

Venice Climate Assessment Report (VAR) Provisional Outline

0. Summary for Policymakers

Synthesizes the report's key insights into clear, actionable guidance. Designed for decision-makers and stakeholders, it lists the main climate risks to Venice with quantified impacts and future projections, and it also outlines climate priorities, challenges, and opportunities.

1. Framing the Venice climate challenge

Sets the overall narrative by explaining the unique vulnerabilities of Venice, explains key concepts, provides methodological clarity, and frames the VAR's contribution to local sustainable development.

1.1 Context and narrative

1.2 Concepts, methods, and knowledge systems

2. Climate change observations and projections

Outlines observed and projected climate changes, extreme weather events, and compound (considering marine, watershed, and atmospheric drivers) extreme phenomena that are relevant for the local environment and frames local climate changes within the global context.

2.1 Atmospheric climate trends and projections

2.2 Marine and coastal climate dynamics

2.3 Hydrological and watershed drivers

2.4 Compound and extreme weather events

3. Impacts and risks

Assesses current and future impacts across local sectors, vulnerable systems (including natural systems) and citizens. Informs decision-makers about who and what is most at risk, helping to target protection efforts, allocate resources, and build resilience strategies.

3.1 Sectoral Impacts

3.2 Cumulative impacts, Interactions, feedback loops and cascades with other (non-climate) drivers

3.3 Impact cost analysis

4. Adaptation and resilience options

Examines systemic, community-led, technological, and institutional responses that strengthen long-term climate resilience in Venice and its lagoon. Adaptation is the primary focus, while highlighting how well-designed measures can also deliver mitigation co-benefits and avoid maladaptation. Emphasizes the role of local knowledge, heritage practices, and community-based approaches alongside technological and infrastructural interventions, showing how place-based actions contribute to broader climate-resilient and lower-carbon development pathways.

4.1 Climate-resilient infrastructures, technologies, and local adaptive capacity

4.2 Nature-based and ecosystem-based solutions for resilience and climate regulation

4.3 The adaptation–mitigation nexus in the Venice

5. Policies, governance, economic instruments, and financing

Analyses how governance structures shape transformation. Examines financial, trade, and valuation tools enabling or hindering local action.

5.1 Governance systems and interfaces

5.2 Community considerations for enabling effective transformation policy

5.3 Financing

5.4 Monitoring, evaluation, and policy effectiveness

6. Venice and its lagoon transformation for a sustainable future

Envisions incremental and transformative adaptation leading to long-term sustainable pathways. Provides example pathways to support the functional integrity of the lagoon-city system under chronic and acute stress, rather than reacting to individual flood events. This emphasizes system-level capacity- combining ecological restoration, governance, and infrastructure- to absorb shocks, adapt over time, and continue delivering cultural, social, and economic value despite ongoing environmental change. Resilience is discussed as a long-term, dynamic strategy that continues Venice's long history of coping with uncertainty, cascading risks, and changing conditions over time.