimilate, reflect and learn from the insights gathered in your monitoring (**SIM3C**) to integrate change into future actions. Adaptation is an ongoing and iterative process, requiring an adaptive management cycle to continually assess and adjust to manage the long-term and uncertain nature of climate change impacts.





# CASE STUDY: COASTAL CHANGE MONITORING AND ADAPTATION PLANNING AT NORTH AYRSHIRE COUNCIL

**Flexible planning to manage uncertain coastal impacts: An adaptive management approach to coastal change is helping North Ayrshire Council to manage and safeguard beach access at Irvine and Stevenson.**



Damage to a footbridge over the mouth of the Stevenston Burn due to undermining of the structure's foundations brought the issue of coastal erosion and sea-level rise in North Ayrshire into sharp focus.

Pressure to either repair the damaged bridge or to quickly establish alternative access to Stevenston beach was initially resisted by North Ayrshire Council as the risks of future coastal change were not well understood. Instead, it was decided to combine the study at Stevenston with an already planned study at Irvine, to provide a better understanding of the future risks and to realise resource efficiencies.

The first stage of the study is nearing completion and the findings will be used to inform a coastal change adaptation plan that will provide more detail about how the shoreline is expected to change, how the identified interventions should be sequenced to best respond to the predicted

change and what to do when the shoreline behaves in a way that differs from the predictions.

The ongoing study has found that spoil from past coal mining and chemical industries could continue to affect how the shoreline can be adapted. Given this and the potential erosion risk to a nearby railway line, the study has concluded that soft engineering methods alone would not be enough to acceptably respond to the predicted coastal change. Instead, several adaptation actions **(SIM2A)** – including the limited introduction of artificial defences – may also be required. In the future and with careful interventions, the study has found that the land protected by these defences has the potential to provide a valuable amenity and biodiversity resource as well as the necessary erosion and flood protection to sensitive or essential receptors.

The next steps include the refinement of the identified actions and strategies **(SIM3A)**, further

engagement and the creation of a local coastal change adaptation plan **(SIM3B)**.

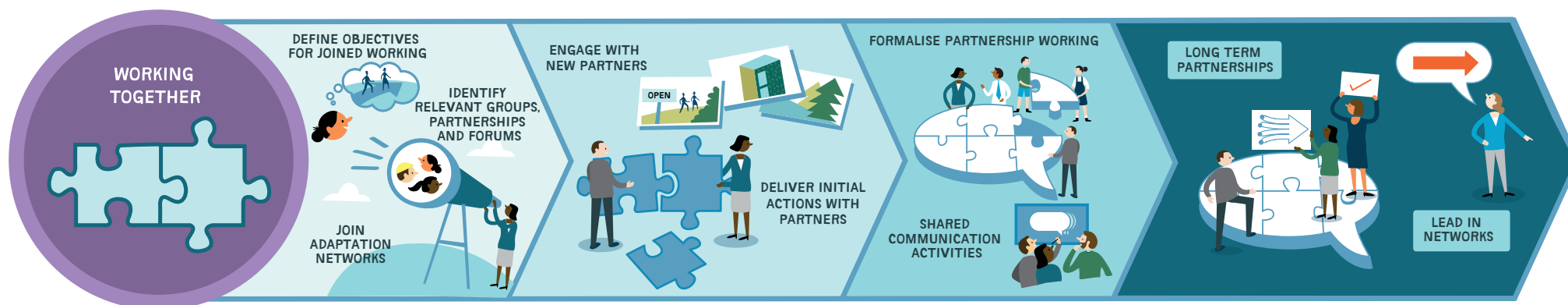
Only by monitoring the condition of the beaches will it be possible to know when and how to intervene. This means that large parts of the natural coastline will now need to be monitored in a similar way to how artificial coastal defences are currently inspected.

The local coastal change adaptation plan **(SIM3B)**, which will be funded by the Scottish Government's coastal change adaptation fund, will provide further details about when the identified actions and strategies should be implemented and what to do if future monitoring suggests that the predicted sea-level rise or coastal erosion is occurring slower, more quickly or in different ways than is predicted **(SIM4B)**. This flexible, risk-based approach to coastal change is agile and responsive to climate impacts, allowing North Ayrshire Council and the wider community to prioritise and plan a work programme.



# CAPABILITY: WORKING TOGETHER

No organisation can adapt alone, by working together we can do more to achieve shared adaptation outcomes. By developing this capability you will forge connections with key partners to share ideas and find opportunities to collaborate. You will benefit from engaging a diverse range of external partners to help shape your adaptation plans.



## Key aspects include:

- **Networks** – you can achieve more by sharing and learning from others. Make the most of support available, and connect with peers, whether through adaptation-focussed or other professional networks. Engage with relevant groups, forums and partnerships where adaptation is appropriate within their remit.
- **Partnership** – collaboration can be essential to achieving adaptation outcomes. You may need to formalise partnership arrangements, either building upon existing arrangements or establishing a new partnership. Agree roles, responsibilities and funding allocations.
- **Joint action** – the delivery of many adaptation actions will need to involve partners. Build collaborative relationships by taking action, from agreeing resources for initial activities to the co-financing for multi-year investment in a programme of adaptation action.

## MATURITY STAGE: STARTING

Your organisation is beginning to forge connections with others working on adaptation. You are becoming active in relevant networks to share learning and expertise. You are also identifying opportunities to consider adaptation in other groups, partnerships and forums.

### WT1A DEFINE your objectives and opportunities for joined up working

**Description:** Many adaptation actions cannot be effectively delivered without the involvement of partners. Clearly outline what you aim to gain from working with others and what you can contribute to a collaborative effort. This could include learning opportunities, data sharing, or coordinated actions.

### WT1B IDENTIFY relevant groups, partnerships and forums

**Description:** Identify partner organisations, groups and networks relevant to your adaptation work. Determine their significance to your objectives and identify any current engagement within your organisation. This may include Community Planning Partnerships or Adaptation Regional Partnerships.

### WT1C JOIN/PARTICIPATE in relevant professional and adaptation networks.

**Description:** Join networks, professional institutions and mailing lists to develop connections with others working on adaptation. You will benefit from shared learning and opportunities to work together, formally or informally.



## MATURITY STAGE: INTERMEDIATE

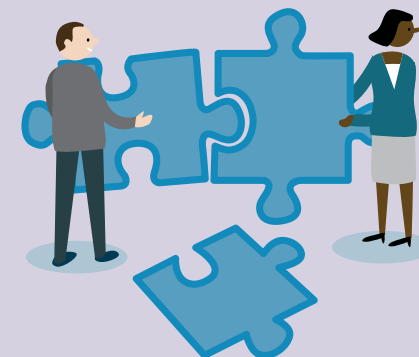
Your organisation is deepening its connection with partners on adaptation. You are taking opportunities to include adaptation in a range of your organisation's external activities, including co-delivery of initial actions. Together you are emphasising the importance of collective action.

### WT2A ENGAGE with relevant groups, partners and forums

**Description:** Initiate contact with partner organisations that align with your adaptation goals, using priority contacts identified in WT1B. Arrange informal meetings to learn about their activities, find overlapping interests, and explore areas for collaboration. Engage in joint actions on adaptation projects, as even small collaborations can build momentum for stronger future partnerships.

### WT2B CO-ORDINATE with partners to deliver initial actions

**Description:** Identify simple, quick actions that you can take forward with partner organisations to help develop collaborative working. This may include sharing data and information about climate impacts, methods for assessing climate risks and case studies of adaptation actions.



## MATURITY STAGE: **ADVANCED**

Your organisation is working with partners on a regular basis to deliver a range of shared adaptation actions. Collaboration is supported by formalising partnership arrangements and you are actively seeking to involve diverse stakeholders in your adaptation planning. You are linking to wider networks to share ideas, experience and seek opportunities to collaborate.

### **WT3A FORMALISE partnership working**

**Description:** As you work with partners more frequently and on larger projects, you may need to formalise partnership arrangements – agreeing roles, responsibilities and funding considerations. This might build upon existing arrangements, or you might need to establish a new partnership. Consider the role and remit of partnership working and develop a business case if required.

### **WT3B DEVELOP communication activities with partners**

**Description:** Highlight and communicate shared priorities, climate risks, and ongoing adaptation actions with partners. Use this communication to emphasise the importance of your collective action, internally and externally.



## MATURITY STAGE: **MATURE**

Your organisation is working in partnership to undertake a programme of action that achieves long-term adaptation outcomes. Partnership arrangements are maintained and refreshed so that they remain effective. You are now a leader on adaptation and supporting others to progress.

### **WT4A ENHANCE long-term partnership working**

**Description:** Achieving long-term adaptation outcomes will require effective partnership working, which needs an on-going effort to maintain and refresh arrangements. Ongoing collaboration with partners can help you deliver an expanding range of adaptation actions and achieve shared outcomes.

### **WT4B LEAD in networks and peer organisations**

**Description:** Take an active role in networks and connect with peer organisations. As an organisation that is now a leader on adaptation, you will have invaluable experience to share. Your adaptation work will be strengthened when others are progressing.





## CASE STUDY: HIGHLAND ADAPTS

Partnering to deliver a regional adaptation partnership enables stakeholders to align their work with broader action to support climate resilience, effecting change on a larger scale than if acting alone.



Highland Adapte was established to enable joined-up climate change adaptation action across the 9,905 sq mile Highland Local Authority region. Highland Adapte is governed by nine partner organisations: NatureScot, Changeworks, Verture, NHS Highland, Forestry and Land Scotland, Highlands and Islands Climate Hub, Highlands and Islands Enterprise, Zero Waste Scotland, and the Highland Council. The widespread and interconnected impacts of climate change cannot be effectively and efficiently managed working alone. This partnership allows stakeholders from across the region to develop a strong shared evidence base for climate resilience projects, as well as wider regional strategies and investments **(WT1A)**.

The partnership has so far focused on producing the first Highland Climate Risk and Opportunity Assessment **(WT2B)**.

The economic component of this assessment was released in September 2024. Partnership working can at times be a slow process, but bringing diverse partners with different levels of experience on an adaptation journey is necessary to ensure long term, regional resilience to climate impacts **(WT2A)**.

In addition to collaborating on the first Highland Climate Risk and Opportunity Assessment, Highland Adapte has enabled and contributed to other partnership work across the region, including the Highland Charter for Climate, Nature, and Health. The relationships strengthened through Highland Adapte are helping to break down organisational silos, as traditional separate organisations are partnering to deliver cross-sectoral projects to meet the needs of our diverse communities **(WT3A)**.

Maintaining momentum is a challenge for any project, particularly when the people driving actions within organisations already have full workloads. Partnership working can help overcome this hurdle because pooling resources allows work to continue when individual organisations' capacity changes over time.

Highland Adapte is also supporting individual organisations to progress adaptation action internally. Informed by Highland Adapte's economic assessment of climate change impacts on the Highland region, the Highland Council is developing its Climate Change Adaptation Strategy and Action Plan.

In addition to facilitating research, Highland Adapte is continuously engaging with stakeholders in and out of the public sector to provide spaces to share learnings from their own adaptation work **(WT4B)**.

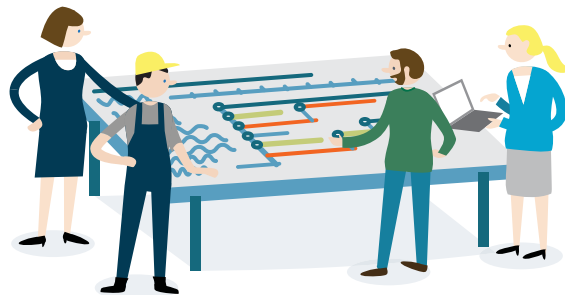
# Benchmarking

Benchmarking allows you to describe your organisation's current adaptation capabilities and provide a baseline from which progress may be measured. The Benchmarking Tool helps illustrate an organisation's adaptation journey along the Climate Adaptation Capability Framework. It can aid communication and engagement to show what your organisation is aiming for and the steps needed to get there.

## Aims of benchmarking

The Benchmarking Tool aims to assess the adaptation progress of an organisation, not an individual employee, team or department. The tool, therefore, may need to be completed by you or a small group of colleagues initially and then finalised through a Benchmarking Workshop with management and/or different departments.

- ▶ Describe your organisation's current adaptation capabilities and provide a baseline from which progress may be measured
- ▶ Identify your current organisational position within the Adaptation Capability Framework
- ▶ Illustrate what you've already done on adaptation and highlight where improvement is needed
- ▶ Provide a way to understand and track ambitious change
- ▶ Support project planning



## Download the Benchmarking Tool:

[adaptation.scot/take-action/benchmarking-tool](https://adaptation.scot/take-action/benchmarking-tool)

## Reporting

The Climate Change (Scotland) Act 2009 includes Public Bodies Climate Change Duties, which require annual reporting of progress. The Adaptation Capability Framework – and the Benchmarking Tool – can be used to demonstrate the range of adaptation activities that your organisation is carrying out.

The Adaptation Capability Framework and Benchmarking Tool inform the Public Bodies Climate Change Duties Reporting Guidance, produced by the Sustainable Scotland Network (SSN).

[sustainableScotlandNetwork.org/ssn-manual/reporting](https://sustainableScotlandNetwork.org/ssn-manual/reporting)



# Public Sector Climate Adaptation Network

The best way to adapt to climate change is to collaborate. By working together it is possible to create the ideas and solutions needed for a climate ready future.

## About the Network

The Public Sector Climate Adaptation Network (PSCAN) was established in June 2019 with major organisations participating including local authorities, infrastructure operators, universities and national organisations.

The Network is now comprised of over 60 public bodies who work together to benchmark their progress and identify and share learning on climate change adaptation. We host monthly informal discussion sessions for adaptation practitioners to meet, and arrange regular Network events for members.

Roddy Hamilton, Falkirk Council, who has been involved with the group since 2020, reflects on the benefits of the Network:

***“The group has been, and continues to be, a fantastic source of information, inspiration, peer-to-peer support, and networking in relation to climate change adaptation and by extension adaptation-adjacent topics including ecology, and climate change mitigation. As the group has grown and developed to reflect the needs of the group, the Adaptation Scotland team and members of the group have maintained a welcoming, inclusive, and supportive environment and a great sense of camaraderie.”***

## PSCAN aims:

- ▶ Support organisations to use the Benchmarking Tool
- ▶ Facilitate peer to peer support
- ▶ Provide training and skills development
- ▶ Develop case studies and shares good practice
- ▶ Provide feedback to inform further development of the [Adaptation Capability Framework](#)



***“We w  
our fu  
be res  
Jim M***


## Starter Pack – available online

The Starter Pack is specific guidance to help organisations quickly complete the Starting maturity stage of the Adaptation Capability Framework. It is particularly helpful for those with limited prior knowledge of adaptation or in organisations where adaptation work is just beginning.





[adaptation.scot/take-action/public-sector-starter-pack](https://adaptation.scot/take-action/public-sector-starter-pack)

# Appendix: CACF Tasks Matrix

## Starting

 <p>UNDERSTANDING THE CHALLENGE</p>	 <p>ORGANISATIONAL CULTURE &amp; RESOURCES</p>	 <p>STRATEGY, IMPLEMENTATION AND MONITORING</p>	 <p>WORKING TOGETHER</p>
<p>UC1A LEARN about Scotland's changing climate and impacts</p>	<p>OC1A CONSIDER how adaptation fits with your organisation's objectives</p>	<p>SIM1A CONSIDER how you contribute to Scotland's adaptation outcomes</p>	<p>WT1A DEFINE your objectives and opportunities for joined up working</p>
<p>UC1B DEVELOP understanding of climate risk and vulnerability</p>	<p>OC1B IDENTIFY resources already available for adaptation</p>	<p>SIM1B IDENTIFY existing adaptation work within your organisation</p>	<p>WT1B IDENTIFY relevant groups, partnerships and forums</p>
<p>UC1C RECORD and CONSIDER the impact of recent weather events on your organisation</p>	<p>OC1C IDENTIFY key internal stakeholders for adaptation</p>	<p>SIM1C DEFINE strategic adaptation outcomes and/or vision</p>	<p>WT1C JOIN/PARTICIPATE in relevant professional and adaptation networks.</p>





## Intermediate

 <p>UNDERSTANDING THE CHALLENGE</p>	 <p>ORGANISATIONAL CULTURE &amp; RESOURCES</p>	 <p>STRATEGY, IMPLEMENTATION AND MONITORING</p>	 <p>WORKING TOGETHER</p>
<p>UC2A MAP OUT how your organisation's functions might be affected by climate change</p>	<p>OC2A ENGAGE with colleagues to optimise adaptation opportunities</p>	<p>SIM2A IDENTIFY a range of potential adaptation actions</p>	<p>WT2A ENGAGE with relevant groups, partners and forums</p>
<p>UC2B CONSIDER scenarios for future climate change impacts</p>	<p>OC2B DEFINE resource requirements to plan and deliver adaptation</p>	<p>SIM2B IDENTIFY plans, policies and procedures that can include climate adaptation</p>	<p>WT2B CO-ORDINATE with partners to deliver initial actions</p>
<p>UC2C ENGAGE with stakeholders using participatory approaches</p>	<p>OC2C ESTABLISH governance arrangements for adaptation</p>	<p>SIM2C DELIVER initial adaptation actions</p>	

## Advanced

 <p>UNDERSTANDING THE CHALLENGE</p>	 <p>ORGANISATIONAL CULTURE &amp; RESOURCES</p>	 <p>STRATEGY, IMPLEMENTATION AND MONITORING</p>	 <p>WORKING TOGETHER</p>
<p>UC3A CARRY OUT climate change risk assessment</p>	<p>OC3A ENSURE key people are responsible for adaptation actions</p>	<p>SIM3A APPRAISE adaptation options</p>	<p>WT3A FORMALISE partnership working</p>
<p>UC3B INTEGRATE climate adaptation knowledge into internal training and procedures</p>	<p>OC3B DEVELOP an investment plan to mobilise resources for adaptation</p>	<p>SIM3B DEVELOP an adaptation strategy and action plan</p>	<p>WT3B DEVELOP communication activities with partners</p>
<p>UC3C IMPROVE understanding of stakeholder needs</p>		<p>SIM3C DEVELOP a monitoring approach for achieving your adaptation outcomes</p>	

## Mature

 <p>UNDERSTANDING THE CHALLENGE</p>	 <p>ORGANISATIONAL CULTURE &amp; RESOURCES</p>	 <p>STRATEGY, IMPLEMENTATION AND MONITORING</p>	 <p>WORKING TOGETHER</p>
<p>UC4A</p> <p>UNDERTAKE project-level risk assessment</p>	<p>OC4A</p> <p>REVIEW and update governance arrangements for adaptation</p>	<p>SIM4A</p> <p>IMPLEMENT a programme of adaptation actions</p>	<p>WT4A</p> <p>ENHANCE long-term partnership working</p>
<p>UC4B</p> <p>MAINSTREAM climate change risk assessment</p>	<p>OC4B</p> <p>SECURE resources to plan and deliver adaptation</p>	<p>SIM4B</p> <p>ADOPT an adaptive management cycle for adaptation planning</p>	<p>WT4B</p> <p>LEAD in networks and peer organisations-</p>
<p>UC4C</p> <p>IDENTIFY knowledge gaps, seek expertise and foster links with research and innovation</p>			



# Adaptation Scotland

supporting climate change resilience



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