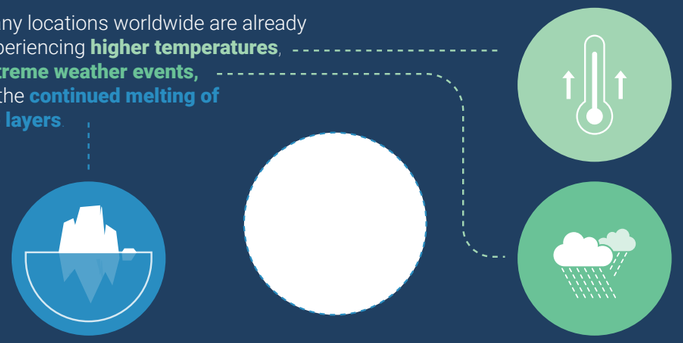
1

CLIMATE CHANGE is the ultimate challenge of our times, as shown by different evidences.

Many locations worldwide are already experiencing **higher temperatures**, **extreme weather events,** or the **continued melting of ice layers**

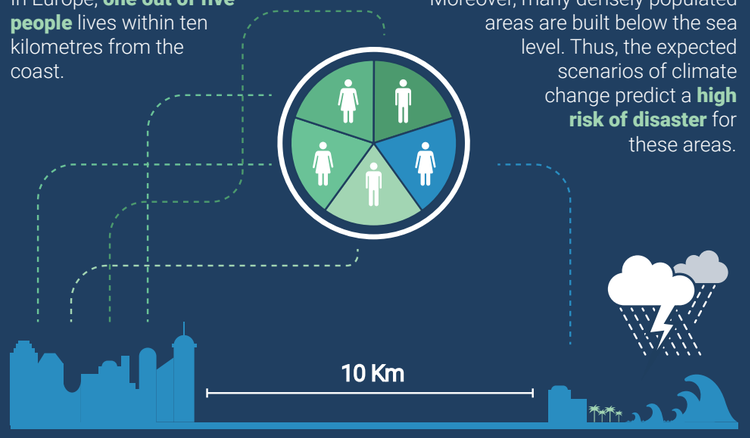


Many **littoral areas** may be at risk by climate change hazards.

3

In Europe, **one out of five people** lives within ten kilometres from the coast.

Moreover, many densely populated areas are built below the sea level. Thus, the expected scenarios of climate change predict a **high risk of disaster** for these areas.



8

The goals of the **LIFE ADAPTA BLUES** project exploit the **management and restoration of EVEs** to enhance **adaptation** to climate change in European Atlantic coastal areas.

1 **Standardization** of procedures for the assessment of the climate change services provided by estuarine ecosystems.

3 Developing **technical recommendations** based on EVEs for three Atlantic European regions.

2 Implementation of a **pilot adaptation project** based on EVEs in the Mondego estuary (Coimbra, Portugal).

4 **Exploring** financial mechanisms (i.e. with the insurance sector) to support estuarine restoration based on the climate change services provided by EVEs

5

The **"LIFE ADAPTA BLUES"** project relies on **estuaries and estuarine vegetated ecosystems (EVEs)** to alleviate the impact of climate change in coastal areas.

Nevertheless, European estuaries have been threatened by many human-based hazards.

As a consequence, the estuarine ecosystem extension has **decreased.**

LAND RECLAMATION

EUTROPHICATION

SPREAD OF INVASIVE SPECIES

Two thirds of the estuarine ecosystems have been lost since the beginning of the 20th century.

7

Estuarine ecosystems can **enhance the adaptation** to climate change in coastal areas in many ways:

BUFFERING
of flooding and extreme sea levels.

PROTECTION
from erosion by moderating wave energy.

LAND BUILDING
through sediment accumulation and soil elevation.

STORAGE OF CO2
and thus, additional climate change mitigation.

COMMUNITY SUPPORT by enhancing services such as fisheries, water quality improvement and cultural benefits.

When fighting climate change, there are **two strategies:**

MITIGATION entails reducing climate change driving forces (i.e. reducing CO2 emmisions). Its goal is to avoid human interference in the climate and allow ecosystems to adapt naturally.

ADAPTATION involves adjusting to actual or expected future climate. Its goal is to reduce our vulnerability to climate change effects and even to take advantage of some of them.

The **LIFE ADAPTA BLUES** project approach is to use **nature-based solutions** for the **adaptation** to climate change of coastal areas.

With the contribution of the LIFE Programme of the European Union.

Partners

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ADAPTA BLUES

WORKING WITH NATURE NOT AGAINST IT

The **"LIFE ADAPTA BLUES"** project proposes a new strategy to **counteract the effects of climate change** in Atlantic European coastal areas.

This scope is known as **NATURE-BASED SOLUTIONS**

This vision provides actions that are **sustainable, cost-effective** and **flexible** to adapt coastal areas to climate change risks.

Thus far, traditional coastal defences have been based on built engineering measures like **dykes or seawalls.**

Coastal managers worldwide are considering alternative solutions that take advantage of **nature processes and species** provided by **coastal ecosystems.**