

GlobalCoast by CoastPredict

GlobalCoast is the framework for implementation of **CoastPredict**, a Programme of the **United Nations Decade of Ocean Science for Sustainable Development**.

GlobalCoast will demonstrate a fit-for-purpose **coastal observing and prediction system** that delivers innovative products and services for coastal resilience in collaboration with partners and co-designed with local communities and stakeholders.

A first GlobalCoast survey in 2023 established the **GlobalCoast Network** of over 135 Pilot Sites as the locally-led foundation of the initiative. **The initiative is now open for more Pilot Sites to get involved.**

A TRANSFORMATIVE APPROACH

GlobalCoast's goal is to co-create globally replicable solutions, standards, and applications that strengthen resilience in both natural and built coastal environments. These solutions will help decision-makers and coastal communities to:

- Manage short-term risks such as storms, flooding, erosion and ecosystem degradation through improved forecasting and early-warning systems.
- Plan for long-term adaptation and mitigation in the face of climate change and ocean transformation.

WHO'S BEHIND GlobalCoast?

GlobalCoast is the practical implementation of CoastPredict, a Programme of the United Nations Decade of Ocean Science for Sustainable Development



**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development

LEARN MORE

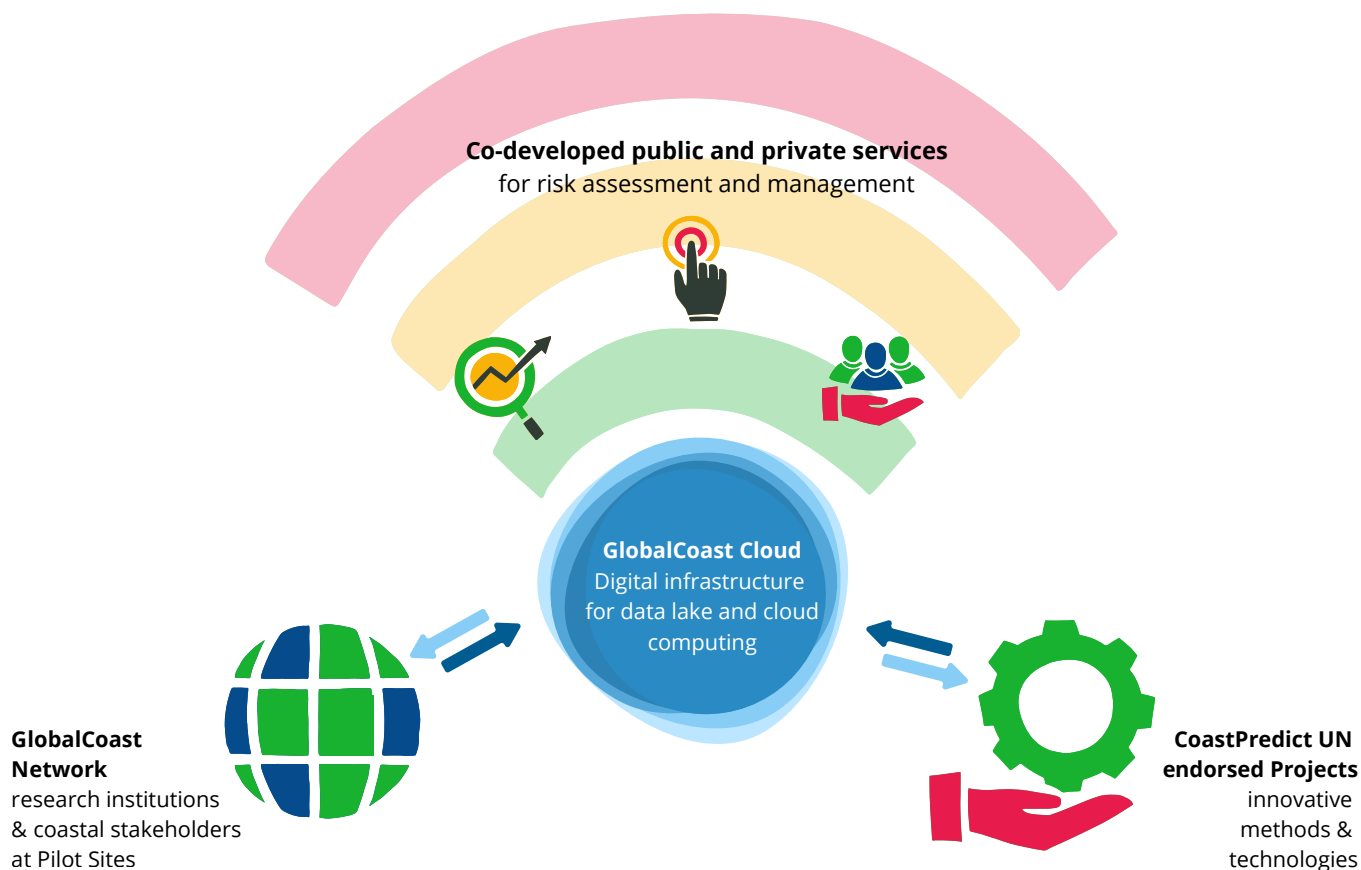
coastpredict.org/globalcoast

Find more details about the GlobalCoast Network and Pilot Sites, and the link to submit or update a Pilot Site on the CoastPredict webpage



GlobalCoast will:

- Develop and exchange replicable solutions
- Enable public-private collaboration
- Engage cloud technology to support services
- Connect coastal solutions globally



POTENTIAL SERVICES

- **Multi-hazard Early Warning Systems** for: storm surge; inundation; coastal erosion; marine heat waves; pollution (chemicals, debris); ecosystem adverse conditions e.g seaweed transport, harmful algal blooms, ocean acidification, hypoxia.
- **Assessment and reporting services for adaptation planning:** climate downscaled data; specific climate indicators; adaptation options; interactive atlas delivery.
- **Case-specific Digital Twins**, testing for: Nature-Based Solutions; mariculture siting & management; coastal habitat protection.
- **Situational sea awareness and Search & Rescue.**

The GlobalCoast Network

The **first GlobalCoast survey** was carried out by CoastPredict in **2023** to collect input from Pilot Sites around the world. The result is the **GlobalCoast Network** - an international community, bringing together researchers, governments, NGOs, the private sector, and coastal communities to co-design solutions for resilience.

To date, the network includes:

- **Over 135 Pilot Sites** identified worldwide (see map below)
- Participation from **more than 230 partner institutions** in 75 countries

A **Memorandum of Understanding** has been signed by almost 60 organisations to establish collaboration with the GlobalCoast Network. More information about the MOU here: coastpredict.org/globalcoast-network-mou/



Map of GlobalCoast Pilot Sites - each pin point represents a Pilot Site. The colours are based on different 'regions of the Global Coastal Ocean' adapted from Robinson and Brink (2010)

Visit the [interactive map here](https://coastpredict.org/globalcoast-network-mou/)

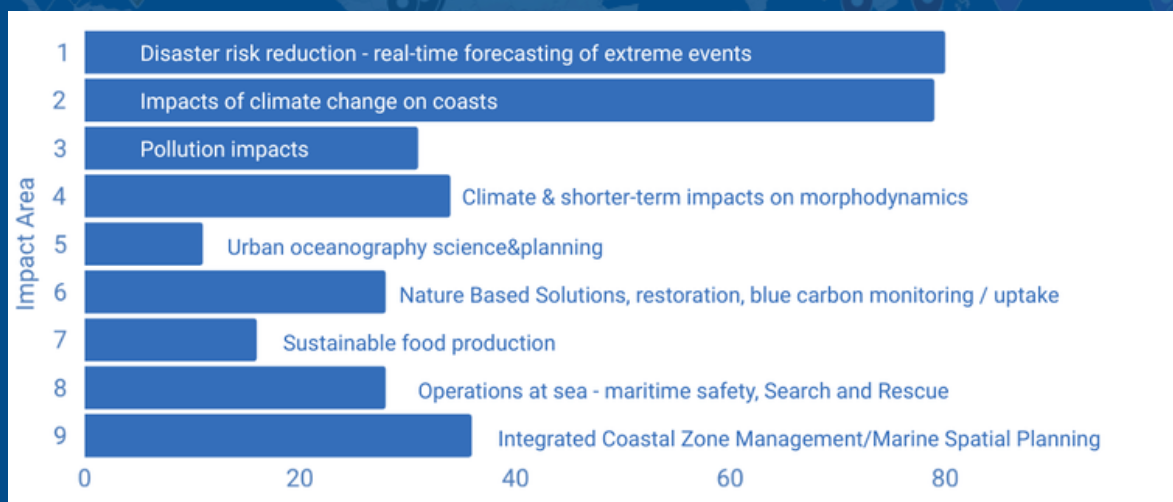
Insights from the first GlobalCoast survey

PRIORITY IMPACT AREAS FOR COASTAL COMMUNITIES

Pilot Site partners were asked to identify up to three priorities for their site. This revealed strong demand for:

- improved early warning systems to anticipate storm surge, harmful algal blooms and coastal erosion for example;
- climate downscaling to address long-term coastal impacts.

These priorities highlight a shared vision - immediate response capabilities must be complemented by robust strategies for long-term adaptation and mitigation.

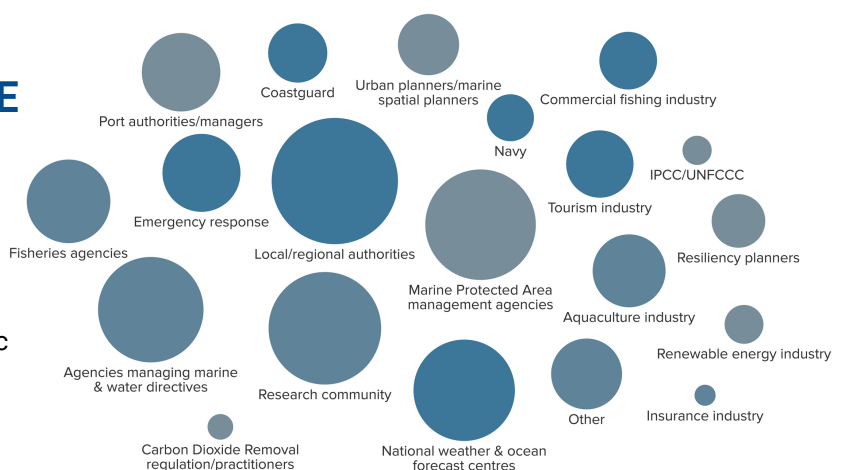


UNDERSTANDING WHO THE END-USERS OF THE INFORMATION ARE

For GlobalCoast implementation we must work with key stakeholders and end-users who need timely information for emergency response and strategic Insights to support long-term sustainable planning.

Pilot Site partners identified key end-users of coastal information and services. The most frequently relevant stakeholder types across

all Pilot Sites included public authorities, the research community and marine agencies, private sectors (such as tourism, ports and aquaculture), as well as local communities and NGOs.



Stakeholder types: the size of each circle represents the relative relevance of that stakeholder type, across all Pilot Sites

By integrating community needs and science, GlobalCoast aims to bridge gaps between knowledge production and its real-world application.

Pilot Sites submission 2025

INTERESTED?

Here's all you need to know to get involved in GlobalCoast



HOW CAN I GET INVOLVED?

You can propose a Pilot Site to be part of GlobalCoast by completing the survey (see the link below or scan the QR code on this brochure). The survey gathers details from coastal Pilot Sites mapping existing work, infrastructure, and capacity; identifying gaps; and capturing regionally relevant challenges and aspirations for coastal resilience.



WHO CAN PROPOSE A PILOT SITE?

There are no specific requirements to participate in the survey. If you have or contribute to observational or predictive capacity in coastal regions, or know of areas suitable for testing and applying technology and products, you are encouraged to join the initiative and submit a site.



HOW WILL GlobalCoast ACTIVITIES AT PILOT SITES BE FUNDED?

GlobalCoast is a framework that leverages existing funding and initiates new funding opportunities for this transformative action by the CoastPredict community and partners. Public-private partnerships will play a key role in driving the rapid transition from science to the delivery of user-driven products and applications.



WHY SHOULD I PROPOSE A PILOT SITE?

GlobalCoast offers an opportunity to collaborate through the CoastPredict framework with leading experts and to benefit from cutting-edge science and technological advances in observing, modelling, AI, cloud-based computing, and end-user service and product development. This is a chance to enhance and accelerate existing initiatives for local benefit while contributing to globally deployable solutions for coastal resilience.



WHAT WILL THE OUTCOMES BE?

Deployment and testing of fit-for-purpose coastal observing and prediction systems at Pilot Sites, delivering user-driven innovative products and services for coastal resilience in collaboration with local stakeholders.

Please use this link to complete the survey and submit a Pilot Site in your coastal region: <https://www.surveymonkey.com/r/globalcoast-main-11-2025>