STORM SURGE GATES / FLOOD BARRIERS

OBJECTIVE

Protect urban areas and infrastructure where storm surges and sea flooding could have major impacts.

DESCRIPTION

Storm surge gates / flood barriers are fixed installations that, in normal conditions, allow water to pass and that, thanks to gates or bulkheads, can be closed in case of storm surges or spring tides to prevent flooding and It can be installed to close the sea mouth of a river or waterway. These barriers can be major infrastructure systems and are often linked with other flood protection measures, such dikes, seawalls and beach nourishment. Storm surge barriers are normally used to protect urban settlements and infrastructures heavily affected by storm surges and sea flooding.
Their number in Europe is rather limited due to the heavy construction costs.

EXPECTED RESULTS

Provide protection for settlements and infrastructure against seaward storm surges.

RESULT INDICATORS

Money saved by avoiding flooding [€]

INVOLVED ACTORS

Stakeholders and local authorities.

EXPECTED TIMELINE FOR ACTION

- Long term (> 10 years)

BEST PRACTICES

- UK

CRITICALITIES

High costs for construction and maintenance.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Grey

SECTOR OF ACTION

- Coastal management

CLIMATE IMPACTS

- Extreme precipitation
- Floods

IMPLEMENTATION SCALE

- Association of municipalities
- Municipality
- Province

SOURCE

https://climate-adapt.eea.europa.eu/metadata/adaptation-options/storm-surge-gates-flood-barriers