

CLIMATE-MATCH

A PRACTICAL GUIDE TO
CLIMATE CHANGE ADAPTATION:
Policy, Data, and Risk
Assessment Tools for Malta



GOVERNMENT OF MALTA
MINISTRY FOR THE ENVIRONMENT,
ENERGY AND PUBLIC CLEANLINESS



Climate-MATCH

Climate-MATCH — Mainstreaming of Climate Adaptation for Horizontal Coordination — represents a major step forward in embedding climate change adaptation across National Government in Malta.

It delivers a coordinated, end-to-end composite framework that links national policy, shared risk information, and asset-level assessments into one complete set of guidelines and tools, linked and built as one system.

This framework supports Maltese ministries and authorities in building capacity to strengthen climate-resilient planning, improving data governance, and applying consistent, evidence-based climate risk assessment — turning adaptation policy and planning into practical operational action.

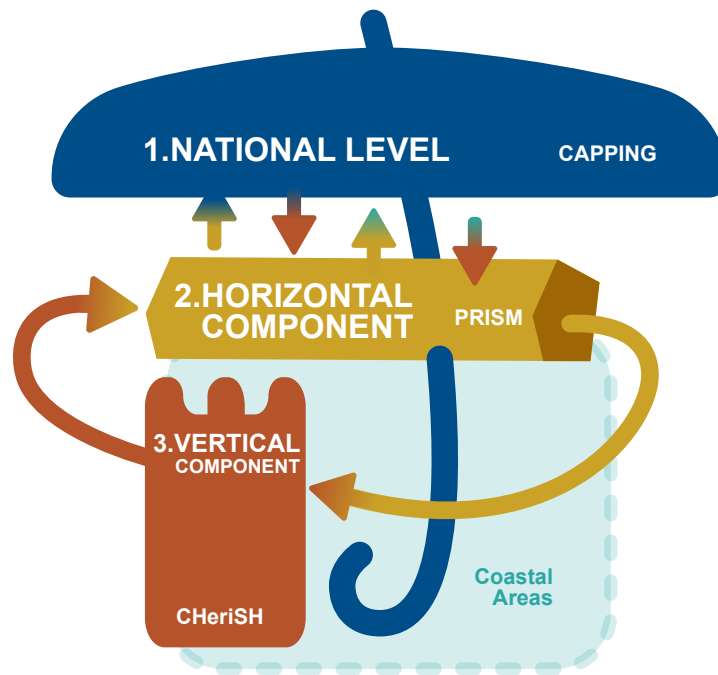
THE PROCESS

Effective climate adaptation depends on a structure that links policy direction and planning, with shared data and information systems, and comprehensive risk assessments.

To support this, a three-tier framework has been developed, each tier addressing a different dimension of climate resilience:

- 1 POLICY AND PLANNING TOOLS FOR CLIMATE ADAPTATION**
A national umbrella framework that guides coherent climate change adaptation policy and planning
- 2 CLIMATE RISK INFORMATION AND DATA SHARING TOOLS**
A horizontal layer of climate risk information and data governance, ensuring that ministries and authorities can work from shared, reliable evidence
- 3 ASSET LEVEL CLIMATE RISK ASSESSMENT TOOLS**
A detailed, asset level risk assessment methodology, demonstrated through coastal heritage sites





Together, these three tiers form a complete, end-to-end approach to climate adaptation:

Policy > Data > Risk Assessment = Actionable Planning

THE TOOLS AND RESOURCES

The full suite of climate adaptation tools and resources is being made available for use across ministries and public entities with different sectoral interests, for an integrated and coordinated approach to climate adaptation.

1. POLICY AND PLANNING TOOLS FOR CLIMATE ADAPTATION

These tools have been designed to provide strategic direction, policy alignment, and planning guidance for climate resilience. They provide the “Why” and “What” of climate change adaptation. Use these tools for:

- Developing or updating climate adaptation policies
- Aligning sectoral plans and strategies with national climate action priorities
- Embedding climate resilience into planning processes across government.

National Umbrella Framework for Climate Change Adaptation Policy and Planning

A national umbrella framework analyses and sets out how climate change adaptation may be integrated into Malta’s planning and governance systems.

It provides the foundation for coordinated and consistent, long-term adaptation across ministries.

Guidance for implementing the National Umbrella Framework for Climate Change Adaptation Policy and Planning

A practical guidance document that supports ministries in applying the national framework. It explains how to align sectoral plans, coordinate across ministries and entities, embed climate adaptation into decision making, and plan for sectoral and cross-sectoral adaptation actions.



2. CLIMATE RISK INFORMATION AND DATA SHARING TOOLS

These tools can be used when data, geospatial information, or tools for risk information sharing are required. They provide the technical “How” of climate adaptation—data, systems, and methods with a view towards harmonization of data and facilitating a common understanding' of the risks being addressed.

Climate Risk Assessment Guidelines

A standardised methodology for designing and implementing climate risk assessments. It defines hazard, exposure, vulnerability and provides a replicable workflow for all sectors, providing an agreed risk language for building a shared strategy for action.

Capacity Building Programme for Climate Risk Management

A training programme that builds capacity by disseminating knowledge and strengthens the skills needed to use climate-risk information, applying the guidelines, and collaborating across ministries according to their competencies and needs.

Framework for Climate Risk Data Management and Sharing

A governance model that clarifies roles, responsibilities, and cooperation mechanisms for managing and sharing climate risk information across government.

Blueprint for a Climate Risk Information Hub

A technical blueprint for a national platform that integrates geospatial datasets and climate risk layers. It outlines the system architecture, data standards, and user requirements for a future operational hub.

3. ASSET LEVEL CLIMATE RISK ASSESSMENT TOOLS

These tools are designed to be used when a detailed, asset-level climate risk assessment is needed and they are applicable directly especially for coastal heritage sites selected for demonstration purposes.

Use these tools for:

- Assessing climate risks to a specific site
- Understanding how hazards interact with local geomorphology
- Prioritising interventions for coastal heritage
- Producing a Cultural Heritage Risk Statement

Framework for Climate Risk Assessment of Coastal Heritage Assets

A detailed, asset level methodology that combines cultural significance with hazard, exposure, and vulnerability assessments.

It provides a structured, clear approach for evaluating climate risks to coastal heritage assets and can be adopted to assess risk to other assets, if adapted accordingly.

Guidance for Implementing the Framework for Climate Risk Assessment of Coastal Heritage Assets

A step-by-step guide to applying the methodology in practice, including guidance for the Excel-based assessment tool, data requirements, and interpretation of results.





WHICH TOOL DO YOU NEED?

IF YOUR OBJECTIVE IS TO...	USE THIS TOOL...
Develop or align national climate change adaptation policy; clarify roles and responsibilities of ministries/entities	National Umbrella Framework for Climate Change Adaptation Policy and Planning
Apply the National Umbrella Framework for Climate Adaptation in your ministry/entity	Guidance for implementing the National Umbrella Framework for Climate Change Adaptation Policy and Planning
Design a climate risk assessment	Climate Risk Assessment Guidelines
Access or share geospatial coastal climate risk data	Blueprint for a Climate Risk Information Hub
Clarify roles and responsibilities for climate risk data	Framework for Climate Risk Data Management and Sharing
Train staff on climate risk assessment or data use	Capacity Building Programme for Climate Risk Management
Conduct a detailed risk assessment of a specific coastal heritage asset	Framework for Climate Risk Assessment of Coastal Heritage Assets
Implement the asset-level methodology step by step for coastal heritage assets	Guidance for implementing Climate Risk Assessment of Coastal Heritage Assets
Conduct a climate risk assessment and implement an asset-level methodology for other assets.	Customise the above two tools according to the nature of the specific assets at hand, using expertise and stakeholder consultation in the field for validation.

COASTAL RISK AS A TEST CASE

Several tools described in this guide have been developed and tested in a coastal context. The coastline provided a practical and high-value environment for piloting tools for climate risk assessment and climate risk information and data management because:

- Small Island States face increased exposure to climate impacts, and many of Malta's most critical assets and economic activities are located along the coast
- Coastal areas experience some of the earliest and most visible climate pressures, making them a useful starting point for testing methods and data workflows
- Work undertaken through the **National Coastal Protection and Adaptation Strategy (C-COVER, 2021–2023)** had already identified challenges such as fragmented datasets, siloed information flows and limited cross entity coordination. It involved a national coastal risk assessment, recommended the information hub and presented opportunities for collaboration at the local, regional and national levels for coastal resilience planning.

Using the coast as a pilot environment enabled the project to develop and refine approaches to sectoral and cross-sectoral risk assessment and data sharing that support adaptation planning. However, the tools and methods described are not limited to coastal issues: they are designed to be scalable and transferable to other climate risks, sectors and asset types across Malta and can be adapted and customised to suit the nature of assets for which climate risk assessment and resilience are needed.



QUICK REFERENCE GUIDE

POLICY AND PLANNING

National Umbrella Framework for Climate Change Adaptation Policy and Planning
Guidance for implementing the National Umbrella Framework for Climate Change Adaptation Policy and Planning

RISK INFORMATION AND DATA GOVERNANCE

Climate Risk Assessment Guidelines
Framework for Climate Risk Data Management and Sharing
Blueprint for a Climate Risk Information Hub
Capacity Building Programme for Climate Risk Management

ASSET-LEVEL RISK ASSESSMENT

Framework for Climate Risk Assessment of Coastal Heritage Assets
Guidance for implementing Climate Risk Assessment of Coastal Heritage Assets

About the Climate-MATCH Initiative:

The **Climate-MATCH** 'Mainstreaming of Climate Adaptation for Horizontal Coordination' initiative (TSI-2023-COMMONCOAST 101145916), funded by the **European Commission's SG REFORM**, supports the **Ministry for the Environment, Energy, and Public Cleanliness (MEEC)** and the **Public Works Department (PWD)** of the **Ministry for Transport, Infrastructure and Public Works (MTIP)** to strengthen **horizontal coordination across sectors** for collaborative management and monitoring of climate change risks in the Maltese Islands.



GOVERNMENT OF MALTA
MINISTRY FOR THE ENVIRONMENT,
ENERGY AND PUBLIC CLEANLINESS



Concluded in 2026, the initiative comprised three complementary components. **CAPPING** provided a national instrument for multi-level, multi-sectoral climate governance. **PRISM** offered a platform for collaborative preparedness focused on coastal climate impacts. And **CHerISH** delivered tools to assess the structural vulnerability of coastal heritage assets.

Technical support was provided by **Maria Ferreira**, Project Coordinator from the **Coastal & Marine Union (EUCC)**, with expert teams led by **Jara Martinez** (**PRISM Component Lead**, **IHCantabria**, **University of Cantabria**, **Spain**), **Patrycja Enet** (**CAPPING Component Lead**, **Aktis Hydraulics**, **The Netherlands**), and **Prof. Ruben P. Borg** (**CHerISH Component Lead**, **University of Malta**, **Malta**).



This project is funded by the European Union via the Technical Support Instrument (TSI) in cooperation with the European Commission's Reform and Investment TaskForce (SG REFORM).

ABOUT