



# Climate services for a climate-resilient Europe

# Success stories, lessons learnt and remaining challenges

2 December 2020, Zoom platform 09:00-15:00

Organised by the European Commission - EASME Executive Agency and the Climateurope project

In the context of the <u>European Green Deal</u>, the <u>new EU Adaptation strategy</u> and the <u>Horizon Europe</u> <u>Adaptation Mission</u>, this workshop will:

- Showcase the added-value and potential of climate services to mainstream adaptation across several sectors and different levels of decision-making.
- Discuss barriers to full deployment of climate services, including institutional and legal issues, market barriers and capacity gaps.
- Share lessons learnt and best practices, in view to overcome existing constraints.
- Explore means of mobilizing resources for creating impacts at the scale needed to make Europe resilient to climate change.

The workshop builds on the results of a portfolio of Horizon 2020 projects, which contribute to the implementation of the <u>European Research and Innovation Roadmap on Climate Services</u>.

Stories from the H2020 projects are featured in the newly published <u>Climate Services CORDIS</u> <u>Results Pack</u>

Co-organizers: Climate-Fit.City, MED-GOLD, S2S4E and VISCA









# <u>AGENDA</u>

# 2 December 2020, 09:00-15:00 CET

## 09:00 -10:30 OPENING PLENARY SESSION

## From knowledge to action. Science - policy - practice dialogue

# Zoom Link: <u>https://us02web.zoom.us/j/85955781701?pwd=UW9jYVFjc1hBY1g1SGFZVWpkMy9hZz09</u> Meeting ID: 859 5578 1701, Passcode: 697424

Climate services translate the results of climate science into practical tools serving the needs of a wide range of users - from public authorities to business to citizens - to account for the climate factors in their decisions. Bespoke climate services can have a significant role in building resilience in the public and private sector and mainstreaming adaptation in policy making, planning and management decisions.

What is at stake, what are achievements so far, what are the challenges to fully deploy climate intelligence and services in support of the European Green Deal and the new EU Adaptation Strategy?

#### Welcome address

Patrik Kolar, Head of Department, EASME

## 9:00-9:30 Invited talks:

*The new Climate Change Adaptation Strategy in the context of the European Green Deal* **Claus Kondrup**, Senior expert, European Commission, DG CLIMA

*The Horizon Europe Mission on climate change adaptation, including societal transformation* **Asun Lera St Clair**, Program Director, Digital Assurance, DNV GL, Horizon Europe Climate Adaptation Mission Board

*Climate services development and delivery* **Chris Hewitt**, Head of International Climate Services, UK MET Office, Climateurope coordinator

#### 9:30 -10:15 Panel discussion with:

| <b>Marc Wüest</b> , Natural hazards expert,                       | <b>Wilfried Hager</b> , Department for Environment, Land                     |
|---|--|
| SwissRE   | Planning and Technology, City of Linz  |
| <b>Natacha Fontes</b> , <i>R&amp;D department, SOGRAPE winery</i> | <b>Roger Street,</b> Environmental Change Institute,<br>University of Oxford |

<u>10:15 – 10:30 Questions & Answers</u>

Chair: Onelica Andrade, DG RTD

# 10:30-10:45 Break

#### 10:45 - 12:15

# BREAK-OUT PARALLEL SESSIONS

Taking decision in a changing climate. Lessons learnt from H2020 demonstration projects. Invited talks with panel discussion (separate programme) You have the option to attend the following breakout sessions. Please feel free to move around the rooms if you wish, just click the corresponding breakout session meeting link shown below

- Policy roundtable on climate adaptation in renewable energy
- Regional and urban adaptation
- Climate adaptation in agriculture

\*The climate services tools developed by the projects and additional ones spanning further areas will be demonstrated in the afternoon session "adaptation playground" (see below)

#### 12:15 -13:00 Lunch break

#### 13:00 -13:30

#### Adaptation playground: Demonstrations of climate service tools, hands on sessions and tutorials

From projects CLARA, CLARITY, Climate.fit-City, H2020\_Insurance, IMPREX, INseaPTION, MED-GOLD, Prosnow, SENSES, S2S4E and VISCA (Separate programme)

#### 13:30 -14:45

#### **CLOSING PLENARY SESSION**

#### The way forward: Mobilizing resources, scaling up and replicate

# Zoom Link: <u>https://us02web.zoom.us/j/85955781701?pwd=UW9jYVFjc1hBY1g1SGFZVWpkMy9hZz09</u> Meeting ID: 859 5578 1701, Passcode: 697424

R&I projects results demonstrated the added value of climate services within specific use cases, for better managing risks, minimizing costs and planning more effectively. How can we capitalize on this experience by extending and replicate it? What can make the climate services more impactful in tackling the climate adaptation challenge? What are the resources available or to be mobilized to create impact at the scale needed to make Europe more resilient?

#### 13:30-13:50 Invited talks

*Research and innovation in support of the adaptation challenge* **Philippe Tulkens**, Deputy Head of Unit C3-Climate & Planetary Boundaries, DG RTD

C3S and the role of research in the operationalisation of climate services Carlo Buontempo, Director of Copernicus Climate Change Service (C3S)

#### 13:50-14:30 Panel discussion with:

**Blaž Kurnik**, Head of Climate Adaptation, EEA- European Environment Agency

Jaroslav Misyak, CMCC- Euro-Mediterranean Center on Climate Change **Elina Kamenitzer**, Head of Climate Office, Operations European Investment Bank

**Philippe Bougeault**, ANR- Agence Nationale de la Recherche, Joint Programming Initiative - Climate ERA4CS Coordinator

#### <u>14:30 – 14:45 Q&A</u>

Chair: Franz Immler, Head of Sector Climate Action, EASME

14:45-15:00 Closing remarks

# BREAK-OUT PARALLEL SESSIONS PROGRAMMES 10:45 – 12:15

You have the option to attend the following breakout sessions. Please feel free to move around the rooms if you wish, just click the corresponding breakout session meeting link



# Policy roundtable on

# climate adaptation in renewable energy

Meeting link: https://us02web.zoom.us/j/85955781701?pwd=UW9jYVFjc1hBY1g1SGFZVWpkMy9hZz09 Meeting ID: 859 5578 1701, Passcode: 697424

# Overview

During this break-out session, the H2020 project S2S4E (Climate Services for Clean Energy) will be hosting an online panel discussion based on the recommendations elaborated in the project's White Report. These recommendations result from the lessons learnt during the S2S4E project and address the next steps for climate services aimed at the energy sector.

The session includes experts on renewable energy and policy, who will engage in a discussion combining different points of view on the recommendations and beyond.

Policy recommendations (serving as the basis of the discussion)

(1) The Copernicus Climate Change Service should make sub-seasonal forecasts easily accessible to everyone in its Climate Data Store

(2) Security of supply measures should promote the use of sub-seasonal and seasonal forecasts

(3) Research into sub-seasonal and seasonal forecast systems should continue to increase their skill

(4) Promote the development of services consistent across all temporal scales

(5) Foster the integration of operational sub-seasonal and seasonal forecasts into quantitative models relevant to sectoral impacts and decision-making

(6) Need for more research to better understand the needs and decision-making processes of potential users of climate services

These recommendations are summarised in the <u>S2S4E Policy Brief</u>, while further information on the lessons learned in the project are available in the <u>S2S4E White Report</u>.

# Agenda

# 10:45-12:15 - 1.5h session

Each panel will involve a short presentation from one or more speakers to set the discussion topic, panel discussion and a Q&A session.

# 10:45 **Panel 1: Climate information needs & integration across energy systems' timescales** (*Recommendations 1 and 4*)

Speakers:

- Chiara Cagnazzo Sectoral Information System Manager, Copernicus Climate Change Service (C3S)
- **Roberta Boscolo** Climate & Energy Science Officer, World Meteorological Organization (WMO)
- Francisco J. Doblas-Reyes Director of Earth Sciences Department, Barcelona Supercomputing Center (BSC)

# 11:15 **Panel 2: Applications of climate forecasts in risk management** (*Recommendations 2 and 5*)

Speakers:

- **Sofia Simoes** Project Coordinator, Clim2power (and ERA4CS)
- Matteo de Felice Scientific Officer, Joint Research Centre, European Commission
- Beatriz Sinobas Ocejo Team Leader of Energy Security and Electricity, European
  Commission

# 11:45 **Panel 3: Communicating uncertainty: what is next in climate services for renewable energy** (*Recommendations 3 and 6*)

Speakers:

- Hannah Bloomfield Researcher, University of Reading
- Jana Sillmann Research Director, Centre for International Climate and Environmental Research (CICERO)
- Michael Christoph Energy Trading Meteorologist, EnBW Trading
- Ignacio Láinez Aracama Energy Assessment Director, EDP Renewables
- Hiba Omrani, Research Engineer at EDF

For an up-to-date agenda and speakers, please also visit the <u>S2S4E event page</u>.





# Regional and urban adaptation

# How can Climate Services support regional and urban adaptation challenges and integrated policy approaches?

**Organisers of the breakout session:** H2020 project <u>Climate-fit.City</u> and EASME

# Meeting link:

https://Universityofexeter.zoom.us/j/94376206912?pwd=VGJyUjJ0aWRTUElvYm9iWEQvcGlOUT09 Meeting ID: 943 7620 6912, Password: 888111

Input talks - sharing projects' experience: Contribution of Climate Services to urban adaptation and co-benefits for other policies

Moderation: Katrien Witpass, Arctik

# 10:45-10:50

• Welcome and objectives of the beak-out session, Katrien Witpass, Arctik

# 10:50 - 11:00

• Contribution of Urban climate services in climate adaptation decision-making and planning by Dr. Filip Lefebre, Climate Services coordinator VITO, project Climate-fit.City

# 11:00 - 11:10

• Socio-economic impacts of climate services for a climate-neutral and resilient city: examples from urban planning, health, mobility and tourism management *by* **Dr. Antonella Passani, Partners and Head of research,T6 Ecosystems, project Climate-fit.City** 

# 11:10 - 11:20

• Climate services for integrated urban management: synergies, co-benefits, and trade-off management in adaptation and mitigation policies by Dr. Roger Cremades, Leading PI of project CLISWELN (ERA4CS), currently at Wageningen University and Research

# 11:20 - 11:30

• Climate Services use case for strategic, urban and district renewal planning in Naples, (*by* **Francesca Pignataro, Municipality of Naples - Urban planning department, project CLARITY)** 

# 11:30-12:15

Roundtable discussion with Climate Services providers, city and policy representatives: Remaining challenges, gaps and opportunities for exploitation and replication

Additional participants:

- EU-Urban Agenda Partnership for Climate Adaptation, Coordinator Stefania Manca, City of Genova
- LIFE Roll-outClimAdapt project, Project coordinator Jürgen Schultze, Technical University Dortmund
- JRC Knowledge Centre for Territorial Policies, Carlo Lavalle, Senior Policy Officer





# Breakout session

# How can climate services support adaptation to climate change in Agriculture?

Organisers of the breakout session: H2020 projects MED-GOLD and VISCA.

Meeting link: <u>https://ncas.zoom.us/j/92242080874?pwd=WjNpMTFZcTVHZ04wbFVkRzBaMzhaUT09</u>

# Meeting ID: 922 4208 0874, Passcode: 560118

Moderation: Massimiliano Pasqui, CNR, project MED-GOLD

# 10:45 -11:25

Input talks - sharing projects' experience:

- Conflicting notions of reliability and usability of climate predictions by **Sandro Calmanti**, ENEA, project coordinator of MED-GOLD
- Quality of climate predictions at the seasonal-to-decadal time scale by **Nube González-Reviriego**, BSC, project MED-GOLD
- Challenges in using climate services from end-user perspective by Natacha Fontes, R&D manager at SOGRAPE VINHOS, project MED-GOLD
   Fernando Alves, R&D Viticulture Manager at SYMINGTON winery, project VISCA
   Valentina Manstretta, R&D manager at HORTA, project MED-GOLD
- Burning questions for the Common Agricultural Policy by **Andrea Toreti**, Senior Researcher at JRC, project-MED-GOLD

# 11:25-12:15

Roundtable discussion with Climate Services providers, users and policy-makers on remaining challenges, gaps and opportunities for exploitation and replication.

Additional participants:

- Josep Maria Solé Tasias, Meteosim, Project coordinator of VISCA
- **Adriana Ignaciuk**, Senior Economist and Team Leader in the Economic and Policy Analysis of Climate Change department at FAO.
- **Cindy Schoumacher**, Policy officer in the Bioeconomy & Food Systems unit at DG RTD, European Commission
- Michal Nekvasil, Policy officer in the Adaptation unit at DG CLIMA, European Commission

# **Adaptation Playground**

# Demonstrations of climate service tools, hands on sessions and tutorials

# <u>13:00-13:30</u>

# From H2020 and ERA4CS projects: CLARA, CLARITY, Climate.fit-City, H2020\_Insurance, IMPREX, INseaPTION, MED-GOLD, Prosnow, SENSES, S2S4E and VISCA

| Room A  | Room B   | Room C   |
|---|--|--|
| Chair: Alessia Pietrosanti, EASME   | Chair: Anna-Natasa Asik, EASME   | Chair: Thomas Vyzikas, EASME   |
| 4 slots of demo presentations   | 4 slots of demo presentations  | 4 slots of demo presentations  |
| with Q&A  | with Q&A   | with Q&A   |
| Zoom link:  | Zoom link:   | Zoom link:   |
| <u>https://us02web.zoom.us/j/859557</u>   | <u>https://Universityofexeter.zoom.us/j/</u>   | <u>https://ncas.zoom.us/i/9224208087</u>   |
| <u>81701?pwd=UW9jYVFjc1hBY1g1SG</u>   | <u>94376206912?pwd=VGJyUjJ0aWRTU</u>   | <u>4?pwd=WjNpMTFZcTVHZ04wbFVkR</u>   |
| <u>FZVWpkMy9hZz09</u>   | <u>ElvYm9iWEQvcGlOUT09</u>   | <u>zBaMzhaUT09</u>   |
| Meeting ID: 859 5578 1701,  | Meeting ID: 943 7620 6912,   | Meeting ID: 922 4208 0874,   |
| Passcode: 697424  | Password: 888111   | Passcode: 560118   |
| Isadora Jiménez, BSC<br>S2S4E Decision Support Tool<br>www.s2s4e.eu/dst<br>A TRL7 operational real-time<br>decision support tool for energy<br>traders and renewable energy<br>managers. It integrates sub-<br>seasonal to seasonal climate<br>predictions with renewable energy<br>production and electricity demand.              | Tracy Irvine, Oasis Hub<br>Oasis Hub <u>https://oasishub.co/</u><br>An eMarket that provides access to<br>the world's public & private sector<br>climate change and catastrophe risk,<br>data, analytical tools and services.<br>For Insurance, reinsurance, banking,<br>finance & investment, property and<br>infrastructure, commodities & supply<br>chains. | Ignasi Porras, Meteosim<br>VISCA DSS<br>https://frontend.visca.cloud/prod/<br>A Progressive Web Application that<br>integrates climate and agricultural<br>models with farmers' management<br>specifications in order to design<br>short-term practices, medium- and<br>long-term adaptation strategies to<br>climate change. For: agri-business,<br>agronomists, farmers.               |
| Paolo Mazzoli, Gecosistema<br>SCHT - Smart Climate<br>Hydropower Tool<br>gecosistema.com/scht<br>A cloud-web climate service for<br>hydropower energy producers and<br>water managers. Artificial<br>intelligence feeds monthly or<br>seasonal energy forecasts with the<br>available state of art Copernicus<br>seasonal forecast. | Denis Havlik, AIT<br><b>CLARITY Urban Screening Service</b><br><u>https://csis.myclimateservice.eu/</u><br>A screening service for the impact<br>assessment and climate proofing of<br>urban infrastructure and adaptation<br>projects. For urban planners and<br>infrastructure and adaptation project<br>developers.   | Sandro Calmanti, ENEA<br><b>MED-GOLD Dashboard</b> <u>www.med-gold.eu</u><br>A web-based tool providing access<br>to historical records of key<br>bioclimatic indicators, seasonal<br>climate outlooks and longer-term<br>projections based on C3S and<br>CORDEX data. For the agrifood<br>sector: agronomists, operation<br>managers, extention officers,<br>purchasing dept. officers. |

| Henrik Carlsen, SEI<br><b>SENSES toolkit</b><br><u>https://climatescenarios.org/</u><br>A collection of user-centred<br>visualization tools, and practical<br>guidelines of how to explore and<br>use climate change scenarios for<br>key user groups, including<br>adaptation planners at national and<br>regional level   | Samuel Morin, Météo-France - CNRS<br><b>PROSNOW</b><br>https://showcase.prosnow.org/<br>A prediction system for<br>meteorological and snow conditions,<br>spanning the range of weather to<br>seasonal forecast. The PROSNOW<br>service enables ski resorts managers<br>for real-time optimisation of<br>grooming and snowmaking, while<br>reducing the related use of<br>resources.   | Gonéri Le Cozannet, BRGM<br>INseaPTION - Sea level projection<br>tool https://sealevelrise.brgm.fr/<br>Demonstrator of a web client<br>allowing to analyse and visualize<br>various scenarios of contributions to<br>global Sea Level Rise (SLR). For<br>coastal adaptation practitioners<br>(e.g. electricity producer, urban<br>planners, project developers) |
|---|--|---|
| Harilaos Loukos, the climate data<br>factory<br><b>The climate data factory services</b><br><u>https://theclimatedatafactory.com</u><br><i>L</i><br>Services include: high resolution<br>ready-to-use climate projections for<br>climate change impact studies;<br>ready-to-use seasonal to sub-<br>seasonal forecast (downscaled and<br>calibrated), on demand curation,<br>management and processing of<br>climate data | Bart van den Hurk, Deltares<br>IMPREX water accounting service<br>www.imprex.eu<br>www.futurewater.es<br>Standardized water accounting at<br>river basin level, to allow basin-scale<br>water management and cross-basin<br>comparison of (critical) water<br>accounts. The account includes a<br>climate change assessment. For river<br>basin managers, national/EU<br>statistical account services, national<br>and regional authorities. | Dirk Lauwaet, VITO<br>Antwerp Zoo climate change<br>impact explorer<br>Climate-fit.City<br>https://kmda.climate-fit.city/<br>The service assess climate change<br>impacts on human comfort<br>conditions and operational resource<br>management for zoo managers and<br>operational services  |