

## ***Coastal resilience and adaptation to climate change: a technical-scientific and financial policy challenge for coastal security and the sustainable development of the Blue Economy***

*This is the theme of the international conference held on 5 November 2024 as part of the 27th Edition of Ecomondo, the important Rimini Green Technology fair, organized by the Emilia-Romagna Region in collaboration with the Ecomondo Scientific Technical Committee, ISPRA, GNRAC (National Group for Research in the Coastal Area), Legambiente, CRPM (Conference of Maritime Peripheral Regions of Europe).*

Is the current EU and National climate action enable to address the challenges of adapting to the ongoing climate change? From the reduction of vulnerability to the strengthening of readiness of public policies in coastal territories? It is a question that institutions at different levels and the scientific community are called to answer for coastal territories and population safety and for the sustainable development of coastal-based Blue Economy sectors in a changing climate scenario.

Although the **capacity to analyze** and understand the impacts of climate change, the forecasting of future scenarios and, from a technical point of view, **the ability to design** and implement specific solutions, have progressed significantly in recent decades, much effort still needs to be made to improve access to available EU/national funds and to address the lack of specific programs and/or financial mechanisms to enable regional and local authorities in accelerating the delivery of **important innovative adaptation solutions**.

According to a recent study ([www.nature.com/articles/s41598-023-48136-y](http://www.nature.com/articles/s41598-023-48136-y)) by the European Institute for Economics and Environment - EIEE, the sea level rise due to climate change could cost Europe up to €872 billion by 2100, due to the potential economic impacts on 271 maritime regions, with particular emphasis in the Mediterranean where more than 40,000 km of coastline are at risk.

**Maritime Regions** are at the forefront regarding these impacts. Although they already have very ambitious and consolidated adaptation strategies, re-designing coastal areas and make them more resilient to climate change effects (sea level rise, floods, storm surges, marine ingression, coastal erosion, wildfires, droughts, etc.,) needs relevant investments and a considerable administrative effort. In addition, in order to implement large-scale intervention programs, the Regions have to face legislative barriers, high fragmentation of funding sources, diversification and complexity of procedures and eligibility criteria, which often discourage or cause significant delays in implementation.

In this regard, special attention must be paid to the new generation of **National Adaptation Plans** (NAPs), which should ensure an effective multilevel and multi actors governance and provide higher funding and administrative support for Regional and Local authorities (e.g. see recommendations delivered by the European Commission under its last assessment of the NAPs). An ambitious political response on funds should be provided as soon as possible, both at European and National level, to allow Regional and Local Authorities to successfully implement their adaptation strategies and plans.

The Ecomondo event aims **to take stock of the state of scientific knowledge on the effects of climate change** on our coasts and on the future scenarios to be faced, as well as on adaptation policies and good practices implemented in Europe.

Also this year, the appointment on these issues at Ecomondo aims to continue the strategic mission of "key forum" on innovative solutions and food for thought on the need to increase the financial endowment and facilitate access to funds for the adaptation of coasts and territories to the effects of climate change, hopefully already for the post-2027 programming period. Below are the presentations, the speeches of the Speakers and the video of the conference which was broadcast live with a large participation of the public (155 presences, of which 120 in the room and 35 in connection with the live video).



## Video of the Coastal Resilience and Adaptation to Climate Change conference at Ecomondo 2024

[https://www.youtube.com/watch?v=FGyvdMPEt\\_4](https://www.youtube.com/watch?v=FGyvdMPEt_4)

The conference starts at 2:18:46, In correspondence with each Speaker is indicated the start time of his speech in the video.

PDF presentations can be downloaded from the boxes at the bottom of the page: <https://ambiente.regione.emilia-romagna.it/it/suolo-bacino/argomenti/difesa-della-costa/Resilienza-costiera-adattamento-cambiamenti-climatici>

**Session Chairpersons:** Enzo Pranzini, GNRAC (National Research Group on the Coastal Environment)  
Lorenzo Cappiotti, GNRAC (National Research Group on the Coastal Environment)  
Giuseppe Sciacca, CPMR (Conference of Peripheral Maritime Regions of Europe)  
Roberto Montanari, Emilia-Romagna Region

**Introduction to the works** Roberto Montanari, Emilia-Romagna Region (video: 2:18:46)

### SESSION 1 - State of the art and challenges

- European Climate Risk Assessment (EUCRA) overall results on climate risks, adaptation actions and policies, and focus on European marine and coastal ecosystems - Hans-Martin Füssel, European Environment Agency (EEA) and EUCRA coordinator (video: 2:32:20)
- Introduction Giuseppe Sciacca, CRPM (video: 2:48:00)
- Keynote speech: Increasing the resilience of coasts to coastal and oceanic risks. The Vision 2030 process - Nadia Pinardi, UN Decade Collaborative Center on Coastal Resilience (DCC-CR) (video: 2:55:50)
- Status of implementation of the National Plan for Adaptation to Climate Change - Fabiana Baffo, Ministry of the Environment and Energy Security (MASE) (video: 3:07:33)
- Implementation of European adaptation policies and the way forward - Elina BARDRAM, Director for Adaptation and Resilience, Communication and Civil Society Relations at DG CLIMA, European Commission and Head of the EU Mission on Adaptation to Climate Change (video: 3:24:33)

### SESSION 2 – Finding solutions

- Introduction Lorenzo Cappiotti GNRAC (National Research Group on the Coastal Environment) (video: 3:47:08)
- Accessibility to adaptation funds, financing for the implementation of the EU ACC strategy - Roberto Rando, Principal Advisor - Climate Office, Directorate for Operational Management and Policy Support, European Investment Bank (video: 3:48:00)
- Needs and perspectives of structural funds for climate change adaptation: use case in the ROP-FESR 2021-2027 in Emilia-Romagna and first lessons learned - Claudia Romano, Head of the Energy and Green Economy Area, Emilia-Romagna Region POR-FESR (video: 4:12:03)
- Climate change impact indicators in coastal areas: data as a guide for the identification of actions - Marco Picone, National Center for Environmental Characterization and Protection of the Coastal Strip, Marine Climatology and Operational Oceanography - ISPRA (Higher Institute for Environmental Protection and Research) (video: 4:31:08)
- The EU Blue Economy Report with a focus on the impacts of climate change along Europe's coasts - Michalis Voudoukas, Joint Research Centre, Economics of Climate Change, Transport and Energy Unit - European Commission (video: 4:45:09)

### SESSION 3 – Good Practices

- Introduction Enzo Pranzini, GNRAC (National Research Group on the Coastal Environment) (video: 6:31:00)
- Enablers and barriers to implementing nature-based solutions to build coastal resilience in Ireland - Eugene Farrell, University of Galway (Ireland) (video: 6:37:00)
- Status of implementation of the "Parco del Mare" intervention on the Rimini waterfront, for the mitigation of the impacts of climate change - Anna Montini, Councillor for Ecological Transition, Environment, Sustainable Development, Blue Economy - Municipality of Rimini (video: 6:57:33)
- Adaptation strategies adopted by the Hauts-de-France Region against coastal erosion and marine ingression - Bertrand Coppin, Policy Officer - Hauts-de-France Region (video: 7:27:50)
- Adaptation to climate change in low and urbanized coasts, the case of Marina di Pisa - Lorenzo Cappiotti, GNRAC - University of Florence (video: 7:51:10)
- Session Chairs' conclusions (video: 8:17:17 to 8:22:20)