

CETPartnership: What's in it for me?

The upcoming call for RTDI projects and matchmaking opportunity

7 June 2023, 11:00 - 13:00 CEST

CETPartnership Joint Call 2023

Call topics

**PLEASE NOTE THIS IS ONLY A
DRAFT VERSION**

**The text of Joint Call 2023 has not
been officially approved yet!**

CETPartnership Joint Call 2023 Call topics

No.	Title	Contact
CM2023-01	Direct current (DC) technologies for power networks	TRI1@cetpartnership.eu
CM2023-02	Energy system flexibility: renewables production, storage and system integration	TRI1@cetpartnership.eu TRI2@cetpartnership.eu
CM2023-03A/3B	Advanced renewable energy (RE) technologies for power production	TRI2@cetpartnership.eu
CM2023-04	Carbon capture, utilisation, and storage (CCUS)	TRI3@cetpartnership.eu
CM2023-05	Hydrogen and renewable fuels	TRI3@cetpartnership.eu
CM2023-06	Heating and cooling technologies	TRI4@cetpartnership.eu
CM2023-07	Geothermal energy technologies	TRI4@cetpartnership.eu
CM2023-08	Integrated regional energy systems	TRI5@cetpartnership.eu
CM2023-09	Integrated industrial energy systems	TRI6@cetpartnership.eu
CM2023-010A/10B	Clean energy integration in the built environment	TRI7@cetpartnership.eu

Integrated Net-zero-emissions Energy System

Call topics 1 and 2



Leading Expert

Michele de Nigris, RSE, IT

CM2023-01 – DC technologies for power networks

Call module developed through a **co-creation approach** involving all **TRI 1** Partners and relevant stakeholders



ETIP SNET
PLAN. INNOVATE. ENGAGE.



Target groups

Need owners / potential applicants

- Offshore wind farms/energy islands
- Grid operators (TSO, DSO and industrial/residential DC grids)
- Industry and SMEs in the fields of components, systems and devices for energy systems as well as software (services)
- Universities and research institutes

TRL

TRL jump of 1-2 classes

Budget

Budget of 10 M€: 2-3 projects shall be funded with 2 - 4 M€ each. Projects addressing planning and markets are expected in the range of 1 - 2 M€



Domain

HVDC, MVDC and LVDC deployment

Offshore, onshore, for energy island integration, pure DC and hybrid AC/DC grids, industrial/residential DC grids



Objective

Accelerate deployment through the development of **enabling and supporting tools**



Call main focus

Operation, control and protection

- Grid operation and control principles for multi-terminal and hybrid networks, DC distribution concepts and applications
- LVDC applications for distributed RES/EV integration and industrial processes

Verification, test and maintenance

Standardized test and validation methods for scaling, de-risk and protection

Planning and markets

Coordination and integration of meshed energy islands and hybrid HVDC, MVDC, AC/DC grids



CETPartnership and Mission Innovation GPFM Joint Call Module

CM2023-02 Energy system flexibility: renewables production, storage and system integration



Call module developed with

- Mission Innovation **Green Powered Future Mission**
- **TRI 1** and **TRI 2** experts and Partners



This Call Module brings **the contribution of CETPartnership at a global level** and gives a **global dimension to funded projects**, which will benefit from work and exchange with project partners from different world regions

Target groups

Private/regulated sector actors such as

- system operators
- SMEs and spin-off companies
- Research Technology Organisations (RTOs)

TRL

Start from TRL ≥3

Achieve TRL 5-6

Budget

A contribution ranging from 0.5 to 1.5 M€ would allow to co-fund sound project proposals



Domain

11 GPFM Innovation Priorities clustered into 5 R&I themes:

1. Large-scale renewable generation and system flexibility and reliability
2. Energy storage technologies and systems for flexibility services
3. System integration and flexible operations
4. Innovative flexibility sources and flexibility markets
5. Energy data management and security



Objective

Address key aspects to accelerate the uptake of highly innovative replicable and scalable solutions, preferably built on top of existing initiatives or assets



Call main focus

R&D projects dedicated to technological development, system integration, digitalization, standardisation relevant to the Innovation Priority themes of the 6 Module Domain

Enhanced zero emission Power Technologies

Call topics 2 and 3



Leading expert

Francesco Basile, University of Bologna, IT

CM2023-03A/03B: Advance renewable energy (RE) technologies for power production (3A/3B)

Objectives of the Call Module

Addressing key aspects in view of accelerating the development and the uptake of zero emission power technology in the Green Deal perspective:

- Contributes to the relevant SET Plan Implementation Plans objectives (on Ocean Energy; PV; CSP, Wind, and Bioenergy)
- Complements Horizon Europe calls covering R&I areas/topics underfunded with respect to the investment needed
- Addresses sustainability aspects
- Addresses integration/hybridization/coupling of different RE technologies for power production and different energy carriers

Scope of the Call Module

The Call Module calls for both research-oriented (ROA/3A) and innovation oriented projects (IOA/3B) addressing one of the following scopes:

- A new generation of cost-competitive, scalable and transferrable RE technologies for power production with higher efficiency, enhanced performances, lifetime, reliability and sustainability
- Integration of different RE power production technologies
- Integration/coupling/hybridization (co-generation of power and other energy carriers)

Expected impact

- Increase the energy conversion efficiency
- Increase technology performance and/or lifetime
- Develop innovative technologies / components
- Decrease investment cost and LCoE
- Demonstrate the feasibility of scaling up
- Demonstrate the technology in different geophysical/weather conditions
- Reduce environmental impact or improve multiple use of occupied land surface / or maritime space
- Minimize the use of critical raw materials and apply circularity-by-design approaches

Project consortia

- Universities, Research and technology developers
- Private companies: SMEs and spin-offs; large companies
- Technology integrators, system integrators
- Site planner and integrators

TRL

ROA: research and innovation action (final TRL \geq 4)
IOA: Innovation action (final TRL \geq 6)

CM2023-03A/03B: Advance renewable energy (RE) technologies for power production: technology areas



tri2@cetpartnership.eu

- **BIOENERGY FOR POWER GENERATION:** High efficiency biomass (co)generation of power; Integrated CHP systems
- **CONCENTRATED SOLAR POWER / THERMAL (CSP/STE):** Line-focus solar power plants technology; Central Receiver power plants technology; Turbo-machinery for specific conditions of solar thermal power plants
- **OCEAN ENERGY:** Dry-testing of power take-off for wave energy devices; Tidal blades; Connection systems
- **OFFSHORE RENEWABLES** (marine renewables, floating wind/PV, etc.): New materials / novel applications of existing materials for moorings, foundations and components; Mooring and connections; Site-specific marine observation, modelling and forecasting
- **SOLAR PHOTOVOLTAICS:** Advanced PV Technologies (Perovskite / Silicon Tandem-Solar cells and modules /Thin film cells); Improvement of Lifetime, Reliability and Sustainability; Digitalization for O&M; New Applications through Integration of PV
- **WIND ENERGY (OFFSHORE AND ONSHORE):** Next generation of wind turbine technology; Atmospheric modelling; Digital twins for turbines; O&M solutions/digital solutions; Landscape integration
- **HYBRID-RES SOLUTIONS:** Site integration optimization of different RES; Integration with storage; Hybrid systems

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

Call topics 4 and 5



Leading Expert

Aage Stangenland, RCN,NO

CM2023-04: Carbon capture, utilisation and storage (CCUS)

 tri3@cetpartnership.eu

Objectives

Facilitate the emergence of CO₂ Capture, Utilisation and Storage (CCUS) technologies via funding of transnational projects

Scope

Selected projects will support the emergence of CCU/CCS primarily in the industrial sectors and the energy sector:

- CO₂ capture from energy intensive or heavy industry
- Advancing lower cost CO₂ capture technologies
- CO₂-storage sites
- Enabling CCUS technologies
- Transport and injection of CO₂
- Reuse of existing energy assets for CCUS
- Negative emission technologies (NETs)

Expected impact

Funded projects will have a significant contribution to the green transition by accelerating development and deployment of CCUS technologies.

All projects must advance the state-of-the art for CCUS technologies and contribute new knowledge and new competence that brings CCUS closer to commercialisation.

Project consortia

In addition to standard CERP criteria of eligible partners from at least three CERP-countries, consortia submitting applications within CCU/CCS must demonstrate the interest of industry partner(s) by actively involving them in the project as formal partners.

TRL

Projects should aim at TRL 5-9. Parts of projects (e.g. one WP or a certain task) may address lower TRL.

CM2023-04: Carbon capture, utilisation and storage (CCUS)



tri3@cetpartnership.eu

What we expect from new projects

- Funded projects will have a significant contribution to the green transition by accelerating development and deployment of CCUS technologies.
- All projects must advance the state-of-the art for CCUS technologies and contribute new knowledge and new competence that brings CCUS closer to commercialisation.
- Only projects ending at TRL 5 or higher will be eligible for funding.
- Industry partners must be actively involved in as formal partners.

CM2023-05: Hydrogen and renewable fuels



tri3@cetpartnership.eu



Objectives

Technological development, demonstration, and deployment of renewable and synthetic fuels production, including hydrogen and energy storage.

Scope

International projects targeting technological solutions for end users.

Expected impact

Renewable fuels and the deployment of the hydrogen society will be important contributions to climate neutrality by 2050.

Project consortia

Research organisation, higher education institutions and industry (small and large private companies). Public and private organisations, associations and NGOs are also welcome to be involved.

TRL

Projects should aim at TRL 5-9. Parts of projects (e.g. one WP or a certain task) may address lower TRL.





R&D areas

- New or improved processes for hydrogen production (green and blue hydrogen).
- Storage of hydrogen through ammonia or other hydrogen liquid carriers.
- Hydrogen infrastructure and distribution aspects.
- New or improved processes and technologies for production of renewable fuels with low or zero carbon footprint (biofuels or synthetic fuels).
- End-use technologies using hydrogen or renewable fuels.



Efficient zero emission Heating and Cooling Solutions

Call topics 6 and 7



Leading Expert

Gerdi Breembroek, RVO, NL

CM2023-06: Heating and cooling technologies



tri4@cetpartnership.eu

Objectives

- Provide **enhanced and improved heating and cooling technologies** and systems for all major parts or climate zones of Europe by 2030 to enable 100% climate-neutral heating and cooling by 2050
- Geothermal energy: module 7
- Relaunch 2022

Scope

Research and innovation for the heating and cooling chain:

- Heat and cold sources
- Thermal storage
- Heating and cooling networks and conversion
- End-use systems

Expected impact

- Cost reduction and/or
- Increase in competitive market opportunities and/or
- Increase in environmental protection
- Innovations impacting societal acceptability, safety, and/or circularity are also within scope.

Consortia

Private sector and research organisations

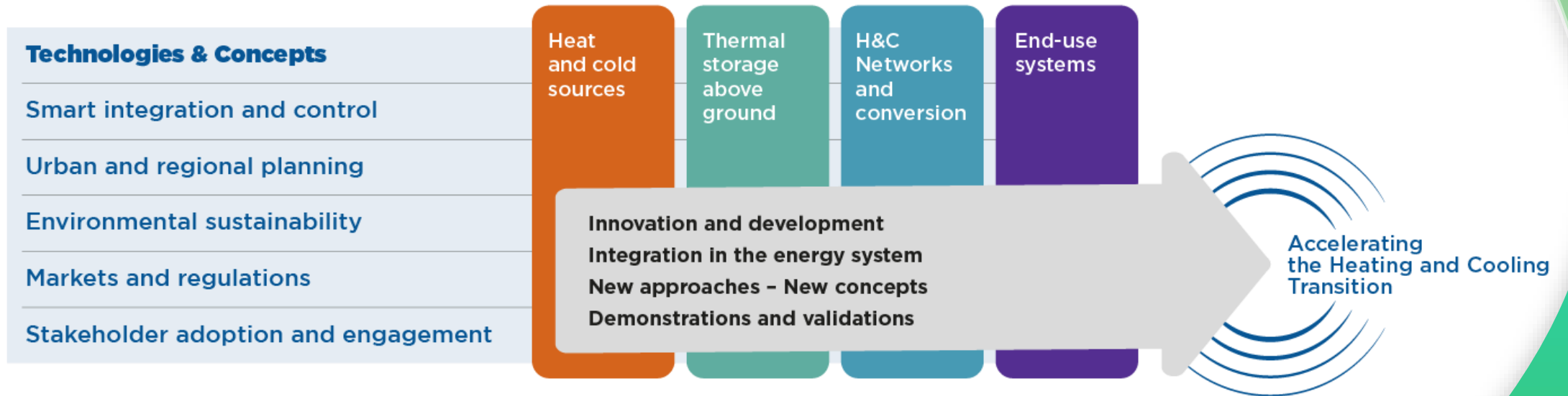
TRL

4-8

CM2023-06: Heating and cooling technologies



tri4@cetpartnership.eu



CM2023-07: Geothermal energy technologies



tri4@cetpartnership.eu

Objectives

- Enable a broad range of geothermal energy-related innovation, development, and research projects, for heating and cooling, power generation, underground thermal energy storage (UTES), and the co-production of geothermal minerals.
- Relaunch GEOTHERMICA-2

Scope

- Technological solutions, for all end users including industry
- Identification and assessment
 - Resource development
 - Operation and integration in the energy system

Expected impact

- Cost reduction and/or
- Increase in competitive market opportunities and/or
- Increase in environmental protection
- Innovations impacting societal acceptability, safety, and/or circularity are also within scope.

Consortia

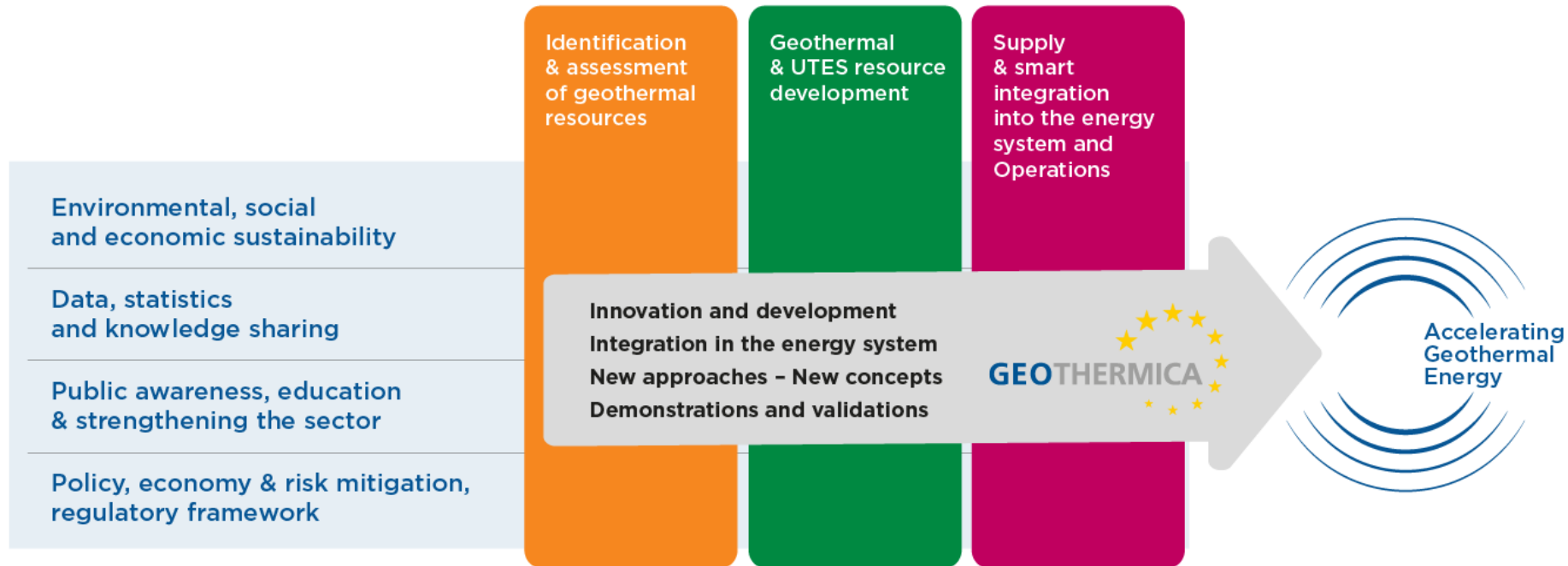
Private sector and research organisations

TRL

4-8

CM2023-07: Geothermal energy technologies

✉ tri4@cetpartnership.eu



Integrated Regional Energy Systems

Call topic 8



Leading Expert

Kristina Starborg, SWEA, SE

CM2023-08 Integrated regional energy systems

 tri5@cetpartnership.eu

Objectives

- Applying Projects should focus on regionally anchored ecosystems with **need owners of the region** and bring them together at European level.
- The projects should coordinate and **link research and innovation activities** with **testbeds**, e.g. living labs and **demonstration projects**.
- The transnational cooperation of these ecosystems will help **foster a deeper understanding** of the different **infrastructural** and **socio-economic** contexts.

Scope

- Projects should be “**regional**” rather than “local”
- the participation of **regional need owning entities**
- connection to local/regional **climate and energy plans** or **existing roadmaps** and **implementation plans** is desired
- Solutions shall contribute to **interoperability** in developing **harmonized business processes** for scalable solutions.

Expected impact

- **Knowledge building** and the **transfer of solutions** to other **regions with similar conditions** gain larger markets for solution providers
- **more efficient use of local resources** and speed up the co-transition of regional energy systems.
- Scaling up in this context means that there is a **high potential for replicability** of the solution in similar environments across Europe.

Project consortia

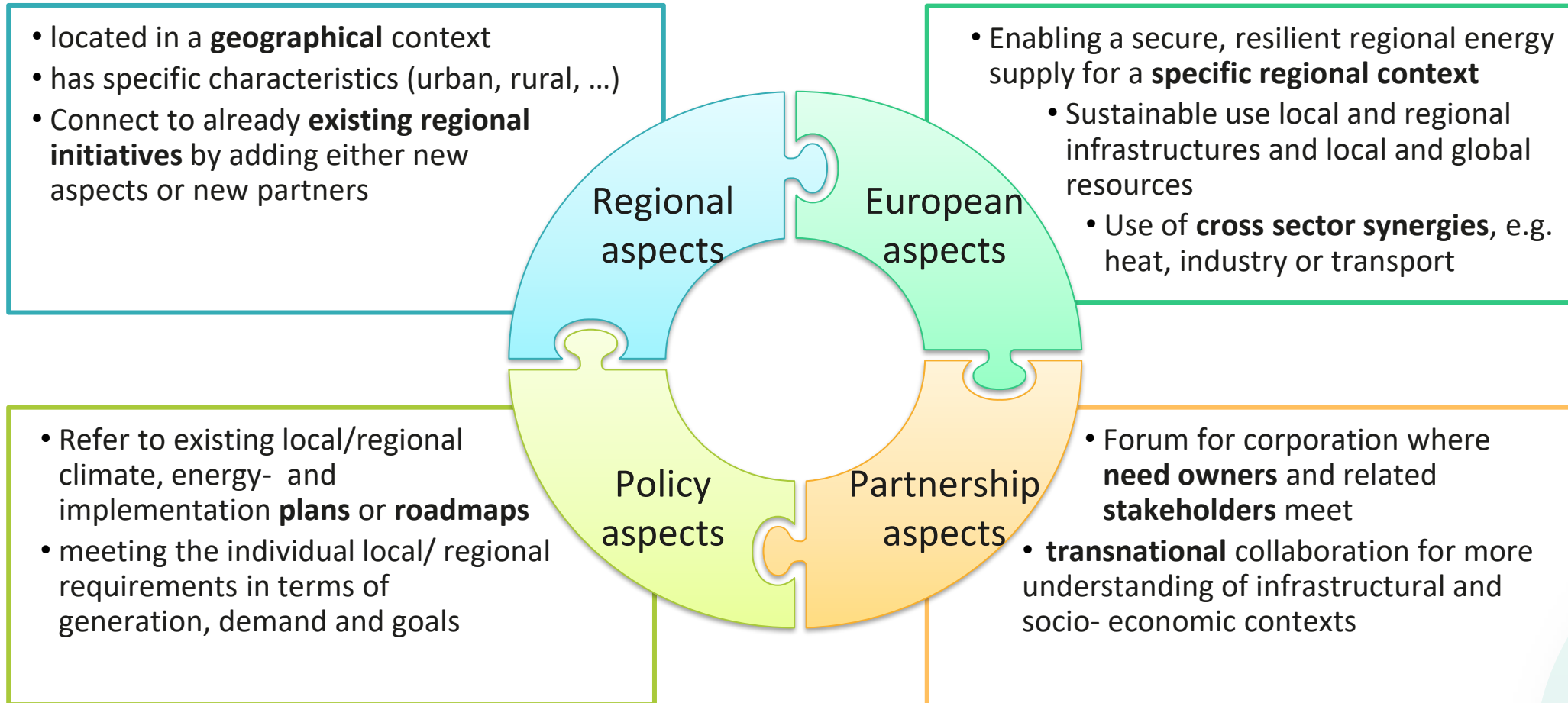
- encourage consortia to further develop already **existing regional initiatives** by adding new aspects
- connect to ongoing or recently finished **demonstration projects**
- cooperate on **existing test infrastructure** and **knowledge**

TRL

5-9

Activities with TRL levels 3-5 may be included if they contribute to the higher project goal

Characteristics of local / regional Energy Transition Ecosystems



Integrated Industrial Energy Systems

Call topic 9



Leading Expert

Fredrik Backmann, SWEA, SE

CM2023-09: Integrated industrial energy systems



tri6@cetpartnership.eu

Objectives

Support and link R & I between different actors with focus on existing needs/problems within industry.

Scope

International projects targeting industrial systems solutions for end users.

Expected impact

Many technologies are developed and ready for use (or close to) but integrating these technologies into industrial processes on a system level is lacking (Changed processes).

Project consortia

Research organisation, higher education institutions and industry (small and large private companies). Public and private organisations, associations and NGOs are also welcome to be involved.

TRL

Projects should aim at TRL 3-7.
Parts of projects (e.g. one WP or a certain task) may address lower TRL.

CM2023-09: Integrated industrial energy systems

 tri6@cetpartnership.eu

1 Call module with industrial process focus:

The module will support the challenges in REPowerEU plan by focusing on topics that contribute to one or more of the following areas in line with the plan:

- Energy and resource efficiency.
- Substituting fossil fuels as an energy source in industrial processes thereby accelerating Europe's clean energy transition.

Integration in the Built Environment

Call topic 10



Leading Expert

Stefan Nowak, NET Nowak Energy, CH

TRI 7: Integration in the Built Environment

TRI 7 Mission *is to provide solutions and technologies for existing and new **buildings to become an active element in the energy system**, with enhanced capability to **produce, store and efficiently use** energy in the residential and non-residential sector, comprising public and commercial buildings, service and mobility infrastructure buildings, etc.*

CM2023-10A/10B Clean energy integration in the built environment

✉ tri7@cetpartnership.eu

Objectives

Two call modules (ROA / IOA)

- To develop and enable the integration of new efficient energy solutions for/in buildings/the built environment, covering generation, use, storage, grids and mobility.
- To focus on the physical, technical, aesthetical and digital integration of clean energy conversion technologies for power, heat and cold.

Scope

To transform buildings / the built environment from a passive towards an active role in the future energy landscape, along two challenges:

- Integration of renewable energy conversion technologies for power, heat and cold
- Digitalization of planning, constructing, commissioning and operation

Expected impact

Based on the projects and their results:

- Validated solutions that can be taken to the next level (research and innovation activities)
- Adoption of proven solutions by the building community (e.g. architects, engineers, installers, building industry as well as regulators and standards)

Project consortia

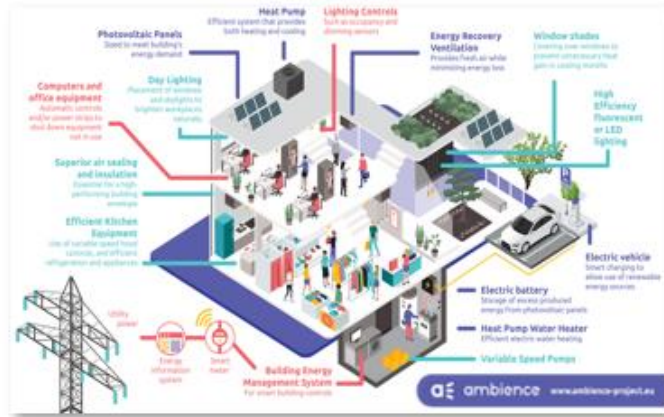
Energy, building and construction research (public and private research organisations, higher education institutions, etc.) and private industry (SMEs, large companies, etc.)

TRL

ROA: research and innovation action (final TRL ≥ 4)

IOA: Innovation action (final TRL ≥ 6)

Identifying the focus of TRI 7



Individual Technologies



Integration in Buildings



Areal Concepts

**TRI 7: Focus on the Interface
- Emphasis on Integration**

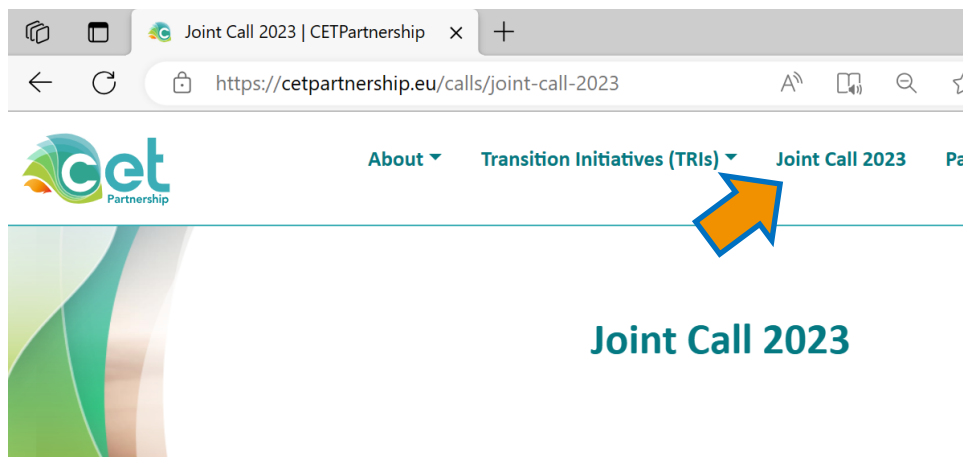
Focus of TRI 7

- Interface between individual technologies and the system
- Addressing the **building / built environment related perspective**
- Identification of the **integration aspect**
- Physical, technical, aesthetical and/or digital integration
- Generation, Use and Storage (electricity, heat, cold)
- Network issues (electricity, heat, cold)
- Smart operation and management
- Role of Digitalization

Building typologies

- Existing and new buildings
- Residential and non-residential, public and private buildings
- Old, historical and special buildings
- Service, mobility and logistics infrastructure

Which countries cover which call topics



Joint Call 2023

SUBMIT YOUR PROPOSAL

MATCHMAKING PLATFORM

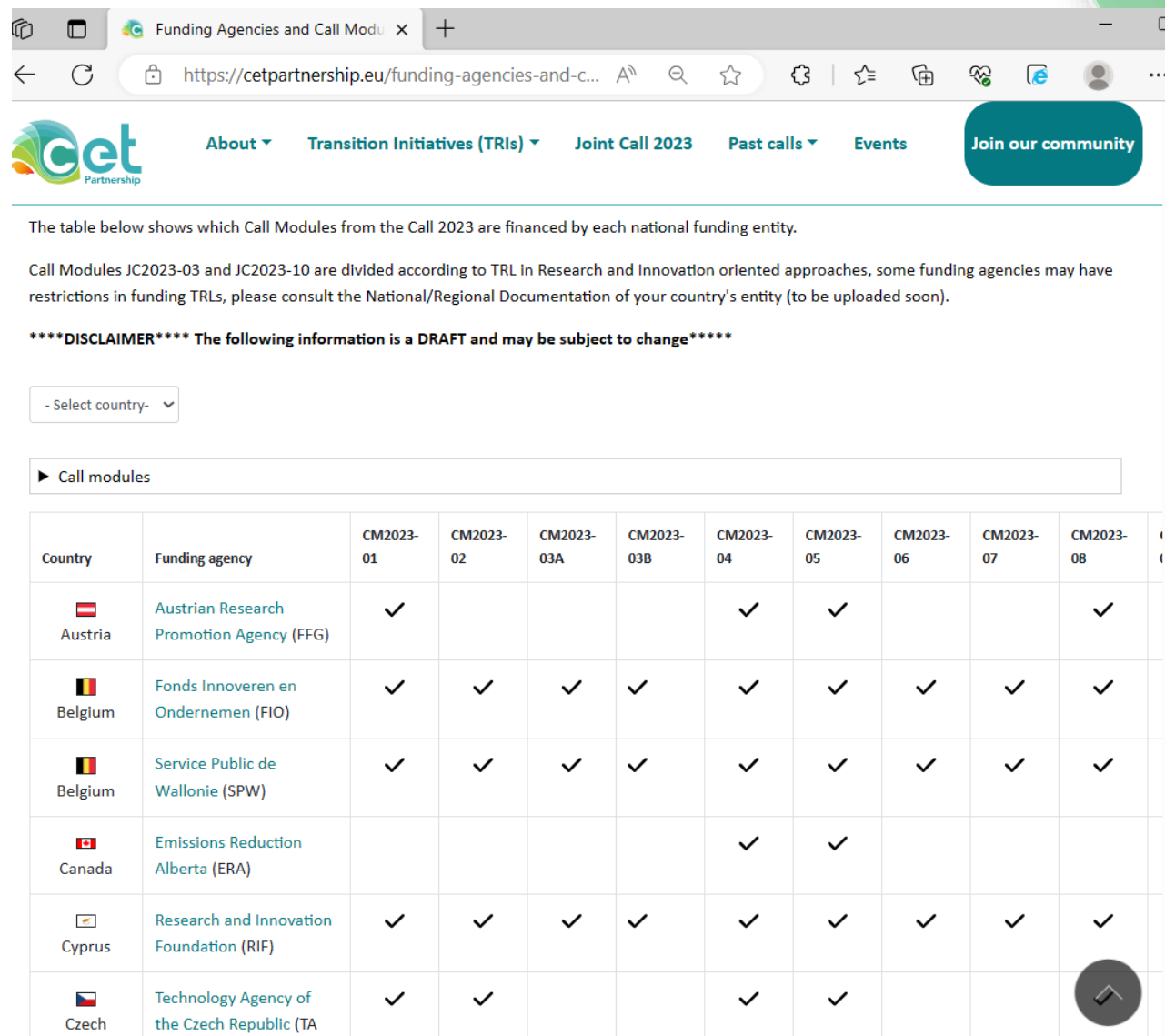
JOINT CALL 2023 DOCUMENTS

FUNDING AGENCIES AND CALL MODULES

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

General information about the call

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









The table below shows which Call Modules from the Call 2023 are financed by each national funding entity.

Call Modules JC2023-03 and JC2023-10 are divided according to TRL in Research and Innovation oriented approaches, some funding agencies may have restrictions in funding TRLs, please consult the National/Regional Documentation of your country's entity (to be uploaded soon).

****DISCLAIMER**** The following information is a DRAFT and may be subject to change****







- Select country- ▼

► Call modules

Country	Funding agency	CM2023-01	CM2023-02	CM2023-03A	CM2023-03B	CM2023-04	CM2023-05	CM2023-06	CM2023-07	CM2023-08
 Austria	Austrian Research Promotion Agency (FFG)	✓				✓	✓			✓
 Belgium	Fonds Innoveren en Ondernemen (FIO)	✓	✓	✓	✓	✓	✓	✓	✓	✓
 Belgium	Service Public de Wallonie (SPW)	✓	✓	✓	✓	✓	✓	✓	✓	✓
 Canada	Emissions Reduction Alberta (ERA)					✓	✓			
 Cyprus	Research and Innovation Foundation (RIF)	✓	✓	✓	✓	✓	✓	✓	✓	✓
 Czech	Technology Agency of the Czech Republic (TA)	✓	✓			✓	✓			

Upcoming events and national contact points

CETPartnerships Joint Call 2023 Promotion events

General		CETPartnership: what's in it for me?	7th June 10:00 CEST
		Info Day 1 (covering all call modules)	13th September (Time TBD)
Thematic		TRI 1 - Webinar on Interoperability in energy systems	Coming soon
		TRI3 event – CCUS, hydrogen and renewable fuels	12th June 13:00 CEST
		TRI4 event – Heating and Cooling	15th June 10:00 CEST
		TRI2 event – Zero-emission power technologies	26th June 10:00 CEST
National & Regional		National event: Norway 	12th June 10:00 CEST
		Regional event: Scotland 	15th June 10:00 BEST
		National event: Spain 	19th June 10:00 CEST
		Other TRI and national events	Coming soon

**Find your partners on the
matchmaking platform!**

CETPartnership Event and Matchmaking Platform

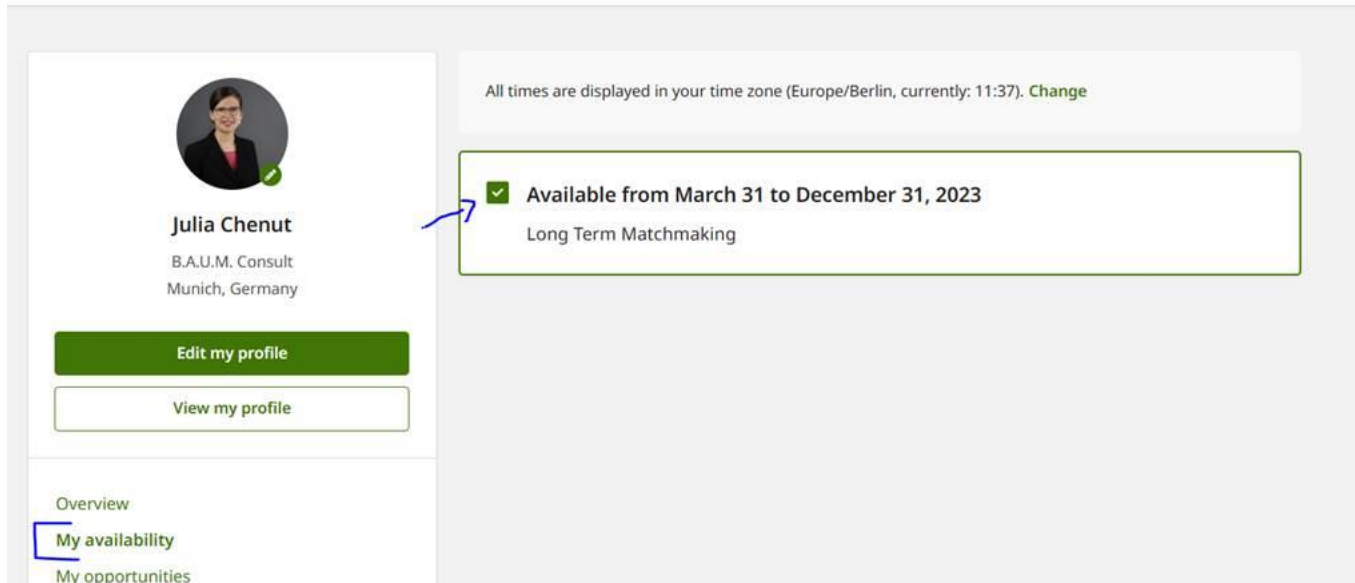
- Event platform:
 - central events
 - thematic events (Joint Call 2023)
- Matchmaking
 - find and get in touch with
 - potential **project partners** for CETPartnership Joint Calls
 - TRI leaders
- Newsletter



How to find a match? – Step 1

- If not done already, make yourself available for **longterm matchmaking** under your profile

My availability



All times are displayed in your time zone (Europe/Berlin, currently: 11:37). [Change](#)

☒ Available from March 31 to December 31, 2023
Long Term Matchmaking

Julia Chenut
B.A.U.M. Consult
Munich, Germany

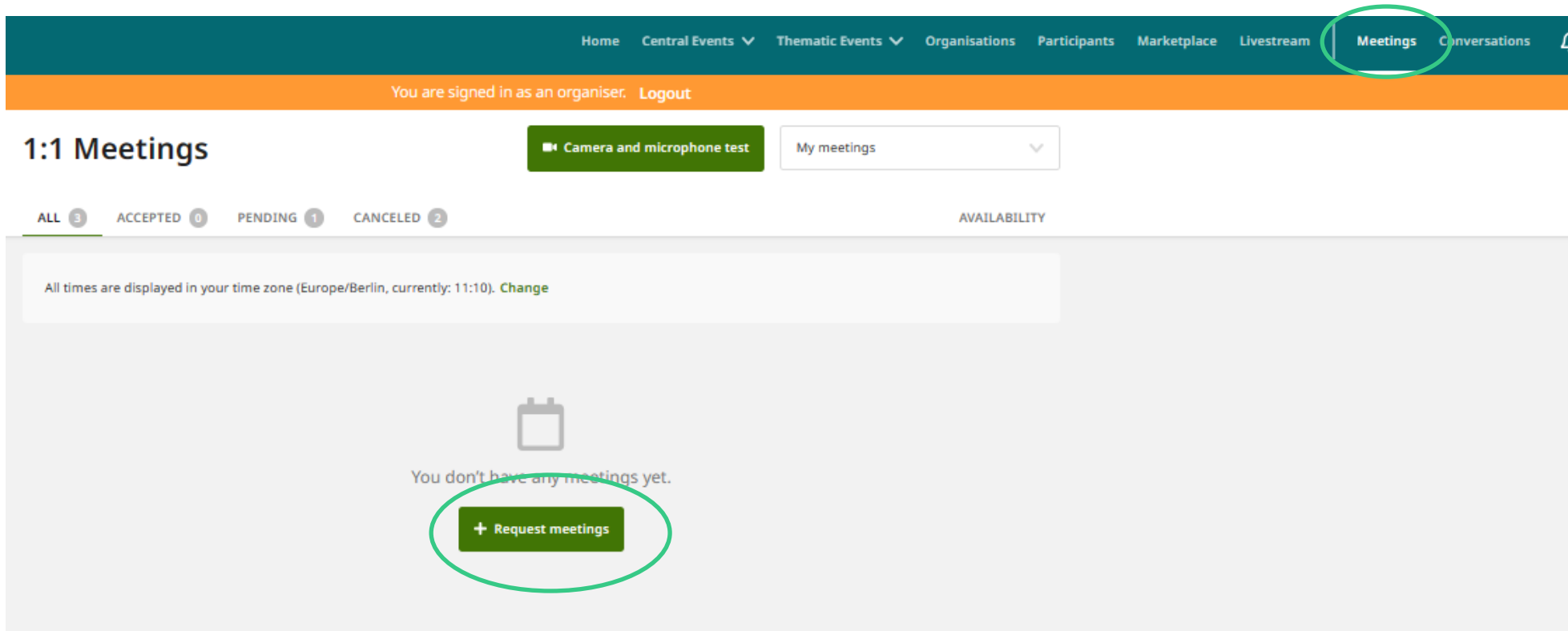
[Edit my profile](#)

[View my profile](#)

Overview
My availability
My opportunities

How to find a match? – Step 2

- Go to “**Meetings**” and request meetings



Home Central Events ▼ Thematic Events ▼ Organisations Participants Marketplace Livestream **Meetings** Conversations


You are signed in as an organiser. [Logout](#)

1:1 Meetings

[Camera and microphone test](#) [My meetings](#) ▼

[ALL](#) **3** [ACCEPTED](#) **0** [PENDING](#) **1** [CANCELED](#) **2** [AVAILABILITY](#)

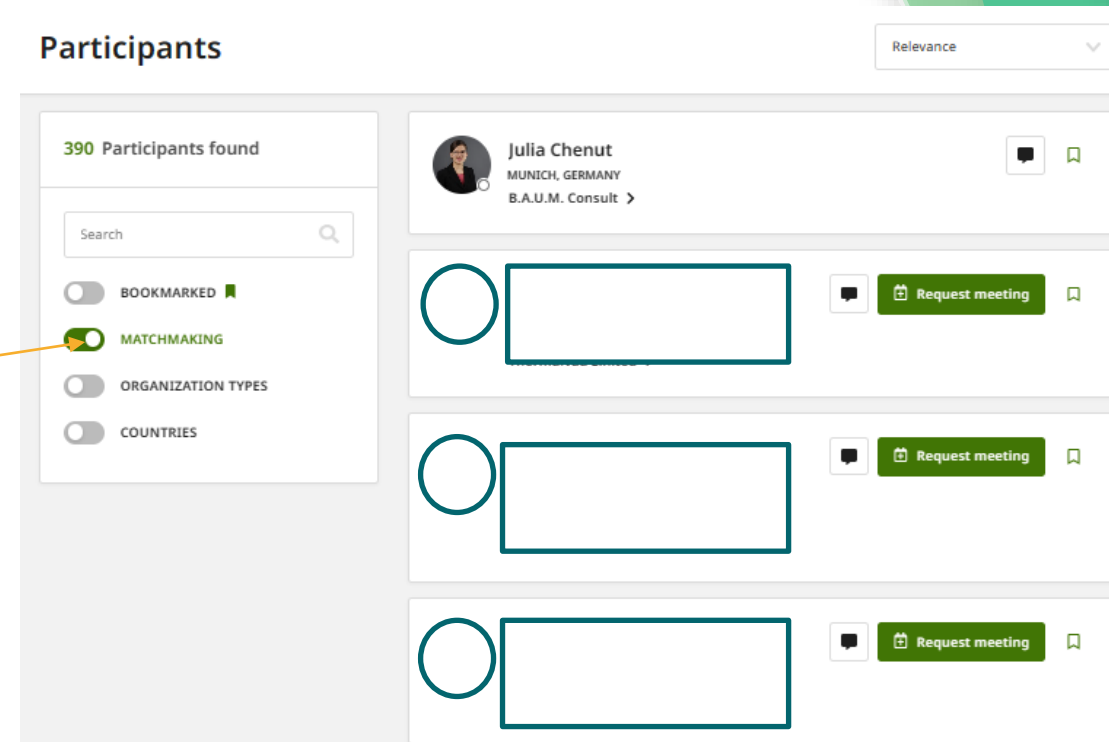
All times are displayed in your time zone (Europe/Berlin, currently: 11:10). [Change](#)


You don't have any meetings yet.

[+ Request meetings](#)

How to find a match? – Step 3

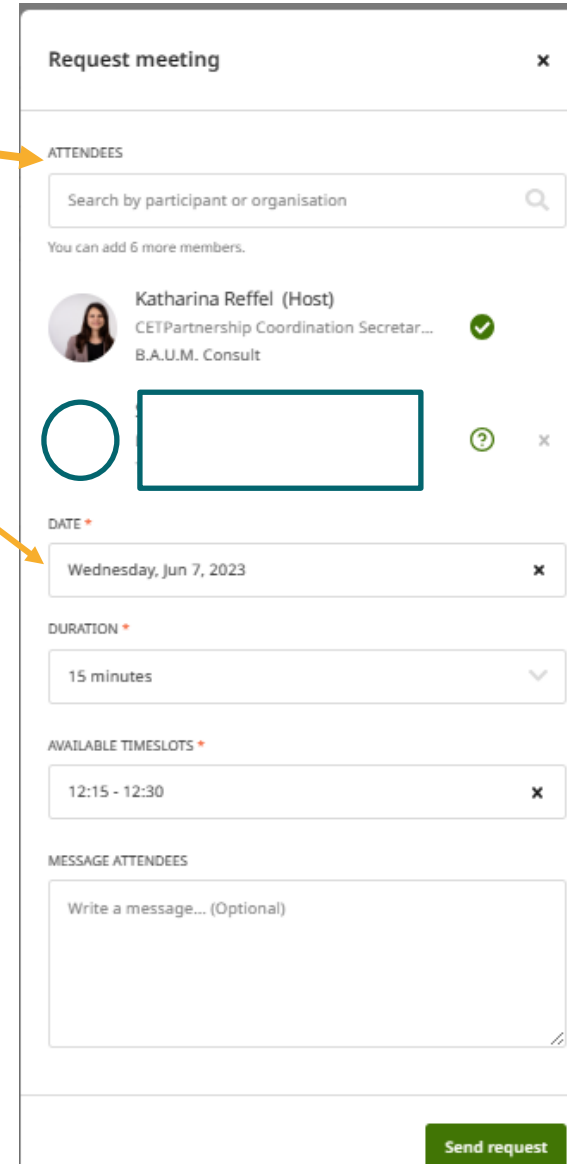
- After clicking on „request meeting“ you will see the **participants** list
- On the left you can filter participants by
 - Being available for matchmaking
 - Organization type
 - Countries
- Click on green button **“request meeting”**



The screenshot shows a web interface titled "Participants". On the left, there is a filter panel with a search bar and four toggle switches: "BOOKMARKED" (off), "MATCHMAKING" (on), "ORGANIZATION TYPES" (off), and "COUNTRIES" (off). An orange arrow points from the "MATCHMAKING" toggle to the text "Being available for matchmaking" in the list. The main area displays a list of participants. The first participant is "Julia Chenut" from "MUNICH, GERMANY" at "B.A.U.M. Consult". Below her are three placeholder cards, each with a circular profile picture, a rectangular name box, a chat icon, a green "Request meeting" button, and a bookmark icon. A "Relevance" dropdown menu is visible in the top right corner.

How to find a match? – Step 4

- You can invite up to 6 further attendees
- You can **arrange meetings**
 - today until 1 pm CEST
 - OR send a meeting request for a specific date, time and duration
- other person will be informed via mail and need to accept your suggestion (automatic time zone consideration)






Request meeting x

ATTENDEES

Search by participant or organisation 🔍

You can add 6 more members.

 **Katharina Reffel (Host)**
CETPartnership Coordination Secretar...
B.A.U.M. Consult ✓

  ? x

DATE *

Wednesday, Jun 7, 2023 x

DURATION *

15 minutes v

AVAILABLE TIMESLOTS *

12:15 - 12:30 x

MESSAGE ATTENDEES

Write a message... (Optional)

Send request

Meeting overview

- To not lose sight you also have a **overview** about your meetings and its status.

1:1 Meetings

Camera and microphone test

My meetings

ALL 2

ACCEPTED 1

PENDING 1

CANCELED 0

AVAILABILITY

The meetings and sessions schedule is displayed in the Europe/Berlin time zone (the current time is 12:02). [Change](#)

Next meetings

JC

Julia Chenut, B.A.U.M. Consult GmbH

16:30 - 16:50

Wednesday, June 09

Online Video Meeting

MEETING SCHEDULED

Cancel

Reschedule

Invite guests

Starts in 4 hours

Received requests

JC

Julia Chenut, B.A.U.M. Consult GmbH

15:15 - 15:30

Friday, June 11

Online Video Meeting

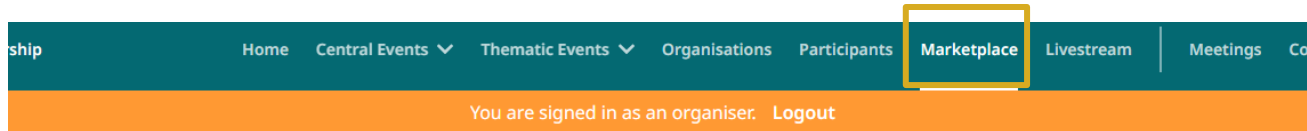
MEETING INVITATION RECEIVED

Cancel

Reschedule

Accept

Marketplace



Marketplace

Add an Opportunity

51 Opportunities found

Search

☐ PROJECT COOPERATION (26)

☐ SERVICE (25)

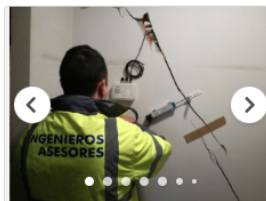
SERVICE

Updated on June 06, 2023

IoT Monitoring and Structural Health Engine...

We provide global solutions to the needs and demands of the Construction and Industry sectors. Our services include physical simulation, IoT monitoring and professional advice in a wide range of construction, and related business activities, includ...

Digital Platform Services



FERNANDO LLANO MARTÍNEZ

R&D Manager at INGENIEROS ASEORES (OVIEDO, Spain)



Request meeting

SERVICE

Updated on June 06, 2023

Geothermal consulting and engineering

We are consulting engineers with decades of experience in geothermal.

Opened for any cooperation opportunity where our expertise can add value.

Project Conception and/or Coordination

The **marketplace** gives every participant the chance to add an opportunity for:

- project cooperation
- specific service offered

Other participants can easily request meetings

The TRI offices are also on B2Match, find them there!

- TRI 1: Giuseppe Palazzo, RSE, IT
- TRI 2: Francesco Basile, University of Bologna, IT
- TRI 3: Aage Stangenland, RCN,NO; Isabel Cabrita, PT
- TRI 4: Alicja Wiktoria Stokłosa, GEORG, IS – from 08 June
- TRI 5: Angela Berger, FFG, AT
- TRI 6: Tanja Suni, CLIC Innovation, FI
- TRI 7: Thomas Biel, NET Nowak Energy, CH

Any questions?

- We stay here until 12:30 if you have any questions regarding matchmaking
- You can also contact us via matchmaking@cetpartnership.eu
- Happy matchmaking!

JOIN THE **COMMUNITY**



EVENTS
PROJECT MATCHMAKING
NEWSLETTER

bit.ly/CETPartnershipMatchmaking

EUROPEAN PARTNERSHIP



Co-funded by
the European Union

Stay tuned for call updates



<https://cetpartnership.eu>



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



https://twitter.com/CET_Partnership



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

CETPartnership

Thank You