

# A novel approach in supporting the local authorities to define adaptation actions to climate change

Federica Flapp, Lia Gover, Elisa Sfiligoi, Martina Arteni, Sara Ursella, Dario Giaiotti, Elena Gianesini, Alessandro Minigher, Alex Pividori, Massimo Bagnarol, Simone Martini, Alessandro Acquavita, Denis Guiatti, Eddio Marini, Bogdan Rusjan, Cristina Moro, Moira Pittis

#### AdriaClim | PP11 | ARPA FVG

9th SISC Annual Meeting | 24 September 2021 S.4.1 – Predicting climate change in the context of risk and adaptation options

#### **Outline**

Scientific information on clim	ate change and the risk assessme	nt
--------------------------------	----------------------------------	----

- ☐ The adaptation actions as the result of participatory process
- ☐ The two interacting levels of the participation process
- ☐ The Project AdriaClim application for GoT<sup>(1)</sup> and lagoon pilot area

(1) GoT (Gulf of Trieste)

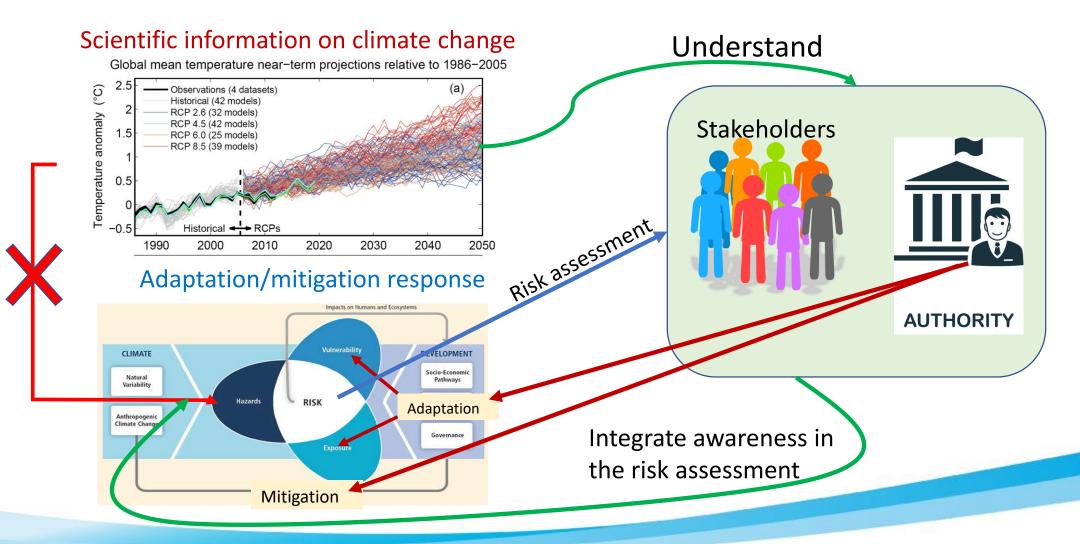




# Climate Change projections and adaptation/mitigation

☐ Scientific information on climate change (Hazard) does not flow naturally into the risk assessment

☐ Adaptation/mitigation actions does not follow sequentially from risk identification ad assessment



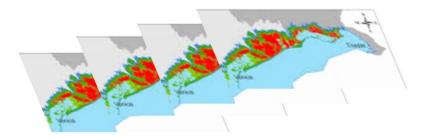


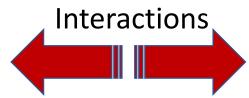




# Key elements of information transfer in adaptation plans

Technical and Scientific Communities





Problem identification

Quantitative risk evaluation

Solutions efficiency and effectiveness

Stakeholder and Authorities communities



Problem perception Problem identification Proposed solution

Response actions (Adaptation plans)

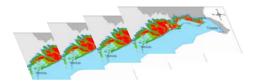
It is a participatory process





# Complex systems interactions may overlap

Technical and Scientific Communities



Community A

Community B

Community C

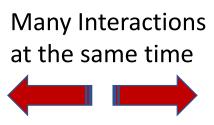
•••••

Community Z



Project Y

Project ...











Initiative M

Initiative N

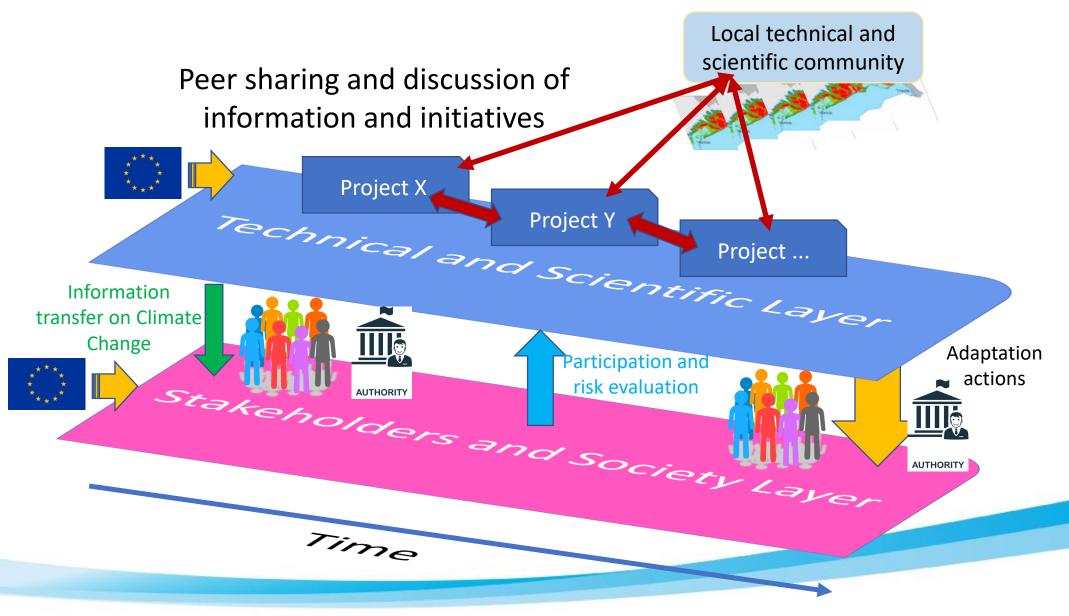
Initiative ...

- Redundancy of Information
- Stress
- Dispersion of resources





# The information flow in the AdriaClim novel approach



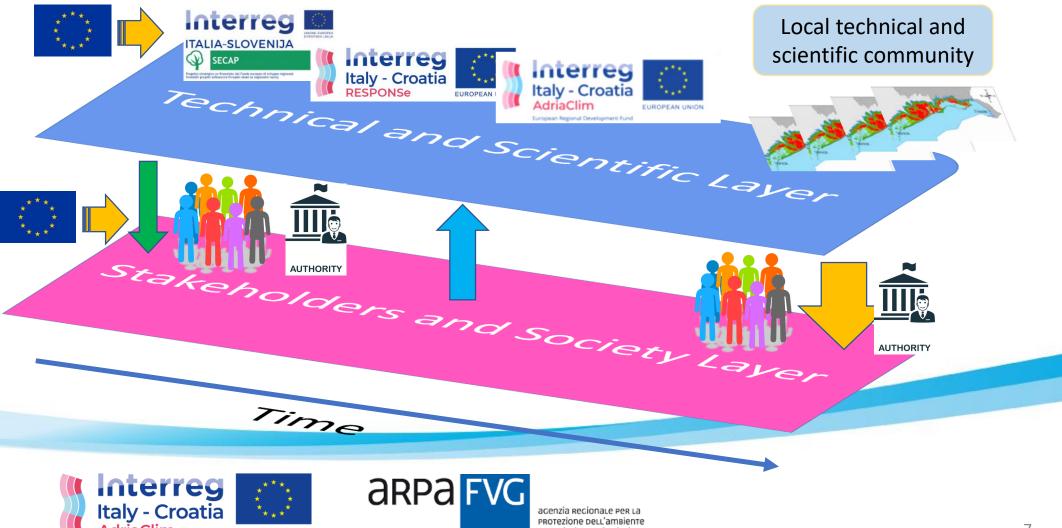




#### The specific case of AdriaClim, RESPONSe and SECAP

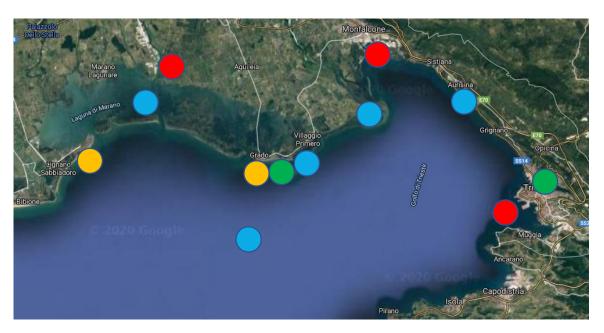
Methodologies and scientific knowledge comparison and agreement at Technical and Scientific Level (climate related hazards indicators, RVA ....)

before delivering to stakeholders



European Regional Development Fund

#### The AdriaClim – ARPA FVG pilot area



#### Pilot area features

- Environment type: coastal areas, lagoon and open sea
- Relevant ecosystems: Natura 2000 sites
- Important anthropic activities: harbors, tourism, historical sites





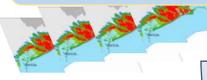






# The climate change information transfer common activity

Local technical and scientific community



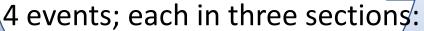
ARPA FVG
APE
INFORMEST
University of Trieste
Civil Protection
CReIAMO PA
Area Science Park
RAFVG











- Climate Change
- Local knowledge, tools and experience,
- Building knowledge together





#### 87 participants

- 2 Regional Authorities
- 4 Local Public Agencies
- 7 County Authorities
- 1 Cluster of Municipalities
- 3 NG and commercial





# The peer sharing and discussion of climate related risks



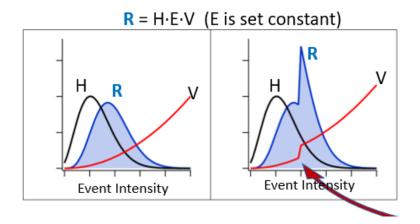
Information sharing on stakeholders risk perception

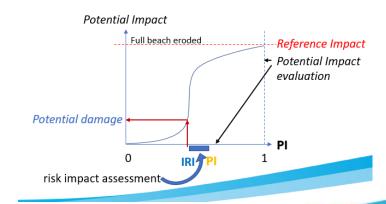




The search for a common approach to risk identification and communication













#### What next? Risks selection and action plans definition

- ☐ Risk selection according to stakeholders and authorities interests and capability to react
- ☐ Supply climate change scenarios information suitable to identify actions and monitoring indexes
- ☐ Support local authorities in identifying adaptation actions and adaptation plans



- Relevant ecosystems: Natura 2000 sites
- Important anthropic activities: harbors, tourism, historical sites







#### Conclusions

Responding to the climate change future scenarios with adaptation is a complex process, involving actor having different competences, interests and approaches to the reality
Resources focused on climate change adaptation may result in overlapping activities
The adaptation to the climate change is the result of a continuous interaction between involved actors
The two levels method reduce the stress on stakeholders and promote synthesis at the scientific level
The AdriaClim project is applying this strategy for the Gulf of Trieste and its lagoons





#### **CONTACT INFORMATION**

Partner Name: ENVIRONMENTAL PROTECTION AGENCY OF FRIULI VENEZIA GIULIA (ARPA FVG)

Contact person: Dario Giaiotti

Via Cairoli, 14 I-33057 Palmanova (UD) - ITALY

dario.giaiotti@arpa.fvg.it

Phone +39 0432 191 8048

http://www.arpa.fvg.it



