INSTALL ARTIFICIAL REEFS

OBJECTIVE

Reduce wave energy and protect the beach from erosion.

DESCRIPTION

Artificial reefs are rubble mound breakwaters of typically single-sized stones with a crest at or below sea level. They are usually constructed offshore, (often parallel to the shore. They are usually less intrusive than paintbrushes and depending on orientation) can have less impact on longshore processes. They can be continuous or segmented.
For the construction of these structures, the design must be thought based on the natural characteristics of the sites because otherwise the impact on the coast can be very important. The installation of these facilities must be part of a global adaptive management policy.

EXPECTED RESULTS

Reefs can improve biodiversity by providing substrates for benthic species (flora and fauna) and become attractive for snorkelling.

RESULT INDICATORS

Area of protected beach [m^2].

INVOLVED ACTORS

Local communities and government at different levels.

EXPECTED TIMELINE FOR ACTION

- Long term (> 10 years)

BEST PRACTICES

- Flanders

CRITICALITIES

They can modify longshore drift.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Grey

SECTOR OF ACTION

- Coastal management

CLIMATE IMPACTS

- Coastal erosion
- Extreme precipitation
- Floods

IMPLEMENTATION SCALE

- Association of municipalities
- Municipality
- Province

SOURCE

https://climate-adapt.eea.europa.eu/metadata/adaptation-options/groynes-breakwaters-and-artificial-reefs