

CETP Joint call 2023

CETP Pitching & Matchmaking Event for validation cooperation, new project initiatives and applicants

October 4, 2023 @9-13 CEST
Online

In order to save our
bandwidth, please keep
your videos
and microphones off when
you are not speaking.

Thank you!

Meeting protocol

We are happy to see so many of you here!

In order to save our bandwidth, please keep your videos and microphones off when you are not speaking.

Feel free to participate in the chat!

CETP Pitching & Matchmaking Event for validation cooperation and new project initiatives

Full event programme

9:00-9:55 Introduction to validation and the Living Labs

5min break

10:00-11:10 Pitch presentations by Living Labs and Testbeds with validation capabilities

10min break

11:20-12:00 Presentations by existing projects with next-stage development plans

12:00-13:00 Pitch presentations by new project initiatives

13:00 Closing

Introduction to validation and the Living Labs

- 9:00-9:05 Welcome and aims of the day, *Tanja Suni, CLIC Innovation, Finland*
- 9:05-9:20 "What is validation and why should you do it?", *Jatta Jussila, CLIC Innovation, Finland*
- 9:20-9:30 Living labs for the energy transition, *Valentino Piana, European Network of Living Labs - Energy Living Lab at HES-SO, Valais / Wallis*
- 9:30-9:45 Brief introduction to CETP and the relevant call modules, *Kristina Starborg, SWEA, Sweden*
- 9:45-9:55 Audience discussion and questions

5min break

What is validation and why should you do it?

Accelerating Innovation in the European Clean Energy Transition Partnership

Jatta Jussila
CETP Impact team
CLIC Innovation

Outline

Understanding validation

The validation process

Overcoming challenges in validation

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Definition of Validation

Validation is the systematic process of testing and verifying an innovation or technology to ensure it meets predefined standards and objectives.

It aims to prove the effectiveness, reliability, and suitability of a solution for its intended purpose.



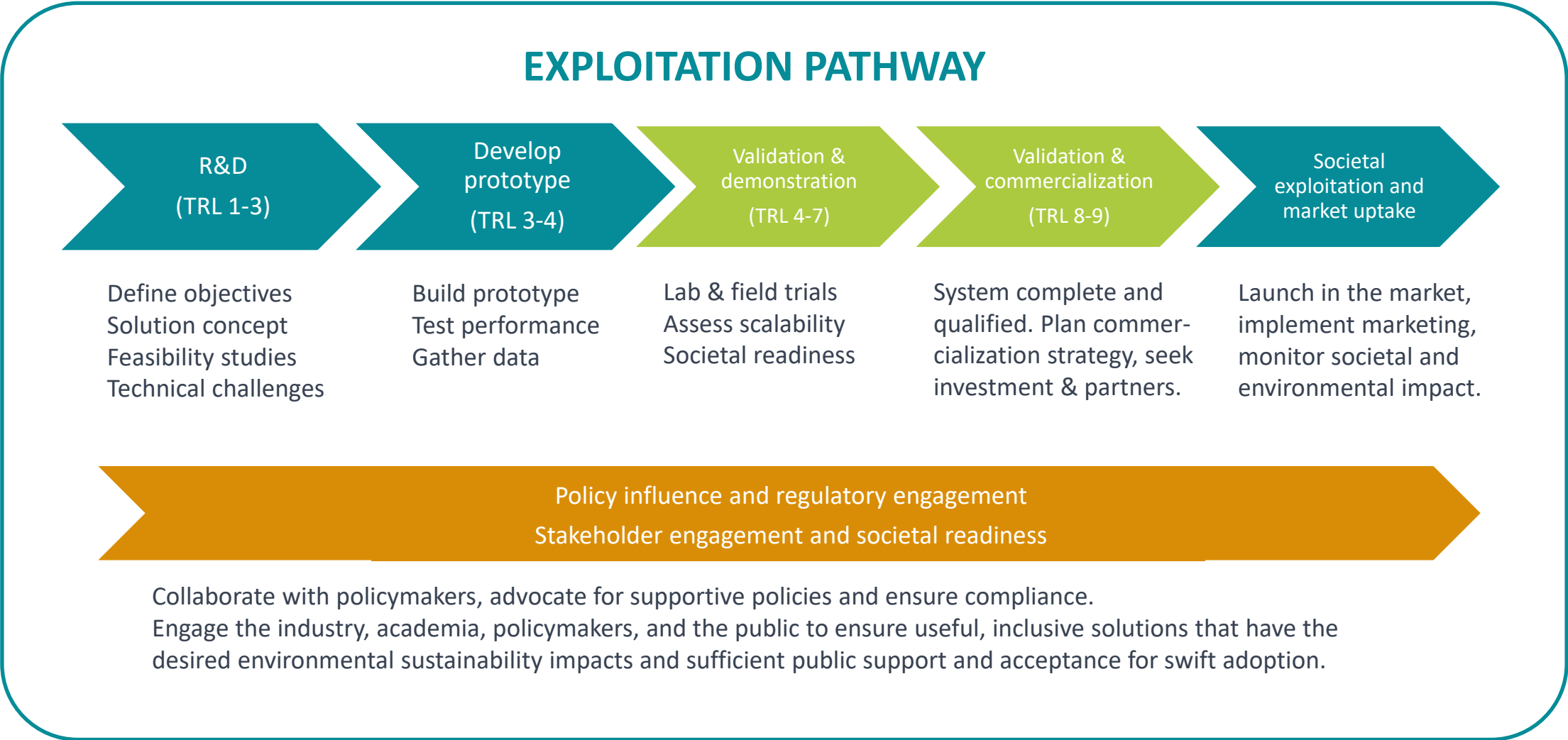
Image: <https://energycenter.org/thought-leadership/blog/converged-energy-solutions-sum-larger-its-parts>

Importance of Validation in Innovation

- Validation **mitigates risks** associated with unproven technologies, reducing the likelihood of costly failures during large-scale deployment. It instills confidence in investors, stakeholders, and end-users by demonstrating the **innovation's viability**.
- By subjecting innovations to rigorous validation processes, we ensure that they can **smoothly integrate into larger systems**, contributing to the creation of a cohesive, clean energy ecosystem in Europe.
- Validation is a key driver for the advancement of **Technology Readiness Levels (TRLs)**, allowing innovations to progress from the early stages of development to higher TRLs where they become deployable solutions for real-world challenges.

Validation is a key element in the Exploitation Pathway

– making concrete use of results for commercial, political, or societal purposes



In summary

Validation is not just a technical process.

It is crucial for achieving the goals of the European Clean Energy Transition, making innovation work both technologically, for businesses, and for the people it serves.

Outline

Understanding validation

The validation process

Overcoming challenges in validation

Validation moves the innovation to higher TRL

TECHNOLOGY READINESS LEVEL (TRL)

RESEARCH DEVELOPMENT DEPLOYMENT	9	ACTUAL SYSTEM PROVEN IN OPERATIONAL ENVIRONMENT
	8	SYSTEM COMPLETE AND QUALIFIED
	7	SYSTEM PROTOTYPE DEMONSTRATION IN OPERATIONAL ENVIRONMENT
	6	TECHNOLOGY DEMONSTRATED IN RELEVANT ENVIRONMENT
	5	TECHNOLOGY VALIDATED IN RELEVANT ENVIRONMENT
	4	TECHNOLOGY VALIDATED IN LAB
	3	EXPERIMENTAL PROOF OF CONCEPT
	2	TECHNOLOGY CONCEPT FORMULATED
	1	BASIC PRINCIPLES OBSERVED

Stages of validation

- Lab-scale testing assesses core functionality.
- System-level testing evaluates integration and performance.
- Real-life user testing ensures practical usability of technology, user experience, and business model.
- Each stage is vital in ensuring robust validation.

Image: <https://www.twi-global.com/technical-knowledge/faqs/technology-readiness-levels>

Validation of the societal readiness (SRL)



Societal readiness (SRL): By involving end-users in the testing process, it becomes possible to evaluate the usability and effectiveness of innovations and business models in addressing their needs and expectations.

This **user-centric approach** is instrumental in ensuring that technologies and business models align with the requirements of the people who will ultimately use them. Will the users be willing to pay for the service you provide?

Living labs often have access to committed test users and other stakeholders for developing the societal readiness of a solution. Will your users be ready to share their data for optimizing a smart energy system, for instance?

Several methods exist for evaluating the societal readiness of a solution. Adopted from www.tno.nl

Increasing TRL of a system solution is an iterative process

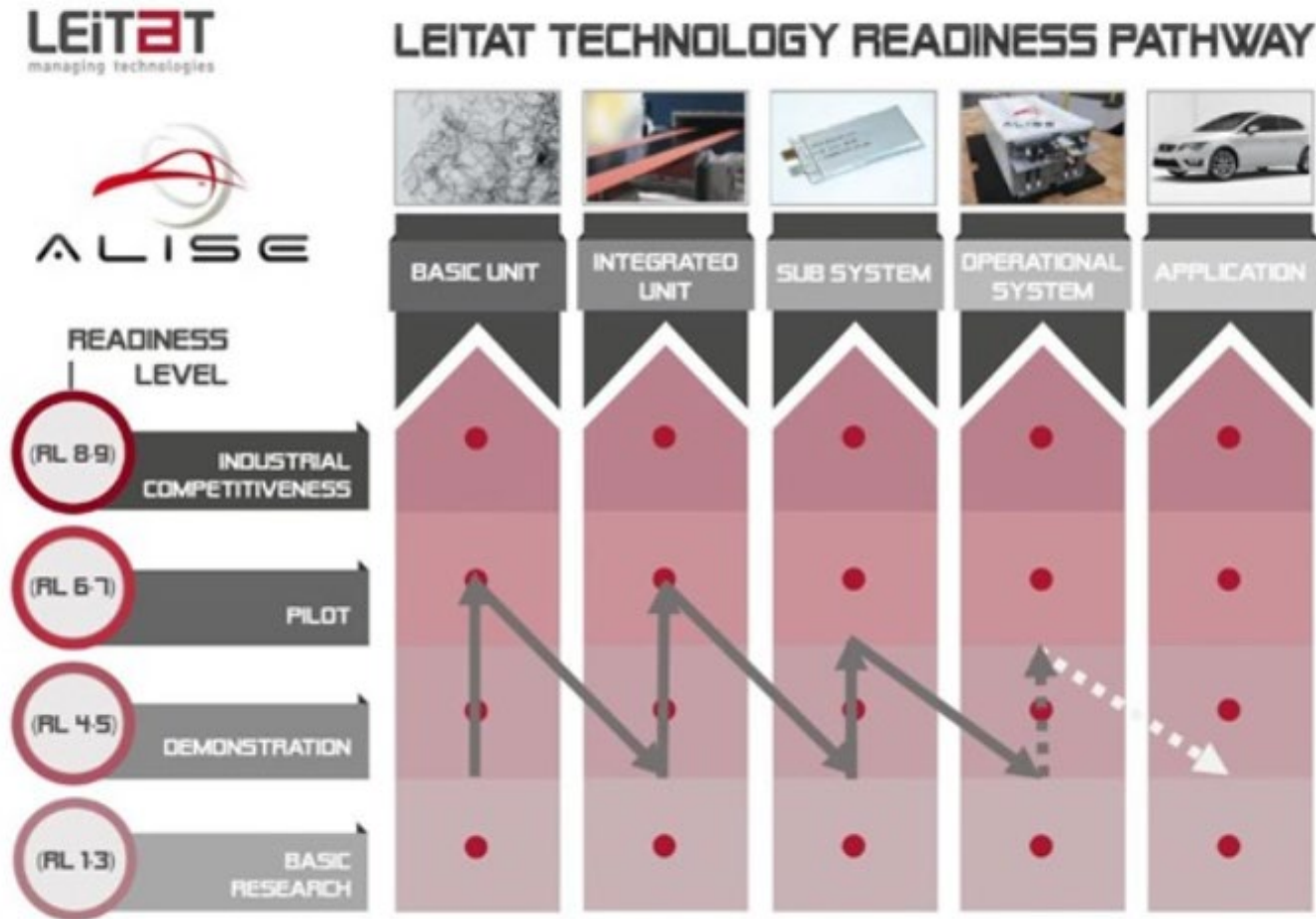


Figure 3. ALISE Technology Readiness Pathway.

- When testing parts within a system, **higher integration of basic units or modules** often reveals shortcomings and requires further research.
- **Components can then be sent back to the lab** for refinement and enhancement.
- **This iterative process** ultimately contributes to the development of a holistic energy solution with individually robust components, capable of working seamlessly together under various scenarios.

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Challenges in validation and risks of incomplete process

- **Delays and difficulties in finding suitable test beds:** One of the key challenges in validation is the often time-consuming and complex process of identifying and securing appropriate test bed facilities. This search can lead to delays in the project timeline, potentially hindering progress.
- **Risk of missing project objectives:** Without a well-planned validation strategy, there's a significant risk that a project may veer off course and fail to achieve its intended objectives. This can result in wasted resources and missed opportunities.
- **Exploitation pathway breaks.** Without a completed validation process, the project will never advance from the lab into practice and to a thriving business.
- **Insufficient societal readiness.** Without extensive testing and validating with users and stakeholders in the value chain, you risk ending up with a great solution that users will not want to buy or use.

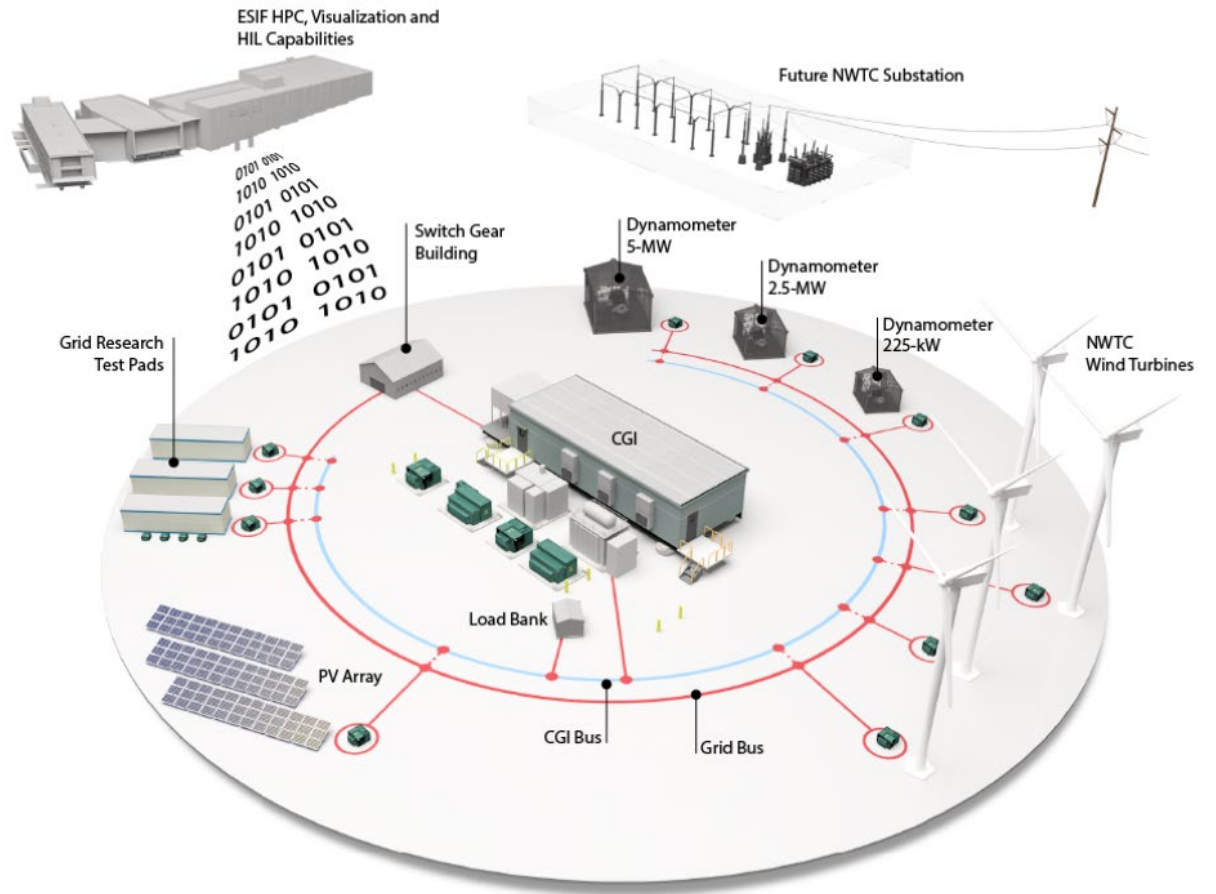
Solutions and support

- **Sharing best practices:** To address these challenges, it's essential for the clean energy community to share best practices in validation. This knowledge exchange can help streamline the process and enable projects to learn from each other's experiences.
- **Collaboration with test beds and Living Labs from the project's inception:** A proactive approach involves collaborating with test beds right from the beginning of a project. By establishing these partnerships early on, projects can avoid delays and ensure that validation is integrated seamlessly into their development process.
- **Match-making for validation cooperation:** Match-making activities play a crucial role in connecting projects with suitable test beds, Living Labs and partners. This proactive approach ensures that projects can access the necessary resources and support for successful validation.

Utilizing living labs and test beds

Living labs and test beds provide a range of testing and validation environments from labs to real-world settings, enabling researchers and companies to validate their technologies, services, and business models in practical scenarios.

- **Access to real-grid infrastructures:** Some facilities grant access to actual grid infrastructures, simulating the complex energy systems of Europe. This access is invaluable for assessing how innovations perform within the context of existing grids and infrastructures, ensuring compatibility and scalability.
- **Engaging committed energy communities:** Living labs and test beds facilitate engagement with dedicated energy communities and users who are eager to participate in testing. This engagement fosters valuable feedback and real-world insights that help refine and optimize energy solutions and your business model.



NREL Flatirons Campus – Controllable Grid Interface
<https://www.nrel.gov/wind/facilities-cgi.html>

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So - let's start matching your innovations
with the perfect test beds and living labs
to make clean energy a reality!

jatta.jussila@clicinnovation.fi

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Living Labs for the energy transition



Valentino Piana
Energy & Environment WG coordinator

CEPT Matchmaking Event
3rd Oct 2023

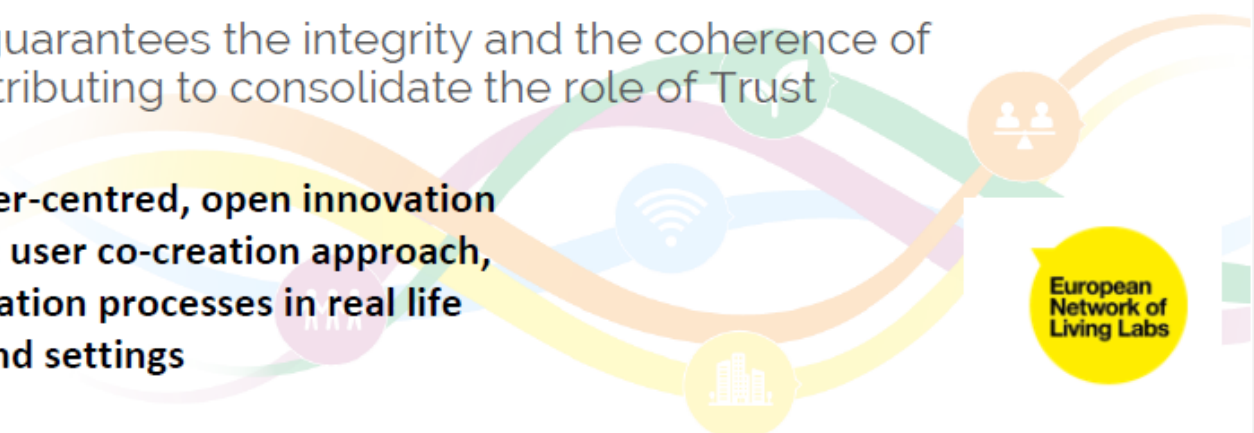


European Network of Living Labs (ENOLL)



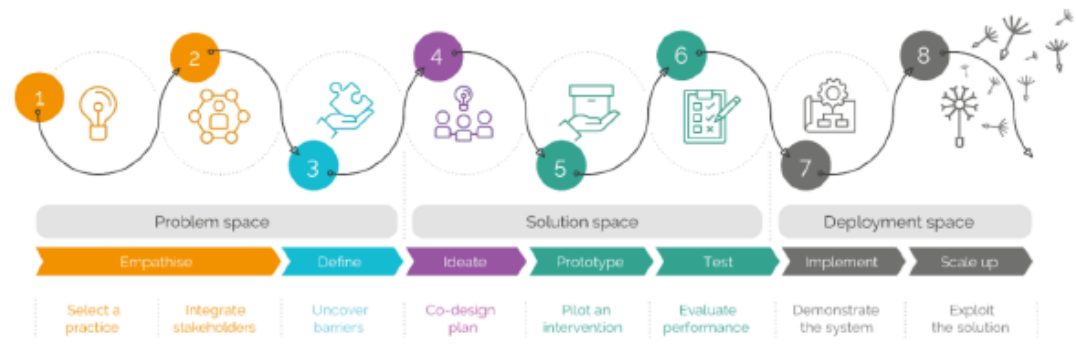
- The European Network of Living Labs (ENoLL) is the international federation of benchmarked Living Labs in Europe and worldwide. Founded in November 2006 under the auspices of the Finnish European Presidency, the network has grown in 'waves' up to this day.
- It is an international non-profit association which aims to promote and enhance user-driven innovation ecosystems, especially Living Labs.
- ENoLL focuses on facilitating knowledge exchange, joint actions and project partnerships among its historically labelled (about 500) members, promoting the establishment of new living labs and enabling their implementation worldwide.
- The certification and labelling of ENoLL Members guarantees the integrity and the coherence of the application of the Living Lab methodology, contributing to consolidate the role of Trust Brokers of the Living Labs with their communities.

We define Living Labs (LLs) as user-centred, open innovation ecosystems based on systematic user co-creation approach, integrating research and innovation processes in real life communities and settings



Our members are present in most CEPT-eligible countries

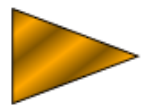
You need to have a coordinator, a strong topics and we can join as testbed but also earlier in the Problem space & (later) in the Solution space & Deployment space



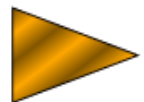
Source: Mastelic (2019), Stakeholders' engagement in the co-design of energy conservation interventions: The case of the Energy Living Lab.



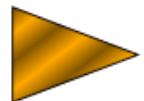
An example: Energy Living Lab @ HES-SO (CH)



Strong point in energy regional systems, sustainable social practices, integration of renewables and electric mobility



Winner of the DUT Call 2022



Coordinator of the SWEET Lantern project (8 years, 10 mln funding)



Contact us



valentino.piana@hevs.ch

projects@enoll.org

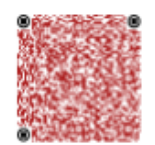


www.enoll.org



www.sweet-lantern.ch

Documentation Download now or take a photo:



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Clean Energy Transition Partnership

CLEAN ENERGY TRANSITION PARTNERSHIP - A transnational initiative for clean energy

The CETPartnership enables more than **50 national and regional RTDI programme owners** and managers from **30 European and non-European countries** to align their research and innovation priorities, pool national budgets and launch Joint Calls annually until 2027.



<https://cetpartnership.eu>



<https://www.linkedin.com/company/cetpartnership/>



https://twitter.com/CET_Partnership



<https://www.youtube.com/@cetpartnership>



Co-funded by
the European Union

The CETPartnership builds on energy ERA-Nets

Builds on **15 years of transnational cooperation** in 9 energy relevant **ERA-Nets**

Build up of **trust and established practices** in:

- conducting joint calls,
- monitoring progress,
- sharing data, information and knowledge beyond the projects
- deducing strategic knowledge,
- maximising the impact of funded projects and their established European and international relationships



The CETPartnership has established the following **7 TRIs** which address the seven CETPartnership RTDI Challenges as described in the Strategic Research and Innovation Agenda (SRIA). Each of the TRIs is led by one of the CETPartnership partners, known as the TRI Lead.



TRI 1: Integrated Net-zero-emissions Energy System



TRI 2: Enhanced zero emission Power Technologies



TRI 3: Enabling Climate Neutrality with Storage Technologies, Renewable Fuels and CCU/CCS



TRI 4: Efficient zero emission Heating and Cooling Solutions



TRI 5: Integrated Regional Energy Systems



TRI 6: Integrated Industrial Energy Systems



TRI 7: Integration in the Built Environment

3 levels of eligibility criteria and requirements – please contact your national funding agency for more information

- Transnational eligibility criteria
- Call Module requirements
- National/regional requirements (separate submission may be needed, see Annex B)

- 1** Submit via **CETPartnership Submission Platform** before **deadlines**, using **templates**
- 2** **>= 3 independent entities** applying for funding from **>= 3 countries participating in the call** (>=2 EU Member States or HE Associated Countries)
- 3** **Maximum 60%** of consortium effort (PMs) for a single partner
- 4** **Maximum 75%** of total project efforts (PMs) in one country/ region
- 5** Organisations **involved** in the CETPartnership are **ineligible** for proposal submission
- 6** Project start before **15 December 2024**
- 7** Project duration max. **36 months**
- 8** Proposal workplan must include work package called **Reporting and Knowledge Community**.

DRAFT

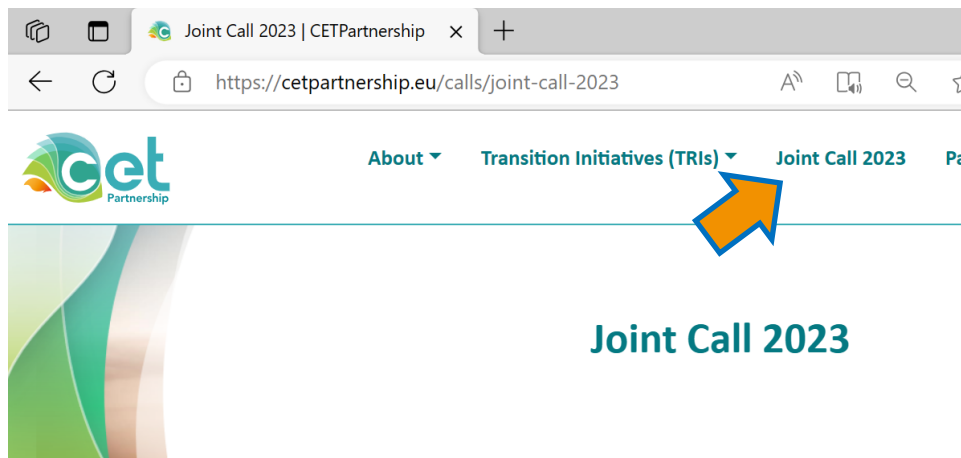
Draft Call text at <https://cetpartnership.eu/joint-call-2023-documents>

General information about the call

Call Calendar

Stage 1 Opening for pre-proposal submission	20/09/2023
Stage 1 Closing	22/11/2023, 14:00 CET
Stage 2 Opening for full-proposal submission	25/01/2024
Stage 2 Closing	27/03/2024, 14:00 CET
Funding decision communicated	June 2024
Project start (tentative)	September 2024
Application to national/regional Funding Agencies	Consult specific Funding Agency Annex.

Find national contact points on the CETPartnership website



Joint Call 2023

SUBMIT YOUR PROPOSAL

MATCHMAKING PLATFORM

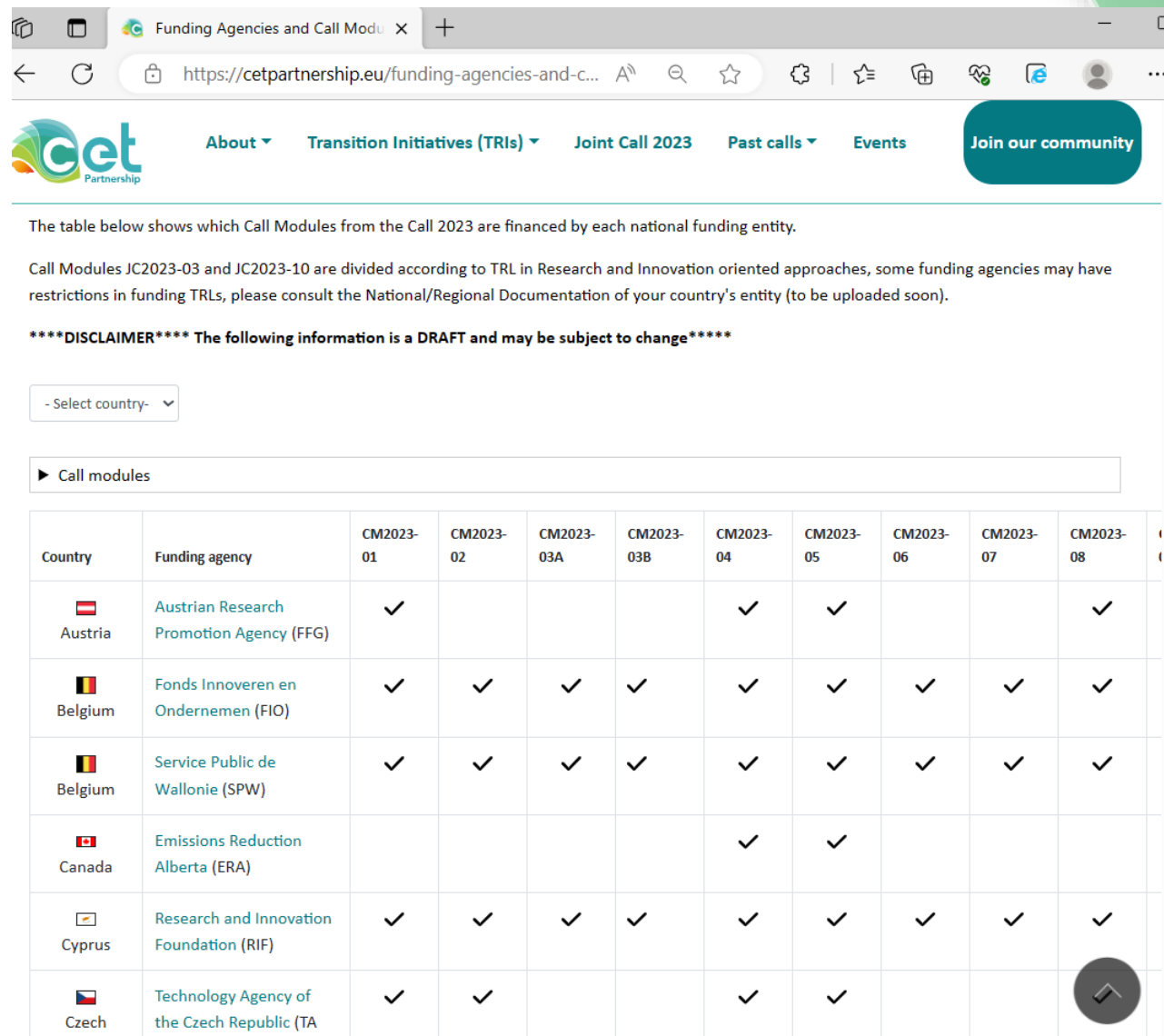
JOINT CALL 2023 DOCUMENTS

FUNDING AGENCIES AND CALL MODULES

The **CETPartnership Joint Call 2023** is the second CETPartnership. To cover different topics and RDI **Modules**, aimed at different energy technologies ; and innovation oriented approaches on different 1 complementing and completing each other.

General information about the call

The **CETPartnership Joint Call 2023** has two parts:



CETPartnership Event and Matchmaking Platform

- Event platform:
 - central events
 - thematic events (Joint Call 2023)
- Matchmaking
 - find and get in touch with
 - potential **project partners** for CETPartnership Joint Calls
 - TRI leaders
- Newsletter



JOIN THE  **COMMUNITY**



EVENTS
PROJECT MATCHMAKING
NEWSLETTER

bit.ly/CETPartnershipMatchmaking

Pitch presentations by Living Labs and Testbeds with validation capabilities

- 10:00 Intro to the session: B2Match presentation and guidance on how to use it, *Kristina Starborg, SWEA, Sweden*
- ~~10:10 Smart Grid Lab - Proofing the distribution grid of the future, *Jonas Graf, University of Stuttgart, Germany*~~
- 10:20 Regulatory Confusion, Utility Level Disruption & Citizen Confidence, *Dudley Stewart, Tallaght Smart Grid Test Bed, Smart MPOWER, Ireland*
- 10:30 Community Management Tools, *Fatuma Ali-Will, Grid Singularity Exchange Germany*
- 10:40 Renewable Energy Communities and innovative governance models: self consumption + demand-response + ancillary: creating value for local development, *Sergio Olivero, Renewable Energy Community "Energy City Hall", City of Magliano Alpi, Italy*
- 10:50 Green Energy Lab - Benefit from our support for your RDI Project, *Lisa Wolf, Green Energy Lab, Austria*
- 11:00 Smart Energy Applications (SEAp) - Opportunities for CETPartnership Joint Call 2023, *Lars Quakernack, SEAp- Smart Energy Applications, Bielefeld University of Applied Sciences, Germany*

10min break