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PRESS RELEASE

Fostering climate resilience through FAIR Digital Objects

Climate change poses risks to European communities, requiring robust adaptation strategies to protect ecosystems, economies and public health. However, fragmented data and limited interoperability across regions hinder coordinated action. Often, valuable insights remain inaccessible to policymakers and researchers seeking evidence-based solutions. Addressing this data-sharing challenge is essential for flexible and responsive adaptation frameworks.

The EU-funded FAIR2Adapt project advances **climate resilience** by transforming data into actionable knowledge. By collaborating with the **European Open Science Cloud (EOSC)**, FAIR2Adapt builds a user-friendly, interoperable data-sharing platform using FAIR Digital Objects and tools like the I-ADOPT framework. Through case studies and stakeholder engagement, FAIR2Adapt develops customised, scalable solutions for climate adaptation.

Our Mission and Vision

The FAIR2Adapt is a multidisciplinary project geared towards transforming data into actionable knowledge to shape **climate adaptation strategies**. By leveraging and collaborating with EOSC, we fully tap into the EOSC's wide range of services, the FAIR Implementation Framework Catalogue of Resources, and align with the EOSC interoperability framework.

According to Dr. Anne Fouilloux, Coordinator of the FAIR2Adapt project and Senior Research Engineer at Simula Research Laboratory, *"Just as a navigation app helps us find our way, FAIR2Adapt empowers communities to find, access, interoperate, and reuse the data needed to take action, adapt, and build resilience against climate change—effectively, openly, and collaboratively. In a rapidly changing climate, access to reliable, interoperable, and actionable data is critical for building resilient communities. FAIR2Adapt envisions a future where scientific knowledge and environmental data are not just available but truly accessible to everyone, regardless of resources or financial means. By leveraging* ***FAIR principles*** *— ensuring data is Findable, Accessible, Interoperable, and Reusable—we empower decision-makers, researchers, and local communities to take informed action. Our ambition is to bridge the gap between climate science and real-world adaptation, transforming complex data into meaningful insights that drive policy, preparedness, and resilience. Together, through collaboration and open science, we can build a future where adaptation strategies are data-driven, inclusive, and sustainable for all."*.

We adopt **FAIR Digital Objects (FDOs)** by using RO-Crate and nanopublications as key implementation tools. We use semantic bridging strategies, such as the I-ADOPT framework, and tailored FDO services to build a collaborative, user-friendly FAIR and open data sharing framework. Rich case studies will co-develop FAIR Supporting Resources in alignment with the FAIRification framework and demonstrate the impact of FAIR and open data sharing on climate change adaptation, and strategically support the EU Mission's objective of enhancing climate resilience in European regions and communities. Through transfer cases and collaboration with other initiatives, FAIR2Adapt extends its reach to additional contexts, showcasing its scalability, sustainability and applicability beyond the project's completion.

The FAIR2Adapt project is designed around six very diverse **case studies** in different European countries that build and refine the FAIR2Adapt FAIR Supporting Resources based on real-world challenges, and demonstrate the transformative power of FAIR and open data sharing in support of climate action and the EU Mission on Adaptation. The goal is to set up and foster collaboration across Case Study Stakeholder Groups via common training sessions, webinars, workshops, open forums, hackathons, and other interactive exchanges.

A significant aspect of the FAIR2Adapt project is **stakeholder engagement** and **capacity-building activities**, which will be instrumental in raising awareness and devising customised solutions. By transforming data into flexible, practical, and resilient climate adaptation strategies, FAIR2Adapt constructs a scalable and extensible model for data sharing that can be adapted to multiple climate adaptation scenarios. The impact of FAIR2Adapt will span across scientific advancement, economic resilience, social-environmental wellbeing, and responsive policy development, fostering multidisciplinary cooperation, enhancing trust in science, and stimulating a climate-smart economy. Ultimately, FAIR2Adapt intends to build a more resilient, inclusive and knowledge-based society capable of efficiently tackling the challenges of climate change.

About FAIR2Adapt

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For more information, please visit:

Website	LinkedIn company page	YouTube channel
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