

# FAIR to Adapt to Climate Change

Advancing Climate Change Adaptation Strategies through  
FAIR and Open Data Sharing and Research Infrastructures

**Anne Fouilloux** (Simula, Norway) and **Barbara Magagna** (GFF, Netherlands)

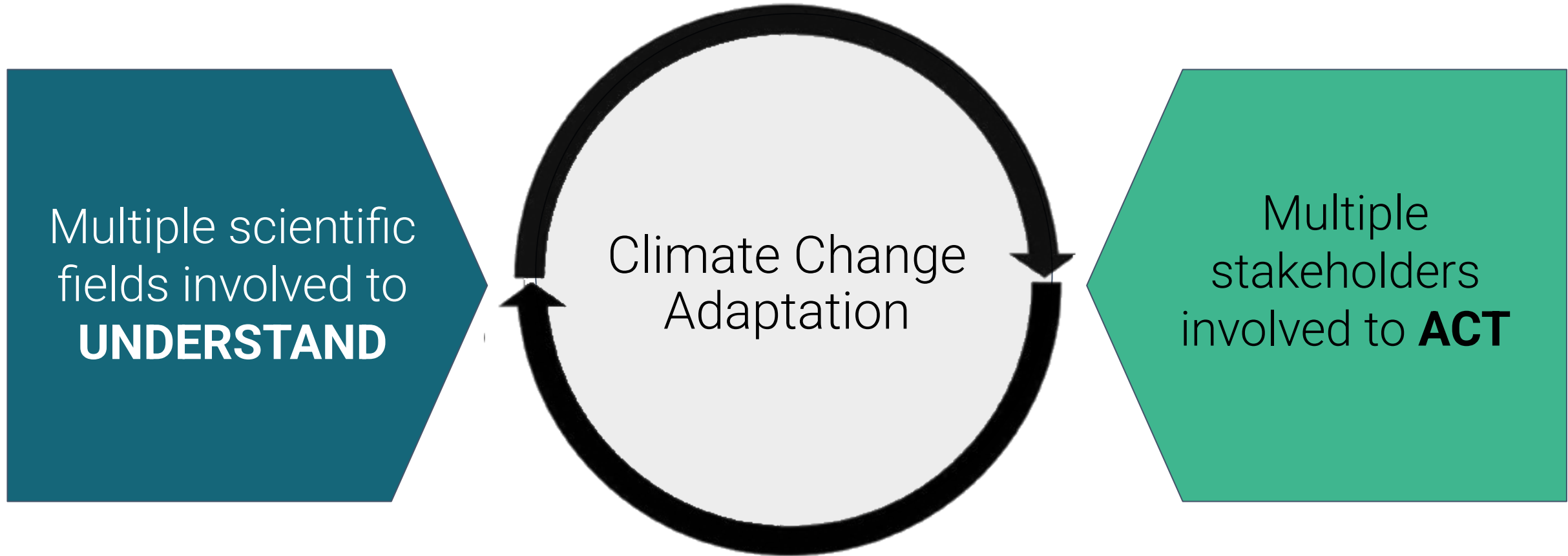


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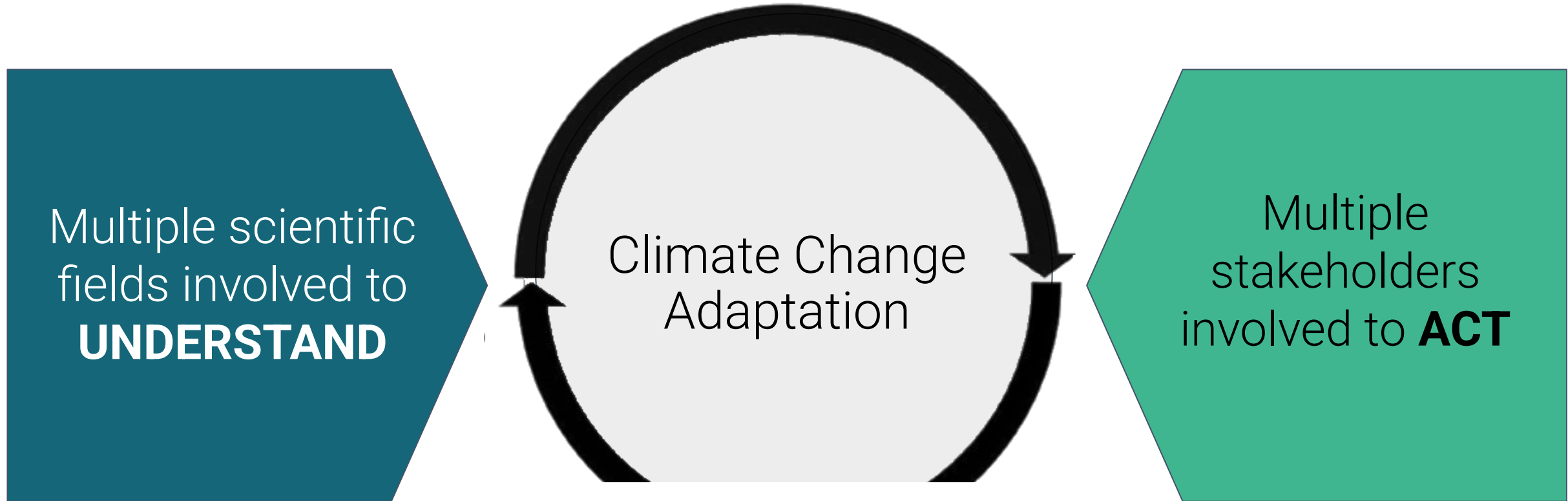
The FAIR2Adapt Consortium  
Grant No: 101188256



# Climate Change Adaptation: A Complex, Multi-Domain Challenge

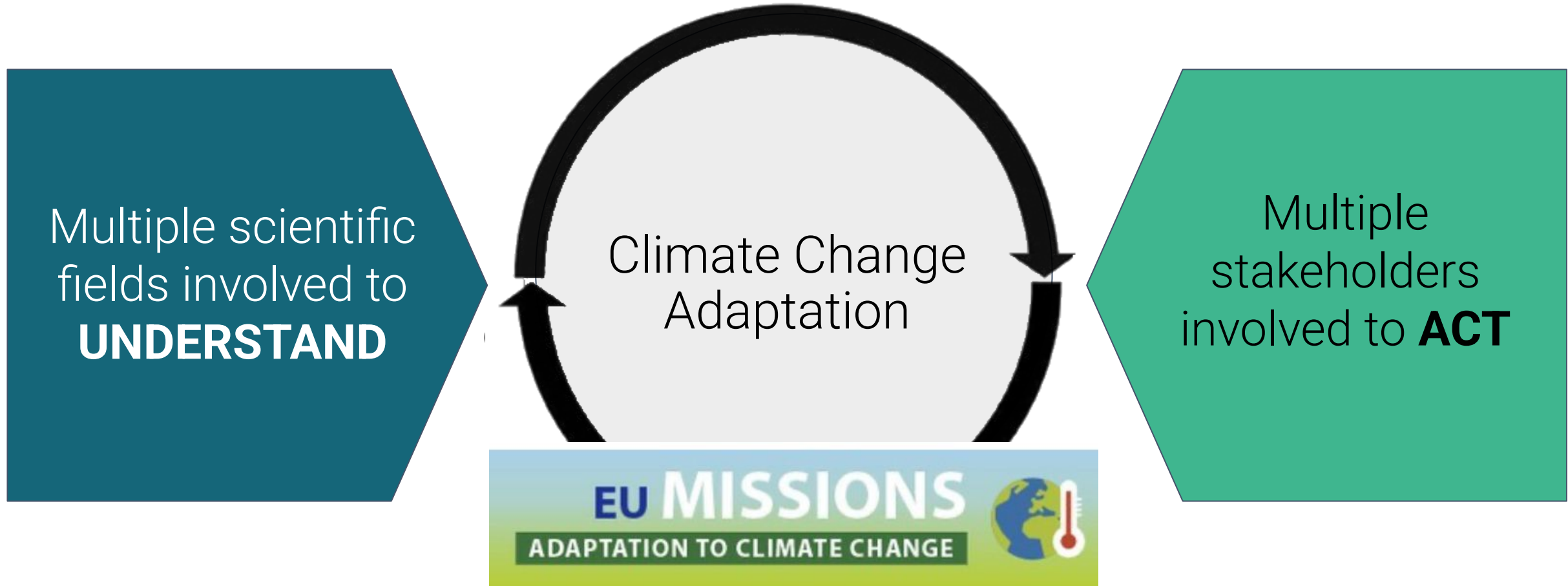


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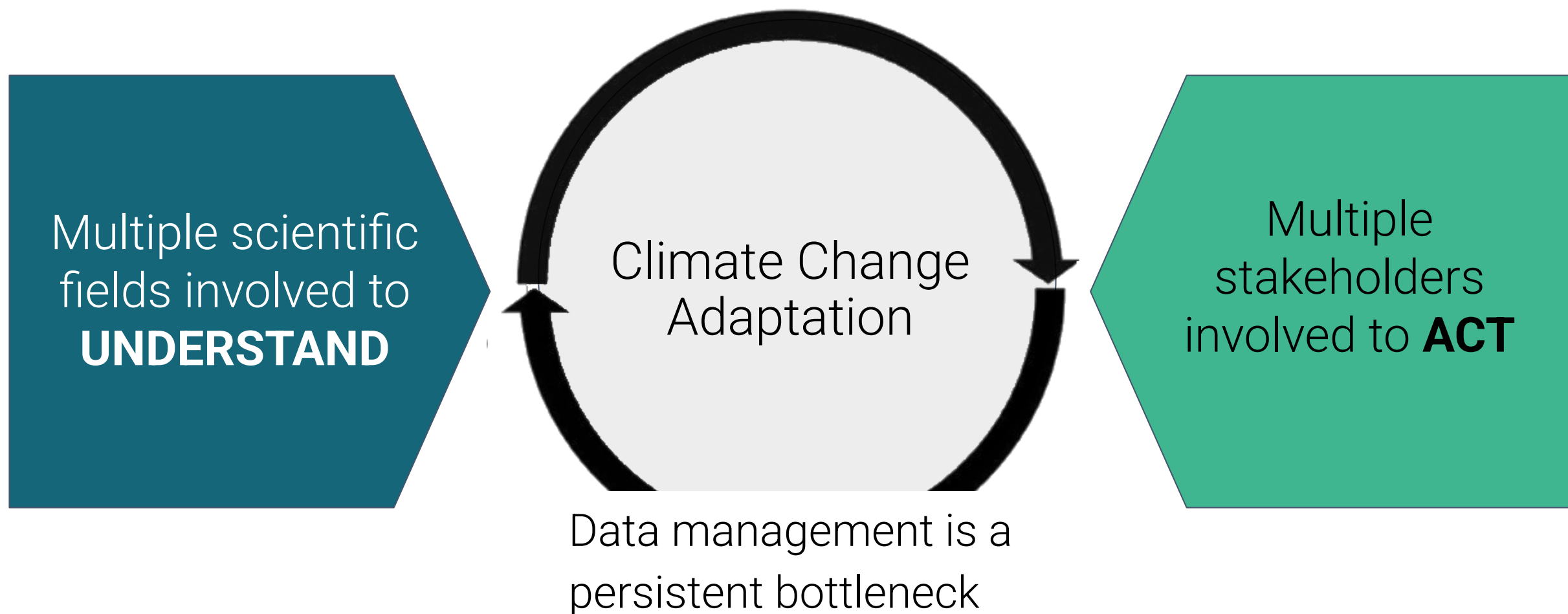


**Critical need:** translating complex knowledge into effective actions.

# Climate Change Adaptation: A Complex, Multi-Domain Challenge



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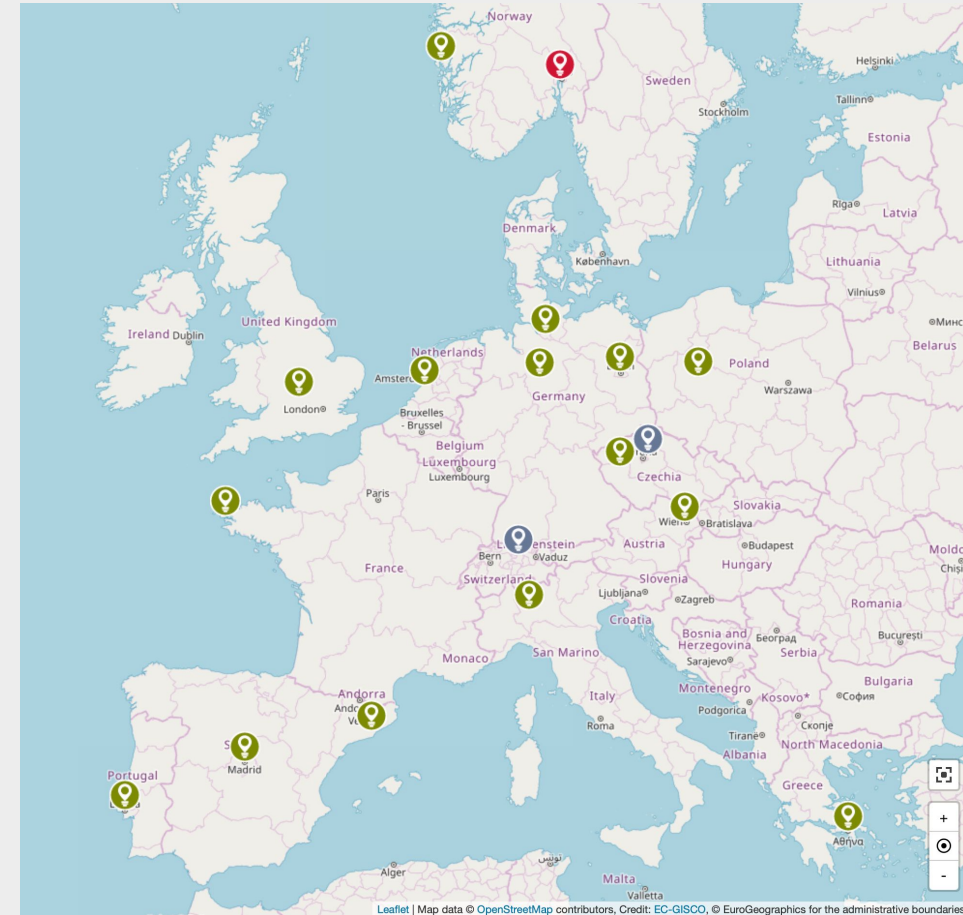
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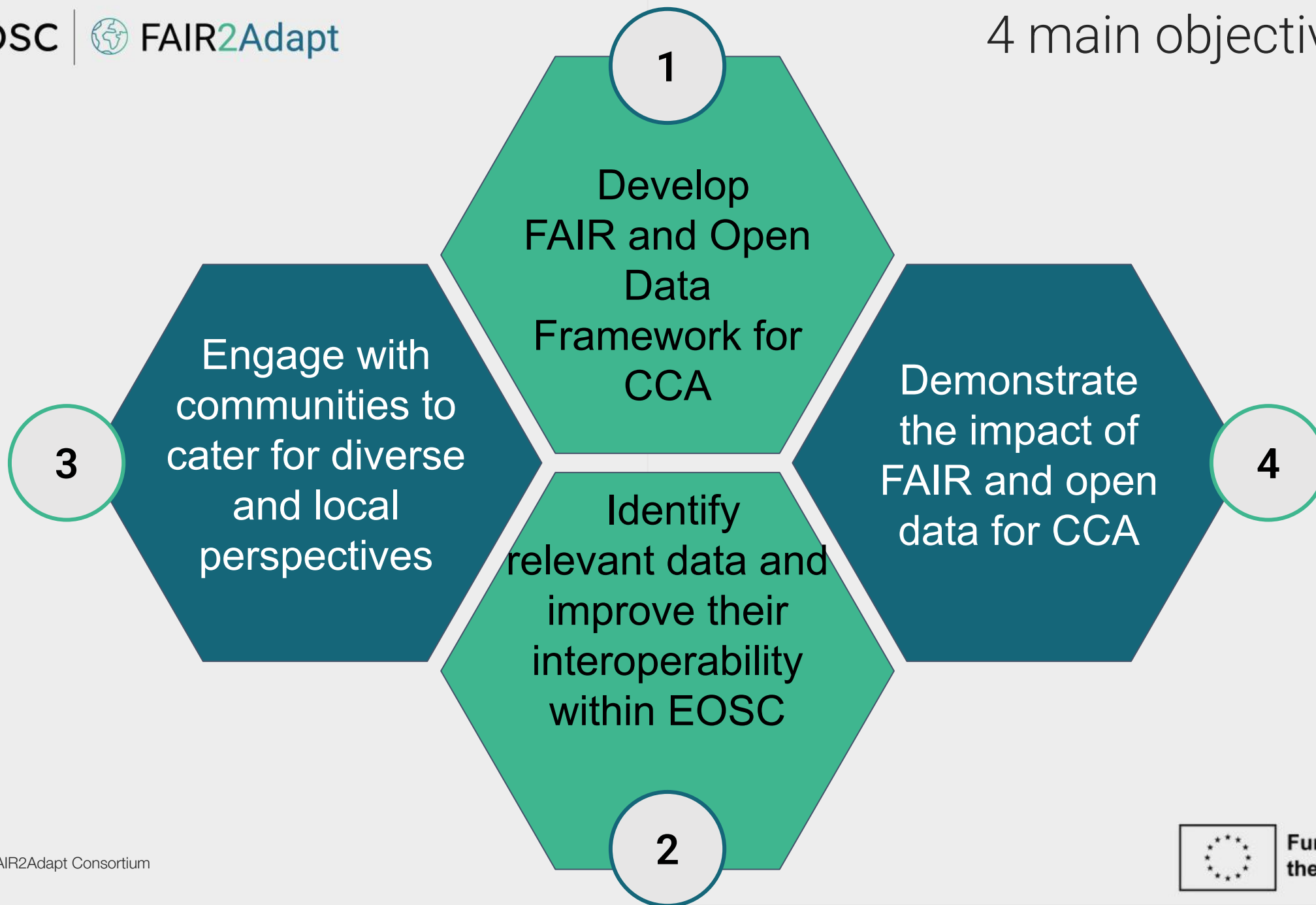


# What is FAIR2Adapt?

3 years EU-funded project, under INFRA-2024-EOSC-01-01 call, with 18 partners focusing on transforming existing data into actionable knowledge that supports adaptation strategies.

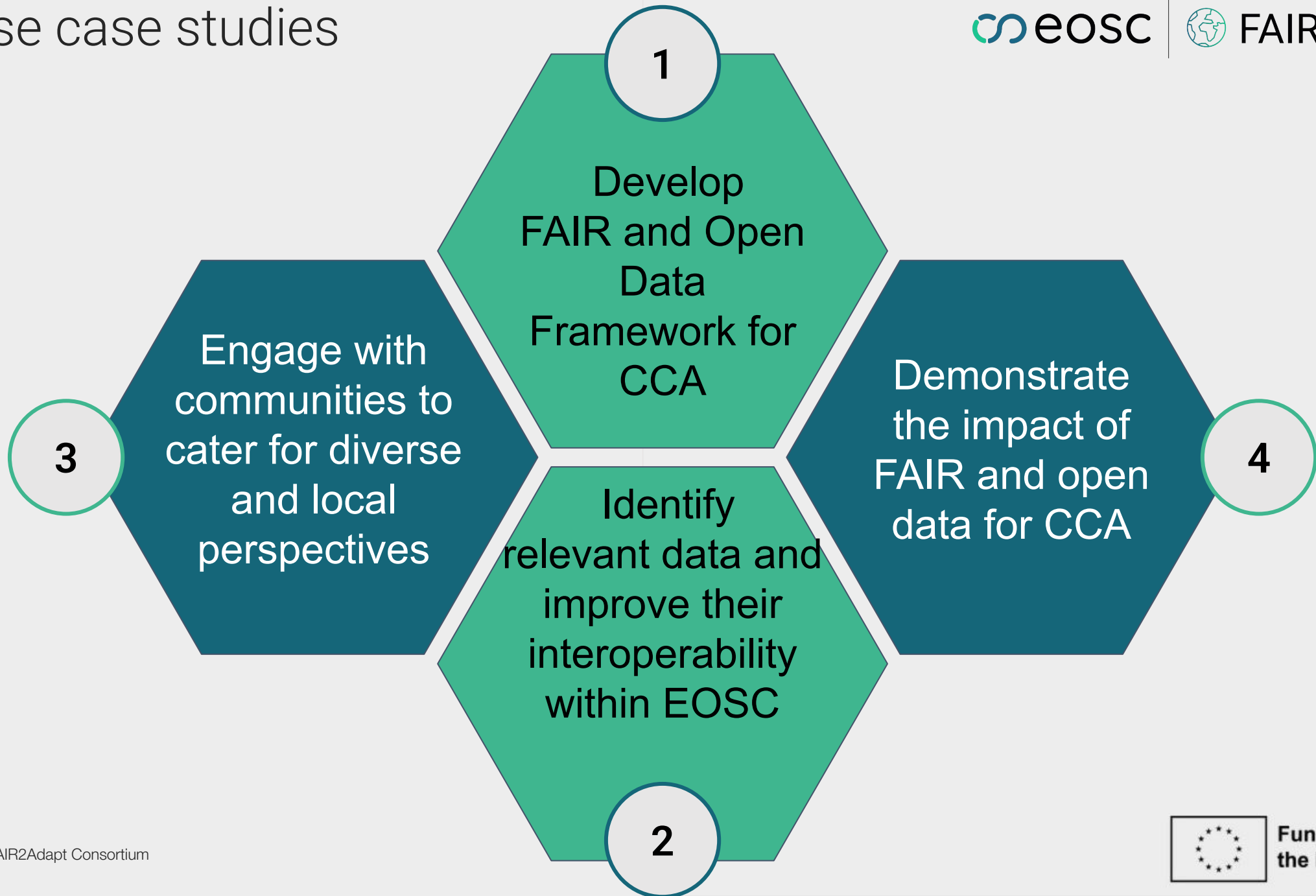
<https://fair2adapt-eosc.eu/>

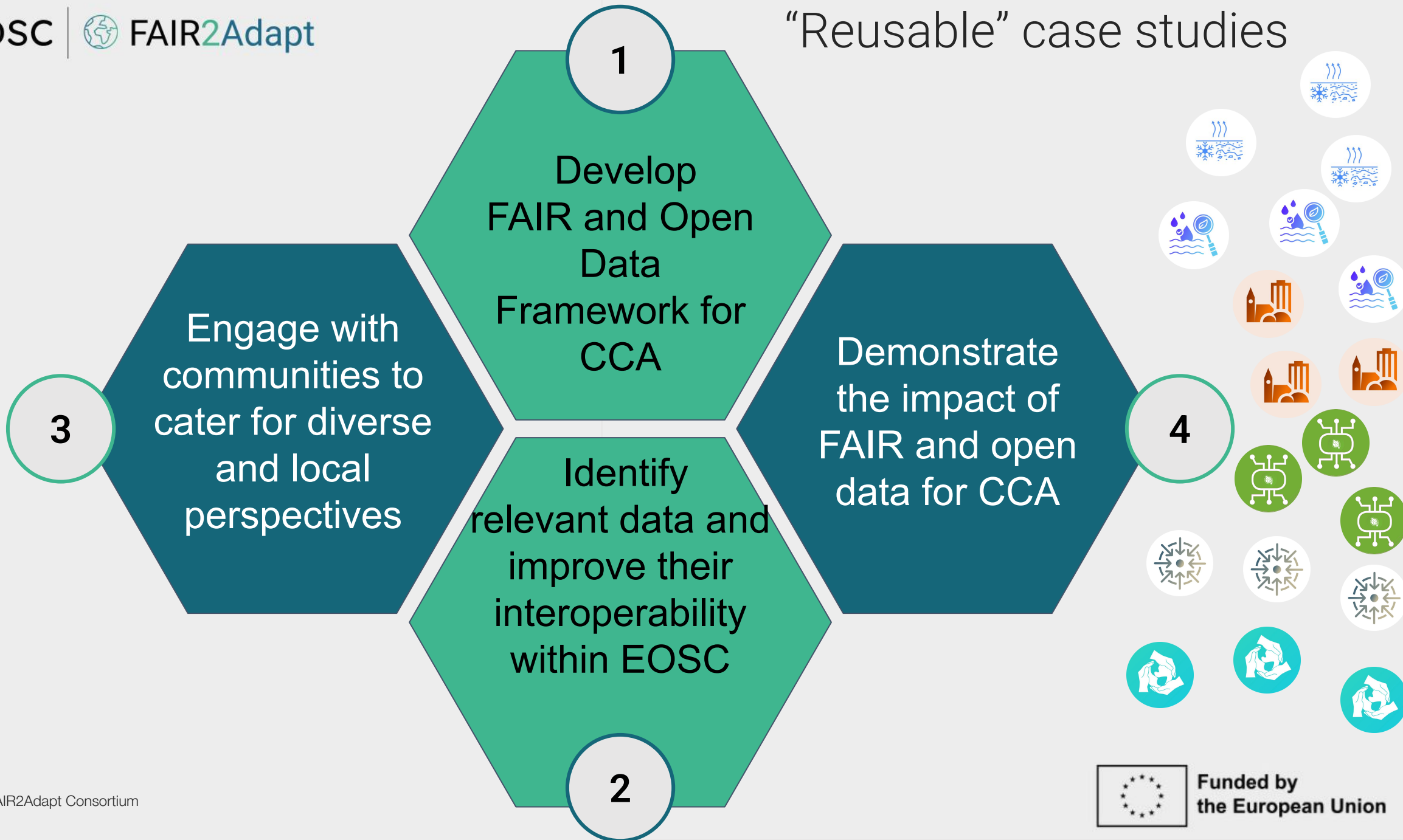






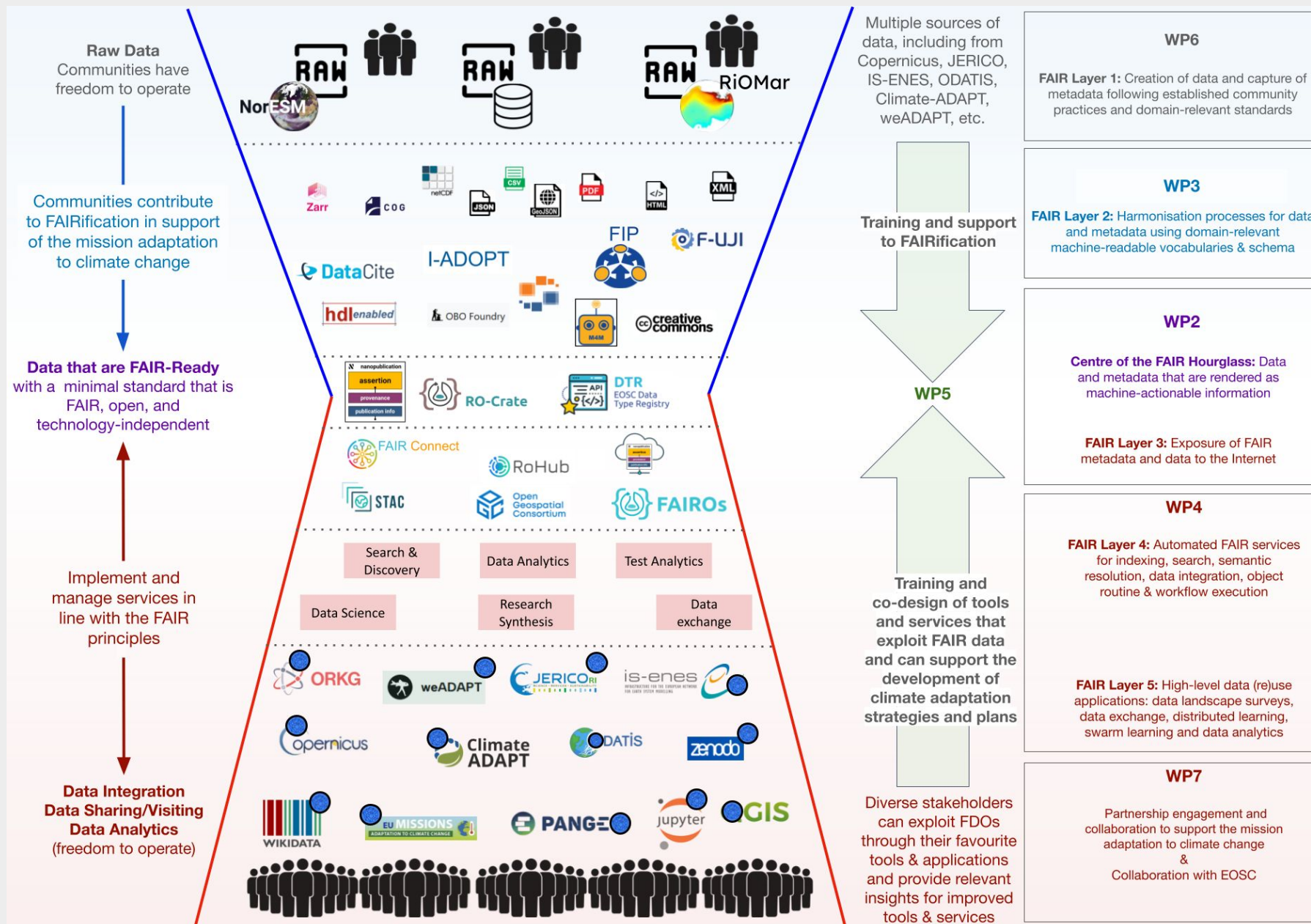
# Diverse case studies





# Our Commitment to bridge the Data Gap

- **We go to the CCA communities**, understand their needs and practices.
- We support them in their **FAIR and Open Science journey**, step-by-step.
- Current phase: **User requirement elicitation**.
- Focus on:
  - Understanding current practices.
  - Identifying how existing RIs, data, and services can best support CCA needs.
  - Facilitating direct connections from producers to consumers.
  - Enabling practical FAIRification aligned with real-world workflows.



# Focusing on Practical Solutions for End-users

Users don't need thousands of resources – they need **the right one at the right time, in a form they can easily “digest”**.

We help:

- **Find** the most relevant datasets, tools, models, and workflows.
- **Reuse** them easily (e.g., via RO-Crate, nanopublications, semantic frameworks like I-ADOPT).
- **Adapt** practices gradually and within their framework (RAST) – not status quo, but **community-driven evolution**.





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*Without reinventing the wheel!*

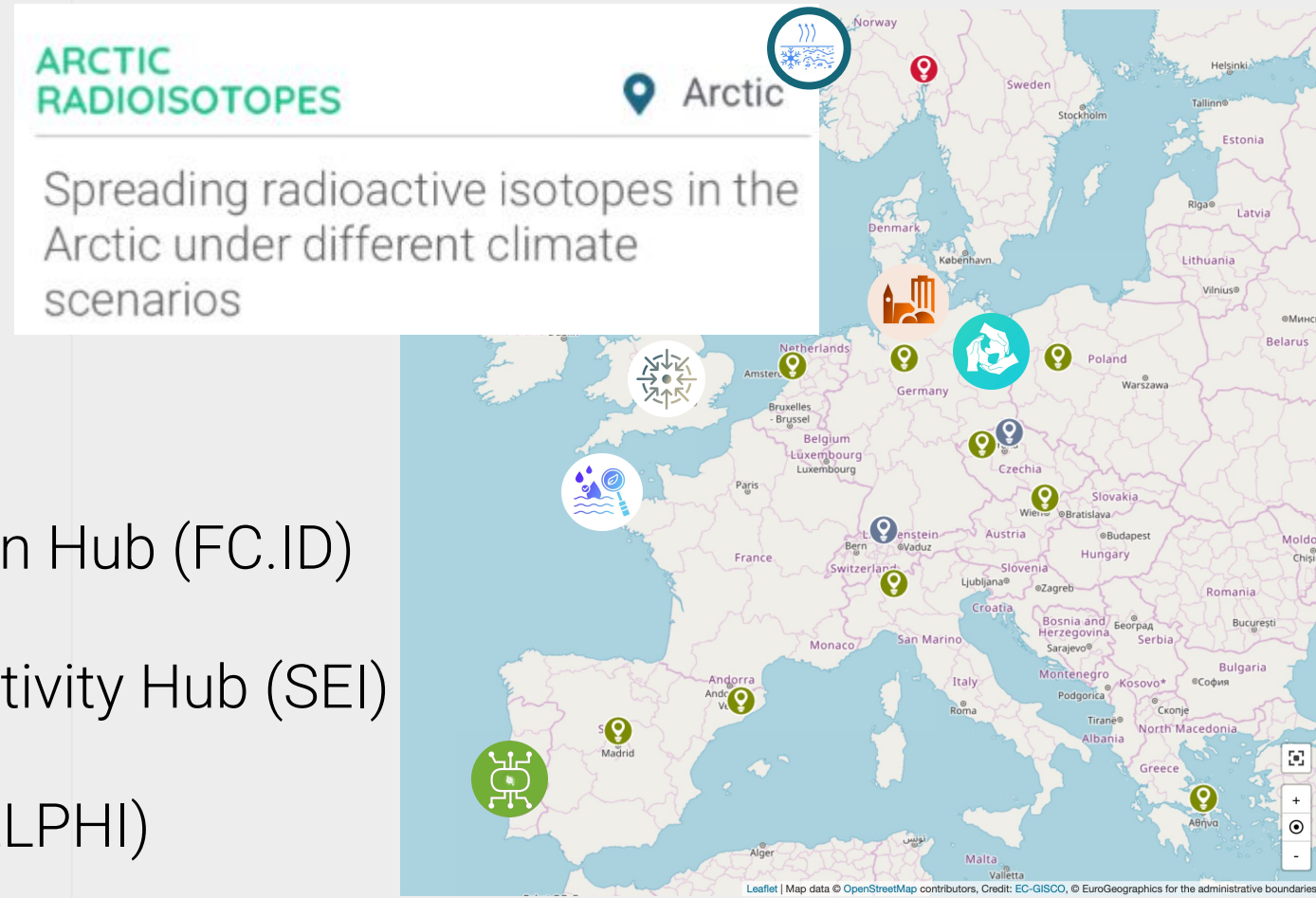
# Applying the approach with 6 Case Studies

- Arctic Radionuclides (NERSC)
- Biscayan RiOMar (IFREMER)
- City of Hamburg (UHAM)
- Designing a FAIR National Adaptation Hub (FC.ID)
- Enriching weADAPT and the Connectivity Hub (SEI)
- FAIR Climate Risk for Business (ADELPHI)



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## BISCAYAN RIOMAR

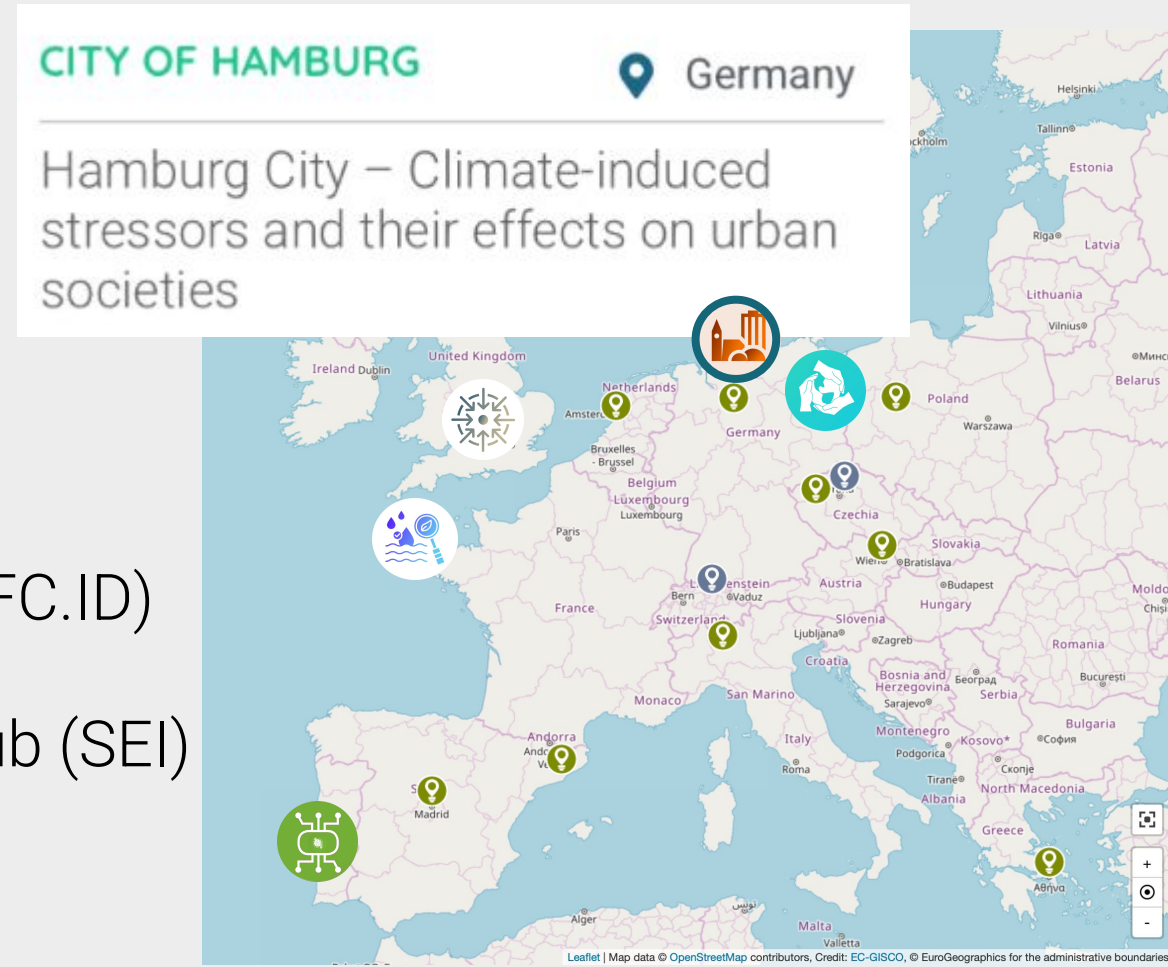
France

RiOMar Project – Coastal Water Quality Anticipation to manage coastal zone ecosystem responses for biodiversity conservation



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ENRICHING weADAPT  
AND THE CONNECTIVITY  
HUB GLOBAL

Global

Connecting and visualising the CCA  
knowledge landscape through the  
Connectivity Hub and weADAPT



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# Beyond FAIR2Adapt: Scaling, Sustainability, and Community Impact





# Stay tune and let's collaborate!

EGU25-21603 | [ECS](#) | Orals | [ESSI2.15](#) | [Highlight](#)

[The Pangeo Ecosystem Supporting Climate Change Adaptation: The FAIR2Adapt RiOMar Case Study](#) ▶

Even Moa Myklebust, Ola Formo Kihle, and Justus Magin

Fri, 02 May, 17:07–17:17 (CEST)  Room -2.32

EGU25-5215 | Orals | [ITS3.11/ERE6.3](#)

[FAIR2Adapt: Advancing Climate Change Adaptation Strategies through FAIR and open data sharing and Research Infrastructures](#) ▶


Anne Fouilloux and Barbara Magagna

Mon, 28 Apr, 09:15–09:25 (CEST)  Room 2.24

EGU25-21472 | Orals | [ESSI3.2](#)

[Community Support and Engagement for FAIR Science in Climate Change Adaptation](#) ▶

Erik Schultes and Barbara Magagna

Wed, 30 Apr, 11:55–12:05 (CEST)  Room -2.92

EGU25-18822 | Posters virtual | [VPS19](#)

[Visualizing a climate and disaster resilience taxonomy from research evidence: scaling and accelerating knowledge interoperability](#) ▶

Sukaina Bharwani, Rosie Witton, Kate Williamson, and Ruth Butterfield

Tue, 29 Apr, 14:00–15:45 (CEST)  vPoster spot 4 | vP4.21

EGU25-13330 | [ECS](#) | Posters virtual | [VPS19](#)

[Advancing and Supporting FAIR Principle Adoption through Innovative Social Infrastructure Tools](#) ▶


Leonie Raijmakers, Edvard Hübinette, Elianna DeSota, Sina Iman, and Philipp Koellinger

Tue, 29 Apr, 14:00–15:45 (CEST)  vPoster spot 4 | vP4.19

EGU25-19699 | Orals | [ESSI3.2](#)


[Building an EOSC based virtual research environment to support the adoption of FAIR and Open Science practices in Climate Change Adaptation communities](#) ▶


Raúl Palma, Malgorzata Wolniewicz, Adam Rynkiewicz, José Manuel Gómez, Andres Garcia Silva, Daniel Garijo, Esteban Gonzalez Guardia, and Anne Fouilloux


Wed, 30 Apr, 12:05–12:15 (CEST)  Room -2.92


## FAIR2Adapt at EGU'25

### ✨ FAIR to Adapt to Climate Change Pop-up Networking Event

 Tuesday, 29 April 2025

 17:30–18:30 on-site (with the option to continue off-site until 22:00 CEST for a relaxed social dinner & drinks!)

 Location: EGU Networking Zone – next to EGU Booth (Hall X2)

Let's meet, share ideas, and explore how FAIR and Open Science can help tackle climate adaptation challenges together. 



Thank you for your attention.

Anne Fouilloux, [annef@simula.no](mailto:annef@simula.no)

<https://fair2adapt-eosc.eu>

<https://www.linkedin.com/company/fair2adapt-eosc-eu>



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