The EUROPEAN CIVIL PROTECTION & the project SAVEMEDCOASTS-2

address the need to mitigate disasters induced by rising sea levels specifically for communities living along the Mediterranean coast. **SAVEMEDCOASTS-2** assesses the risk and supports local stakeholders to face the expected effects of sea level rise in the coming years. The project's Case Studies are the **VENICE** lagoon and the **BASENTO** river mouth (Italy), the **EBRE** delta (Spain) and the **CHALASTRA** plain (Greece); here **SAVEMEDCOASTS-2** carries out the KnowRiskFlood risk communication campaign.

Between **ADAPTATION** and **MITIGATION**

ISTITUTO NAZIONALE

DI GEOFISICA E VULCANOLOGIA

INGV

CITTA' DI VENEZIA

Scientists, worried about sea level rise, study causes and origins; engineers design barriers to protect the coasts; urban planners shape the smart and resilient cities of the future. We should strive to reduce greenhouse gas emissions into the atmosphere. Citizens must adapt to the effects of sea level rise to build a more resilient society. In the long run, we will mitigate the effects and "flatten the curve" of sea level rise. Each of us can give his own contribution. JUST ACT NOW!



STUDENTS TODAY, LEADERS TOMORROW

SAVEMEDCOASTS-2 specifically targets schools in the four Case Studies through the KnowRiskFlood education campaign to increase knowledge and promote awareness. SAVEMEDCOASTS-2 scientists discuss with students and teachers evidence, causes, effects and solutions to face the consequences of the Sea Level Rise.

JOIN THE PROJECT!



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sea level rise scenarios along the mediterranean coasts

SEA LEVEL RISE is a Global threat

High Water in Venice often happens... we are used to it... in the last few years it has been much more frequent ... this concerns us

Both in Venetians' perception and in real measurements the High Water phenomenon is getting more frequent and intense in the last years. However, this is not a problem just affecting Venice! Sea level is rising worldwide and since the XIX century is rising faster and faster.

The major reason for this is global warming, that in turn causes the melting of ice glaciers and the thermal expansion of the oceans. In addition, where land is sinking (subsiding), the sea level is rising much faster.

While sea level rises, coastal areas turn into lagoons and swamps, river floods have larger impacts. The effects of storms, coastal erosion and tsunami are amplified.





KNOW CAUSES to mitigate effects

Global warming and land subsidence are caused by both natural and anthropogenic phenomena. Human activities have unprecedented impacts on the Earth System. In the last century the heavy industrial development caused a worrying increase of the greenhouse effect and in turn brought mean global temperatures and **Sea Level** to values no longer sustainable.

AN UNCERTAIN future

If greenhouse gas emissions do not decrease the sea level will continue to rise, reaching by 2100 even more than 1 meter above today's level and several meters in the next hundred years.

Small low lying islands and coastal plains will be flooded. **Sea Level Rise** affects billions of people living in coastal areas around the world. In some countries people are already forced to move away from their homes to live in inner areas.

YEAR 2100 scenarios

million people are at risk.

THE MEDITERRANEAN SEA IS RIMMED BY MANY COASTAL PLAINS. The Venice lagoon and the Basento river mouth in Italy, the delta of the Ebro river in Spain, of the Rhone river in France, of the Nile river in Egypt and the coastal plain of Chalastra in Greece, are among the areas most exposed to coastal flooding. Here more than 1

The diagram shows the expected sea levels for two climatic scenarios in the Venice lagoon up to 2100: **blue** is the scenario of minimum rise; **red** is the expected sea level rise if greenhouse emissions will continue to increase rapidly.