

# PROTECT training curriculum: Matching climate services to climate targets and broader needs

Stefka Domuzova & Thanh-Tâm Lê EIT Climate-KIC

5<sup>th</sup> of April, 2023



This project has received funding from the Horizon Europe Framework Programme (HORIZON) under grant agreement No 101060592

# **Welcome! Housekeeping reminders:**

- Please keep your mics off
- Ask questions on the chat and we will answer them/invite you to discuss
- The **recording and the slides** will be made available on the PROTECT website in the coming weeks
- Mentimeter code: 6321 1409





# What is **PROTECT**?

HEurope project aiming at raising awareness and building capacity for the use of pre-commercial procurement schemes in the co-development of climate services.

We look for public procurers – public authorities (regions, cities, national and regional agencies, etc.) that may be interested in exploring innovative procurement for tackling adaptation and mitigation issues in one of the 5 domains:

- Agriculture, forestry and other land use
- Civil security and protection
- Energy and utilities
- Marine and coastal environment
- Sustainable urban communities



# What is the PROTECT training webinars curriculum?

A curriculum of 10 webinars taking place in the spring and autumn of 2023

- Spring sessions: Focusing on providing knowledge on innovation procurement, climate services and Earth Observation and related problematics
- Autumn sessions: Focus on each of the 5 PROTECT application domains: AFOLU, Civil security and protection, Marine and coastal, Energy and utilities, Urban.





# Spring sessions of the PROTECT curriculum



- 22<sup>nd</sup> March: Introduction to Innovation procurement: PCP and PPI What is PCP and what is in it for you?
- 23<sup>rd</sup> March: Exploring the wide range and scope of climate services, including EObased services

Why do I need to know about CS and which CS should I know about?

- > 4<sup>th</sup> April: Practical aspects of PCP How does PCP work in practice?
- 5<sup>th</sup> April: Matching climate services to climate targets and broader needs

Can climate services help both with 'climate' and 'nonclimate' needs in a co-benefit approach?



# What will we explore today?

- Importance of identifying main climate and non-climate needs and understanding the climate services market Stefka Domuzova, EIT Climate-KIC
- Involving different parts of the organization in defining the demand and optimising procurement of climate services Thanh-Tâm Lê, EIT Climate-KIC
- Climate services for non-climate objectives Stefka Domuzova, EIT Climate-KIC
- Formulating and structuring demands to the climate services market
- Q and A and engagement session
- Conclusions



# Matching climate services to climate targets and broader needs

# Importance of identifying main climate and non-climate needs and understanding the climate services market

## Stefka Domuzova, EIT Climate-KIC



## Climate services sound great! But...what is a climate service?

#### **European Roadmap for Climate Services, EC, 2015:**

"Transformation of climate-related data — together with other relevant information — into customised products such as projections, forecasts, information, trends, economic analysis, assessments (including technology assessment), counselling on best practices, development and evaluation of solutions and any other service in relation to climate that may be of use for the society at large. As such, these services include data, information and knowledge that support adaptation, mitigation and disaster risk management."

### TL;DR:

Transforming climate and non-climate data into customised tools that may serve the society at large for climate adaptation, mitigation and disaster risk management.



## ...what is a climate service?

#### Room for the River programme (NL)

- main goal was to manage higher water levels in rivers by lowering the levels of flood plains, creating water buffers, relocating levees, increasing the depth of side channels, and the construction of flood bypasses.
- combines flood protection with environmental and recreational benefits, leveraging climate services to inform infrastructure and landuse planning.



Room for the Waal River: Implemented interventions include the relocation of the Lent dike, the digging of a new river channel and the creation of a new island. Source: https://goexplorer.org/nijmegen-embracing-the-river-to-combat-flooding/



# What climate services is PROTECT looking at?

PROTECT domain	Agriculture, forestry and other land use	Civil security and protection	Energy and utilities	Marine and coastal environment	Sustainable urban communities	The PROTECT taxonomy has three levels: Application domain / Sub-domain / Climate service.
Sub-domains	Environmental monitoring Natural resources monitoring Operations management Weather services for agriculture Operations management	Early warning Migration and settlement Post-event analysis Preparedness Rapid mapping Search and Rescue Infrastructure Planning Insurance for natural disasters Critical infrastructure	Renewable energy Energy - other Waste Drinking water	Environmental monitoring Maritime engineering Navigation Ocean services Ports Vessel tracking Aquaculture Fisheries	Environmental monitoring Smart cities operations Urban planning and monitoring Urban mobility	
Categories of climate services						



# Why is it important to know about types of climate services and their markets?

- It helps to know the structure of the market → knowing where to search for a service provider or for someone with similar needs as your own (e.g. for a PCP)
- If the taxonomy categories do not match your needs, it probably means that there is a market gap → and probably the service you are looking for does not exist off-the shelf (i.e. you may need a PCP)
  - -> Either way, you may need/benefit from PCP
- And even if you are not doing a PCP, knowing the market can help formulate your demand, or assess if the climate services you are currently using correspond to your needs





# Matching climate services to climate targets and broader needs

## Involving different organizational units and stakeholders in defining the demand and optimising procurement of climate services

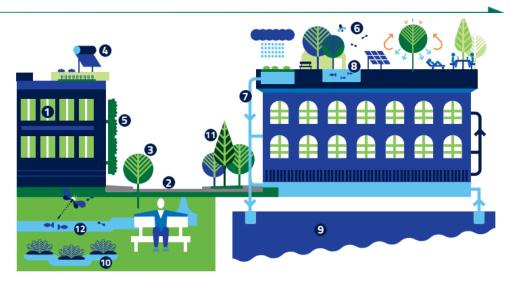
### Thanh-Tâm Lê, EIT Climate-KIC



# Systemic urban nature-based solutions (NBS)

#### **Blue-green solutions**

The Blue-Green Dream project focused on the use of NBS to achieve urban sustainability and climate change resilience, building on a holistic, integrated planning methodology, engaging with a wide panel of stakeholders across the whole planning process; and a concept of modelling, quantifying and optimising potential synergies between NBS with the local urban environment, to achieve lower life-cycle costs and enhanced benefits. Each component requires climate information but in a consistent, systemic approach.



Building
Street
Trees
Solar water heating
"Multi-functional" green wall
"Multi-functional" roof garden
Storm water harvesting and recycling
Food production
Ground water aquifer
Constructed wetland
Pocket park
Urban streams and ponds

Credits: Blue Green Solutions / Imperial College London, EIT Climate-KIC



# **Unlock climate-resilient farming**

#### ARISE

The project, initially tested at scale in East Africa, seeks to help smallholder farmers achieve more sustainable food production and improved market access, as well as higher incomes, reducing exposure to climate and weather risks across all value chain stakeholders. Climate information is at the core of the set of programmes: predicting the likelihood of extreme weather events; assessing weather and agricultural risk to farmers; managing supply chain risk for farmers, value chains and countries; demonstrating livelihood impacts for smallholder farmers; enabling optimum decisionmaking metrics for all stakeholders.



Credits: arise-project.com



# Matching climate services to climate targets and broader needs

# **Climate services for 'non-climate-driven' objectives**

### Stefka Domuzova, EIT Climate-KIC



## Too cool for coal

#### The Ruhr region transition

The German region, once a major coal-mining hub, has successfully transitioned to a more sustainable, low-carbon economy by leveraging climate services.

The region has used climate data to assess the potential of renewable energy resources,

leading to the establishment of numerous **wind** and solar power facilities. This transition has contributed to Germany's overall climate goals while revitalizing the region's economy through new jobs and investment opportunities.



Credits: Unsplash



## **Climate-friendly Olympics?**



Credits: Getty images/AP



# **Climate change disrupting supply chains**



Credit: afxhome - stock.adobe.com





### **Flooded harddisks**

- Thailand 2011 floods and their effect on computer supply chains due to the dependence on Thailand for key hard drive components
- Thailand manufactured about 43% of all hard disk drives globally. The floods made it almost impossible for Thailand to continue its normal level of production. This led to an increase in the international price of hard disk drives by 80–190 per cent



Credit: Unsplash



From what you have heard how would you proceed to structure your demand for a purchase of climate service? Whom would you involve?







# Thank you!

Stay updated on upcoming webinars and materials from past ones: https://www.protect-pcp.eu/trainingcurriculum/

Join the PROTECT community: https://www.protect-pcp.eu/open-call/



This project has received funding from the Horizon Europe Framework Programme (HORIZON) under grant agreement No 101060592