

Clean Energy Transition Partnership CETPartnership Joint Call 2024 2025-01-31

The Clean Energy Transition Partnership is a transnational joint programming initiative to boost and accelerate the energy transition, building upon regional and national RDI funding programmes. The initiative is receiving funding from the European Union's research and innovation programme "Horizon Europe" under grant agreement No 101069750.



Co-funded by the European Union



	History of changes
Date	Changes
2024- 05-03	Initial version
-	Minor modifications of Chapter 5 and Call Modules 02, 03A, 03B, 05, 07, 09, updated Annex A, B and D
2024-	Minor change in Call Modules 06 and 07; updated Annex C;Section 6.2.1: Full proposal date corrected to: 02 April 2025; Minor adjustment in
	table of content - correction of numbering Update: National Annexes/C. and Table 1.2. [to reflect changes to national commitment]
2024-	Final version approved by EU, Update of Table 1.2 and and Italy/MUR, Malta/MCST, Netherlands/RVO, Norway/RCN, South Korea/KAIA, Sweden/SWEA, national requirements document, addition of Spain/EUSKADI and UK/SE requirements
08-23	Updates of Table 1.2 and national requirements document for Canada/ERA, France/RPL, Germany/PtJ(MWIKE), Greece/GSRI, Italy/MUR, Latvia/LZP. Addition of Israel/MoE national requirements document.
2024- 09-04	Update of Netherlands/NWO national requirements and Annex D, budget for Italy/MUR
2024- 09-11	Update of Germany/PtJ(BMWK), Ireland/TA-RI(SFI), Israel/MoE, Italy/MUR, Poland/NCBR, Portugal/FCT national requirements
2024- 09-13	Update of Israel/MoE and Türkiye/TUBITAK national requirements
2024- 09-18	Update of Austria/FFG and USA/DOE national requirements and Annex D
2024- 09-25	Withdrawal of ADEME/France as Funding Organisation in JC2024, removal from table 1.2, Annex C and D
2024- 10-04	Update of CDTI/Spain national requirements
2024- 10-11	Update of Denmark/IFD, Ireland/TA-RI(SFI) and Switzerland/SFOE requirements and fundning commitments
2024- 10-18	Update of Ireland /SEAI national requirements
	Withdrawal of Switzerland /SFOE as Funding Organisation in JC2024, removal from table 1.2, Annex C and D. Update of Italy/MUR and USA/DOE national requirements
	Update of Italy/MUR national requirements and confirmation of Israel/MOE planned contribution
	Increase of budget commiment for France/RPL
2025- 01-31	Updated requirements for Germany/SMWK and changed budget for /Spain/SODERCAN



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1. Introduction

1.1. Structure of the Call text

This Call text is structured as follows:

- Chapter 1 and 2 introduce the Clean Energy Transition Partnership (CETPartnership), the CETPartnership Joint Call 2024 (Call) and definitions used in this document.
- Chapter 3–6 provides instructions on the Call procedure, including an overview, the eligibility criteria and guidelines, the evaluation criteria and the process of the Call.
- Chapter 7 presents information to be considered at project implementation.
- Chapter 8 presents aims and topics of the Call Modules in the Call.
- Annex A describes the Reporting and Knowledge Community work package that is mandatory for all proposals and projects in the CETPartnership.
- Annex B describes the three dimensions of innovation for system solutions that can be applied to project design, as well as the CETPartnership Knowledge Community that involves projects funded by the Call.
- Annex C presents national/regional requirements of Funding Organisations participating in the Call.
- Annex D presents a matrix of Funding Organisations' participation in the Call Modules.

1.2. Clean Energy Transition Partnership (CETPartnership)

The <u>Clean Energy Transition Partnership (CETPartnership</u>)¹ aims to accelerate the clean energy transition and to contribute the goal of climate neutrality by 2050. It is a transnational and strategic partnership to align research, development and innovation (RDI) strategies, leverage knowledge and experience and foster a system transformation. Around 50 national/regional Funding Organisations from more than 30 countries in Europe and beyond participate in the CETPartnership with co-funding from the European Union (EU) through the Horizon Europe (HE) RDI Framework Programme.

The CETPartnership not only funds transnational RDI projects which will contribute to revolutionising the energy system. It also helps change makers find each other and collaborate, co-create strategic, evidence-based knowledge and impact, and develop transferable solutions, through the <u>CETPartnership Knowledge</u> <u>Community</u>² and <u>CETPartnership Impact Network</u>³. This will further help policy makers and decision makers in the private and public sector and contribute to further development of the partnership and a clean energy system. All relevant stakeholders are invited to join the <u>CETPartnership community</u>⁴.

While building on the achievements of pre-existing European Research Area Networks (ERA-NETs) in different areas of energy technologies and systems, the CETPartnership allows a broader ambition and a larger portfolio of topics and projects. The CETPartnership has developed the <u>Strategic Research and Innovation</u> <u>Agenda (SRIA)</u>⁵, describing the common vision and objectives of the CETPartnership's transformative, chal-

⁵ https://cetpartnership.eu/sites/default/files/documentation/cetp_sria_1.0.pdf



¹ https://cetpartnership.eu/

² https://cetpartnership.eu/about/knowledge-community

³ https://cetpartnership.eu/about/impact-exploitation

⁴ https://clean-energy-transition-partnership-2023.cetp.b2match.io/home

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lenge-driven and transdisciplinary approach. Based on thematic challenges identified in SRIA, seven **Transition Initiatives (TRIs)** have been developed as the main acting bodies and configurations of Funding Organisations.

The CETPartnership's annual joint calls cover a wide range of RDI disciplines and welcome interdisciplinary approaches. So far, the CETPartnership has implemented two joint calls in 2022 and 2023. The first call resulted in 46 projects, involving more than 350 organisations and about EUR 80 million from funding organisations in 26 countries.

1.3. CETPartnership Joint Call 2024 (Call)

The CETPartnership Joint Call 2024 (Call) is the third annual joint call under the CETPartnership. The Call consists of **Call Modules**, addressing different energy technology and system challenges as well as different RDI approaches and thus complementing and completing each other.

Call Modules focusing on enabling technologies (CM2024-02, 03A, 03B, 04, 05, 06 and 07, see Table 1.1 and **Chapter 8**) typically address approaches with reference to the <u>Technology Readiness Levels (TRLs)</u>⁶ or <u>Commercial Readiness Index (CRI)</u>⁷. Some distinguish between research-oriented approaches (ROA, CM2024-03A) and innovation-oriented approaches (IOA, CM2024-03B).

Call Modules focusing on system integration (CM2024-01, 02, 08, 09 and 10, see Table 1.1 and **Chapter 8**) typically address holistic, integrated and transdisciplinary approaches with three dimensions: "technologies and infrastructures", "organisation of energy systems" and "transition of energy systems" (see **Annex B**).

No.	Title
<u>CM2024-01</u>	Energy data spaces and interoperability
<u>CM2024-02</u>	Energy system flexibility: renewables production, storage and system integration
<u>CM2024-03A</u>	Advanced renewable energy (RE) technologies for power production (ROA)
<u>CM2024-03B</u>	Advanced renewable energy (RE) technologies for power production (IOA)
<u>CM2024-04</u>	Carbon capture, utilisation and storage (CCUS)
<u>CM2024-05</u>	Hydrogen and renewable fuels
<u>CM2024-06</u>	Heating and cooling technologies
<u>CM2024-07</u>	Geothermal energy technologies
<u>CM2024-08</u>	Integrated regional energy systems
<u>CM2024-09</u>	Integrated industrial energy systems
<u>CM2024-10</u>	Clean energy integration in the built environment

Table 1.1. Call Modules in the CETPartnership Joint Call 2024

All projects funded by the Call are expected to actively participate in the <u>CETPartnership Knowledge</u> <u>Community</u>⁸ and work on topics of relevant Call Modules as well as cross-cutting issues outlined in <u>CETPartnership SRIA</u>⁹. In addition, the projects will be supported in <u>exploitation and impact maximisation</u> with an Impact Library, training and networking. Read more about the mandatory Reporting and Knowledge Community Work Package in **Annex A**, and about the CETPartnership Knowledge Community in **Annex B**.

⁹ https://cetpartnership.eu/sites/default/files/documentation/cetp_sria_1.0.pdf



⁶ Definition in Horizon Europe Work Programme 2023-2024 13. General Annexes, https://ec.europa.eu/info/funding-tenders/op-portunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-13-general-annexes_horizon-2023-2024_en.pdf

⁷ https://arena.gov.au/assets/2014/02/Commercial-Readiness-Index.pdf

⁸ https://cetpartnership.eu/index.php/about/knowledge-community



At the global level, the Call is part of the <u>Mission Innovation (MI)</u>¹⁰ call series. As such, some of the Call Modules are prepared directly in collaboration with MI missions, and all Call Modules are open to applications that directly and/or indirectly contribute to the work of MI missions.

1.4. Participating Funding Organisations

Around 45 national/regional Funding Organisations (see Table 1.2) participate in the Call with budget for funding in different Call Modules (around EUR 90 million in total¹¹). The Funding Organisations will fund eligible costs of Beneficiary Partners based in their country/region according to their budgets and requirements (see **Annex C** and **Annex D**).

Country	Region	Organisation name	Acronym
Austria		Austrian Research Promotion Agency	FFG
Belgium	Flanders	Fonds Innoveren en Ondernemen	FIO
	Wallonia	Service public de Wallonie	SPW
Canada	Alberta	Emissions Reduction Alberta	ERA
Czech Repu	ıblic	Technology Agency of the Czech Republic	TA CR
Denmark		Energy Technology Development and Demonstration Programme	EUDP
		Innovation Fund Denmark	IFD
Estonia		Estonian Research Council	ETAG
France	(Federal)	Agence Nationale de la Recherche	ANR
	Pays de la Loire	Pays de la Loire Region Council	RPL
Germany	(Federal)	Projektträger Jülich/Forschungszentrum Jülich GmbH (BMWK)	PtJ (BMWK)
	North Rhine- Westphalia	Projektträger Jülich/Forschungszentrum Jülich GmbH (MWIKE)	PtJ (MWIKE)
	Saxony	Saxon State Ministry for Science, Culture and Tourism	SMWK
Greece		General Secretariat for Research and Innovation	GSRI
Hungary		National Research, Development and Innovation Office	NKFIH
Iceland		The Icelandic Centre for Research	RANNIS
India		Department of Science & Technology, Ministry of Science & Technology, Government of India	DST
Ireland		Geological Survey Ireland	GSI
		Taighde Éireann - Research Ireland (earlier Science Foundation Ireland)	TA-RI (SFI)
		Sustainable Energy Authority of Ireland	SEAI
Israel		Ministry of Energy	MoE
Italy		Ministero dell'Università e della Ricerca	MUR
Latvia		Latvian Council of Science	LZP

Table 1.2. Funding Organisations (TBC= participation to be confirmed)

¹⁰ http://mission-innovation.net/

¹¹ As per 8 August 2024.

EUROPEAN Partnership: cetpartnership.eu





Lithuania		Research Council of Lithuania	LMT
Malta		Malta Council For Science And Technology / Science Malta	MCST/SM
The Netherlands		Dutch Research Council	NWO
		Netherlands Enterprise Agency	RVO
Norway		The Research Council of Norway	RCN
Poland		National Centre for Research and Development	NCBR
Portugal		Fundação para a Ciência e a Tecnologia	FCT
Romania		Executive Agency for Higher Education, Research, Development and Innovation Funding	UEFISCDI
South Korea	l	Korea Agency for Infrastructure Technology Advancement	KAIA
Spain	(Federal)	Centre for the Development of Technology and Innovation.	CDTI
	Asturias	<u>Fundación para el Fomento en Asturias de la Investigación</u> <u>Científica Aplicada y la Tecnología - Agencia de Ciencia,</u> <u>Competitividad Empresarial e Innovación Asturiana</u>	FICYT- SEKUENS
	Basque	Departmento de Desarrollo Económico, Sostenibilidad y Medio Ambiente. Eusko Jaurlaritza-Gobierno Vasco	EUSKADI
	Cantabria	Regional Development Agency of Cantabria	SODERCAN
Sweden		Swedish Energy Agency	SWEA
Tunisia		Ministry of Higher Education and Scientific Research	MHESR
Türkiye		The Scientific and Technological Research Council of Türkiye	TUBITAK
The United Kingdom	Scotland	Scottish Enterprise	SE
The United States of America		Department of Energy	DOE



2. Definitions

In the Call, the following definitions apply. The Call process includes two stages:

- a pre-proposal stage (Stage 1)
- a full proposal stage (Stage 2)

The term **proposal** refers to both the pre-proposal and the full proposal.

A proposal is submitted by a **Project Consortium** that may consist of the following **Project Consortium Partners**:

- **Coordinator**: A legal entity applying for funding in the Call and responsible for coordinating and managing the proposal. The Coordinator cannot be changed after the deadline for pre-proposal submission (Stage 1) and before the selection of full proposals to be funded (Stage 2) in the Call process.
- **Beneficiary Partners**: All Project Consortium Partners applying for funding in the Call (including the Coordinator).
- Self-financed Partner(s): Project Consortium Partner(s) participating from any country with their costs declared but without applying for funding in the Call. Each Self-financed Partner submits a Letter of Commitment in Stage 2 of the Call process (see Subsection 6.2.1).

The Project Consortium Partners are legal entities of any organisation type such as:

- Secondary and higher education establishments
- Research organisations
- Private for-profit companies
- Public bodies
- Other entities (e.g. non-profit organisations)

Each **Project Consortium Partner** may have the following persons:

- A Principal Investigator (PI)
- Any Team Members



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3. Call overview

The CETPartnership Joint Call 2024 (Call) is the third annual co-funded call under the CETPartnership and is open for Beneficiary Partners from countries participating in the Call and for Self-financed Partners from all over the world ¹². The Call consists of 11 **Call Modules**, addressing different energy technology and system challenges as well as different RDI approaches (see **Chapter 8**), thus complementing, and completing each other. **All Project Consortia are therefore encouraged to check carefully the coverage and requirements of their intended Call Module**.

Around 45 national/regional Funding Organisations participate in the Call with budget for funding in different Call Modules (around EUR 95 million in total ¹³), for eligible costs of Beneficiary Partners based in their country/region (see Annex C and Annex D). All Project Consortia, above all the Beneficiary Partners, are encouraged to check carefully the coverage and requirements of relevant Funding Organisations.

The Call follows a 2-stage procedure; a pre-proposal stage (Stage 1) and a full proposal stage (Stage 2), see **Table 3.1** and **Chapter 6**. A Project Consortium chooses one Call Module to submit its pre-proposal (Stage 1). If the pre-proposal is selected in Stage 1, the Project Consortium is invited to submit a full proposal to the same Call Module (Stage 2). If the proposal is selected for funding in Stage 2, the eligible Beneficiary Partners will receive funding from their relevant Funding Organisations.

Funding Organisations may additionally require submission according to own submission procedure such as deadlines, portals and templates, see respective national/regional requirements in **Annex C**.

Opening for pre-proposal submission (Stage 1)	19 September 2024	
Deadline for pre-proposal submission	21 November 2024, 14:00 CET	
National/regional deadline for pre-proposal submission	See Annex C	
Opening for full proposal submission (Stage 2)	29 January 2025	
Deadline for full proposal submission	2 April 2025, 14:00 CEST	
National/regional deadline for full proposal submission	See Annex C	
Funding decision communicated	Beginning of July 2025	
Project start	1 September–15 December 2025	

Table 3.1. Call timeline

In both Stage 1 and 2, the proposals will be checked according to eligibility criteria and requirements set for the Call in general (see **Chapter 4**), Call Modules (see **Chapter 8**) and Funding Organisations (see **Annex C**) and will be evaluated according to evaluation criteria (see **Chapter 5**), ranked per Call Module and selected according to the available funding. Failing to meet a criterion or requirement can lead to exclusion from the selection in both Stage 1 and 2. All Project Consortia are therefore encouraged to check carefully all the criteria and requirements, with relevant contacts if necessary.

In short, for a proposal to be considered for funding, it must:

- have met all the transnational criteria (see Chapter 4) and Call Module requirements (see Chapter 8), including a Project Consortium including Beneficiary Partners deemed eligible by relevant Funding Organisations participating in the Call Module (see Annex C and Annex D), and;
- have been selected according to the ranking and available funding.



¹² EU sanctions may apply, see https://www.eeas.europa.eu/eeas/european-union-sanctions_en

¹³ As per 8 August 2024.



Questions about the Call in general should be addressed to the CETPartnership Call Management (**Call Management**, <u>callmanagement@cetpartnership.eu</u>).

Questions about the Call Modules should be addressed to respective Call Module contacts, see Chapter 8. Questions about the national/regional requirements should be addressed to respective Funding Organisations see Annex C.



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4. Eligibility criteria and guidelines

The Call includes the following eligibility criteria and requirements:

- > **Transnational eligibility criteria**, applicable for all Project Consortia applying to the Call
- Call Module requirements, applicable for Project Consortia applying to Call Modules with specific requirements, see also Chapter 8
- National/regional requirements, applicable for Beneficiary Partners applying for funding from Funding Organisations in the Call, see also Annex C

Table 4.1. Summary of transnational eligibility criteria

- **1** A proposal must be written in English and submitted on the CETPartnership Submission Platform before the deadlines, following mandatory proposal templates.
- 2 A Project Consortium must consist of a minimum of three Beneficiary Partners (including one Coordinator) adhering to relevant national/regional eligibility criteria, from a minimum of three different countries participating in the selected Call Module. Of these three Beneficiary Partners, at least two must be from EU Member States or HE Associated Countries.
- **3** The total effort of one Project Consortium Partner in the Project Consortium can be maximum 60% of the total project efforts (measured in person months).
- **4** The total effort of Project Consortium Partners from one country/region in the Project Consortium can be maximum 75% of the total project efforts (measured in person months).
- **5** The following individuals are ineligible for proposal submission: CETPartnership Governing Board members, CETPartnership General Assembly members and researchers from the Funding Organisations in the Call.¹⁴
- 6 A project must finish in 36 months from the start of the project.
- 7 A proposal must include a work package called Reporting and Knowledge Community in their work plan.

For a proposal to be considered for funding, it must have met all the transnational criteria (see this chapter) and Call Module requirements (see **Chapter 8**), with a Project Consortium including Beneficiary Partners deemed eligible by relevant Funding Organisations participating in the Call Module (see **Annex C** and **Annex D**). Failing to meet an eligibility criterion or requirement can lead to exclusion from the selection. All Project **Consortia are therefore encouraged to check carefully all the eligibility criteria and requirements.** Below, **eligibility criteria and requirements** are described in lists () and **guidelines and recommenda-tions** in texts.

4.1. Proposal submission

A proposal must be written in English and submitted on the <u>CETPartnership Submission Platform</u>¹⁵ before the deadlines, following mandatory proposal templates available for download on the start page of the Submission Platform. To be considered for funding, submission of a pre-proposal is mandatory for each Project Consortium, and submission of a full proposal is mandatory for each invited Project Consortium. Resubmission or revision of a proposal will be denied after the submission deadline unless it is requested by the Call Management. (Transnational eligibility criterion 1)



¹⁴ Legal entities who are able to provide written proof that their organisational structure is completely separated from those of the Funding Organisation participating in the Call may under these exceptional circumstances submit their proposal to the Call.

¹⁵ https://cetp-submission.mur.gov.it/



National/regional Funding Organisations may additionally require submission according to own submission procedure such as deadlines, portals and templates, see respective national/regional requirements in Annex C.

4.2. Project Consortium Partners

- A Project Consortium must consist of a minimum of three Beneficiary Partners (including one Coordinator) adhering to relevant national/regional eligibility criteria, from a minimum of three different countries participating in the selected Call Module. Of these three Beneficiary Partners, at least two must be from EU Member States or <u>HE Associated Countries</u>¹⁶ (Transnational eligibility criterion 2).
- The total effort of one Project Consortium Partner in the Project Consortium can be maximum 60% of the total project efforts (measured in person months). (Transnational eligibility criterion 3).
- The total effort of Project Consortium Partners from one country/region in the Project Consortium can be maximum 75% of the total project efforts (measured in person months). (Transnational eligibility criterion 4).
- The following individuals are ineligible for proposal submission: CETPartnership Governing Board members, CETPartnership General Assembly members or researchers from the Funding Organisations in the Call. However, legal entities who are able to provide written proof that their organisational structure is completely separated from those of the Funding Organisation participating in the Call may under these exceptional circumstances submit their proposal to the Call. (Transnational eligibility criterion 5).
- Specific Call Module requirements may apply regarding the Project Consortia, see Call Module requirements in respective Call Modules in Chapter 8.
- Specific National/regional requirements may apply regarding the Project Consortia, see respective national/regional requirements in Annex C.

Each Self-financed Partner is expected to enclose a Letter of Commitment with the full proposal (see **Subsection 6.2.1**).

No individual involved in a proposal can act as an evaluator in the Call.

4.3. Project duration and budget

- > A project must finish in 36 months from the start of the project. (**Transnational eligibility criterion 6**).
- Specific Call Module requirements may apply regarding the project budget; see Call Module requirements in respective Call Modules in Chapter 8.
- Specific National/regional requirements may apply regarding the project duration and/or budget; see respective national/regional requirements in Annex C.

The Call generally aims to support projects with a duration between 12 and 36 months and applying for funding in the Call in the range of (but not limited to) EUR 0.5–5 million, besides possible self-financing.

4.4. Research, development and innovation (RDI) approaches / Technology Readiness Levels¹⁷

Specific Call Module requirements may apply regarding the RDI approaches/TRLs; see Call Module requirements in respective Call Modules in Chapter 8.

¹⁶ https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participa-tion_horizon-euratom_en.pdf





Specific National/regional requirements may apply regarding the RDI approaches/TRIs; see respective national/regional requirements in Annex C.

The Call applies the definition of TRLs in the <u>HE Work Programme</u>¹⁸.

Since the CETPartnership aims to accelerate the clean energy transition to achieve the goal of climate neutrality by 2050, the Call generally aims to fund projects increasing their TRL and reaching medium to high TRLs (4–8), in combination between technological and system solutions with societal, commercial, financial, environmental, regulatory and other critical aspects. TRL increase of 1–2 is considered usual, increase of 3 ambitious and increase of 4 infeasible. Projects may include activities at lower or higher TRLs based on specific needs to reach project goals or meet national/regional requirements.

Other frameworks than TRLs may apply as well in some Call Modules. For example, the <u>Commercial Readiness</u> <u>Index (CRI)</u>¹⁹ describes solutions in terms of their commercial value proposition and ability to obtain financing for deployment. The <u>Societal Readiness Level (SRL)</u>²⁰ is a way of assessing the level of societal adaptation of solutions. In addition, the <u>Smart Readiness Indicator (SRI)</u>²¹ is a common EU scheme for rating the smart readiness of buildings.

The <u>CETPartnership Exploitation Guidelines</u>²² developed by the CETPartnership Impact Network will be of help in planning a project with activities to advance on such scales as well as to exploit outcomes and maximise impact.

4.5. Cross-cutting dimensions

Specific Call Module requirements may apply regarding the cross-cutting dimensions; see Call Module requirements in respective Call Modules in Chapter 8.

The cross-cutting dimensions are an integral part of the CETPartnership. They can be transition pathways, circularity, digitalisation as well as policy and social aspects and include different societal stakeholders and innovation ecosystems. Read more about the cross-cutting dimensions in the <u>CETPartnership SRIA</u>²³.

4.6. Reporting and Knowledge Community work package

A proposal must include a work package called Reporting and Knowledge Community in their work plan (see Annex A). (Transnational eligibility criterion 7).

When developing a proposal, it is important to consider the concept and content of the CETPartnership Knowledge Community, in which projects funded by the Call are expected to actively participate. Read more about the Knowledge Community in **Annex B** and the <u>CETPartnership's website</u>²⁴.

4.7. Open science

The CETPartnership promotes and asks Project Consortia to carefully consider open science practices, including the FAIR principles (Findable, Accessible, Interoperable, and Reusable), with a strong emphasis on high accessibility of funded projects' findings (see the evaluation criterion Excellence in **Chapter 5**). Read more about open science in the <u>EU's open science policy</u>²⁵.

²⁵ https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science_en



¹⁸ https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-13-general-an-nexes_horizon-2023-2024_en.pdf

¹⁹ https://arena.gov.au/assets/2014/02/Commercial-Readiness-Index.pdf

²⁰ https://innovationsfonden.dk/sites/default/files/2019-03/societal_readiness_levels_-_srl.pdf

²¹ https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/smart-readiness-indicator_en

²² https://cetpartnership.eu/sites/default/files/documentation/CETP_exploitation_guidelines_2024.pdf

²³ https://cetpartnership.eu/sites/default/files/documentation/CETP%20SRIA_v1.0_endorsed_compressed_0.pdf

²⁴ https://cetpartnership.eu/about/knowledge-community



4.8. Gender dimension

The CETPartnership considers eliminating gender inequality and intersecting socioeconomic inequalities throughout research and innovation systems, for example by addressing unconscious bias and systemic structural barriers. The CETPartnership integrates the gender dimension in the research and innovation content of the Joint Calls (see the evaluation criterion Excellence in **Chapter 5**) and promotes gender balance among personnel in a Project Consortium.





5. Evaluation criteria

In both Stage 1 and 2, proposals will be evaluated according to the following main evaluation criteria:

- Excellence
- Impact
- Quality and efficiency of the implementation

The following **sub-criteria** will be used in all the Call Modules to determine the scores for the three main evaluation criteria. Sub-criteria with asterisk (*) will be used in Stage 2 only.

Excellence

- Clarity and pertinence of the project's objectives in relation to the Call and Call Module.
- Extent to which the project's objectives are ambitious, and go beyond the state-of-the-art of the proposed work in terms of research/innovation for the clean energy transition.
- Soundness of the proposed methodology, including the underlying concepts, models, assumptions, and interdisciplinary approaches.
- *Appropriate consideration of the diversity and gender dimension in research/innovation content.
- *The quality of open science practices including sharing and management of research/innovation outputs and engagement of citizens, civil society and end users where appropriate.

Impact

- Credibility of the pathways to achieve the expected outcomes and impacts for the clean energy transition specified in the Call and Call Module.
- Likely scale and significance of the contributions due to the project, through appropriate involvement of end-users and other relevant target groups.
- The added value of the transnational collaboration.
- Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan through use of the solutions by target groups where appropriate, including communication activities.

Quality and efficiency of the implementation

- Quality and effectiveness of the work plan.
- *Assessment of risks.
- *Appropriateness of the effort assigned to work packages and the resources overall.
- Capacity and role of each participant, and extent to which the consortium as a whole brings together the necessary expertise.

Gender balance in personnel named in the proposal will be one of the criteria to decide in case of ex aequo proposals.

For proposal evaluation, a full score in the range of 0–5 (see **Table 5.1**) will be awarded at individual evaluations and panel meetings for each of the three main evaluation criteria, not for any sub-criteria. Each main evaluation criterion will be equally weighted.





Table 5.1. Evaluation Scores

Score	Description			
0	Fail/Missing : The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information (unless the result of an 'obvious clerical error').			
1	Poor: The criterion is inadequately addressed or there are serious inherent weaknesses.			
2	Fair: The proposal broadly addresses the criterion but there are significant weaknesses.			
3	Good : The proposal addresses the criterion well but with a number of shortcomings.			
4	Very good : The proposal addresses the criterion very well but with a small number of shortcomings.			
5	Excellent : The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.			





6. Call process

The Call process includes two stages: the pre-proposal stage (Stage 1) and the full proposal stage (Stage 2). To be considered for funding, a proposal must be submitted on time, complete and concise. Direct submission of a full proposal in Stage 2 is impossible.

6.1. Pre-proposal stage – Stage 1

6.1.1. Submission of pre-proposals

A pre-proposal must be submitted by a Coordinator (see **Section 4.2** for the eligibility criteria and guidelines on Project Consortia) in reference to a Call Module before **21 November 2024, 14:00 CET** on the <u>CETPartnership Submission Platform</u>²⁶, in collaboration with the other Project Consortium Partners (including possible Self-financed Partners). On the Submission Platform, the Coordinator must invite all the other Project Consortium Partners. At submission, every Project Consortium Partner invited by the Coordinator must have accepted the invitation and entered its information and budget on the Submission Platform, while any irrelevant partners must have been removed.

The pre-proposal has a draft status until it is submitted. Once it is submitted, it can still be revised and resubmitted as many times as needed before the deadline.

The pre-proposal must include a project description (max 10 pages using the mandatory pre-proposal template available for download on the start page of the Submission Platform and following instructions there) and any possible supporting documents. See **Section 4.1** for the eligibility criteria and guidelines on submission. See **Section 4.2–4.8** for the eligibility criteria and guidelines on how to formulate the pre-proposal.

Please consider that Funding Organisations may additionally require submission according to own submission procedure such as deadlines, portals and templates. See respective national/regional requirements in Annex C.

6.1.2. Eligibility check of pre-proposals

Eligibility checks will be performed on a submitted pre-proposal according to:

- > Transnational eligibility criteria (see **Chapter 4**) by the Call Management.
- > Call Module requirements (see **Chapter 8**) by a relevant TRI.
- > National/regional requirements (see Annex C) by relevant Funding Organisations.

The TRI deems the pre-proposal:

- Eligible for submitting a full proposal
- Conditionally eligible for submitting a full proposal, requesting more information or requirements to be included in a full proposal
- Ineligible for submitting a full proposal.
- The Funding Organisations deem the Beneficiary Partners in the pre-proposal:
- Eligible for submitting a full proposal
- Conditionally eligible, for submitting a full proposal, requesting more information or requirements to be included in a full proposal



²⁶ https://cetp-submission.mur.gov.it/



• Ineligible for submitting a full proposal.

Considering any Beneficiary Partner deemed ineligible in this step, please note that requirements to proceed to the next step deviate from **Transnational eligibility criterion 2**, **3** and **4**, namely that a pre-proposal must meet the following requirements in addition to **Transnational eligibility criterion 1**, **5**, **6** and **7**:

- The Project Consortium consists of a minimum of **two** Beneficiary Partners (including the Coordinator) deemed eligible or conditionally eligible by relevant Funding Organisations from a minimum of **two** different countries participating in the selected Call Module. Of these two Project Consortium Partners, at least **one** must be from EU Member States or HE Associated Countries.
- The total effort of Beneficiary Partners deemed ineligible by relevant Funding Organisations in Stage 1 covers less than 25% of the total project efforts (measured in person months).

Please also note that the final eligibility checks for funding will be performed in Stage 2. To be considered for funding, proposal must then have fully met all the transnational eligibility criteria, including a Project Consortium deemed eligible by relevant Funding Organisations.

6.1.3. Evaluation of pre-proposals

Each pre-proposal will be evaluated according to the evaluation criteria described in **Chapter 5**, by an evaluation panel of at least three independent evaluators ²⁷. The pre-proposal will receive individual scores from the independent evaluators for each of the three main evaluation criteria in the range of 0-5 and individual total scores in the range of 0-15 from the independent evaluators. This will result in an average score for each of the three main evaluation criteria in the range of 0-5, and a total average score in the range of 0-15. In case of strong disagreement between the individual scores by the independent evaluators (differing 6 or more between the lowest and the highest individual total scores), the evaluation panel will have a meeting to reach a consensus and provide a full score for each of the three main evaluation criteria in the range of 0-5, resulting in a total score in the range of 0-15.

A ranking list will be developed for each Call Module with pre-proposals having an average or consensus score at or above 3 for all the three evaluation criteria and a total average or consensus score at or above 10.

6.1.4. Selection of pre-proposals

Following the ranking lists developed in the former step, the Funding Organisations will agree on a list of preproposals to be invited to Stage 2, while ensuring that the total funding requested by the invited pre-proposals is maximum four times the available budget for each Funding Organisation.

In case of budgetary constraints, pre-proposals will be selected considering the following core principles:

- Maximising the total number of projects funded.
- Maximising the number of countries/regions involved in the projects funded.
- Having a good balance between the Call Modules in terms of the number of projects funded.
- Having similar success rates between the Call Modules.
- Maximising the amount of EU financial contribution generated.

The outcome of Stage 1 will be notified by the Call Management to each Coordinator with a report on the eligibility checks and, if applicable, the evaluation of the pre-proposal, as well as information on the means of redress, see **Section 6.3**.

²⁷ All independent evaluators declare their confidentiality, impartiality and independence prior to the start of the individual evaluation. They assess a conflict of interest prior to access to each proposal. In a conflict of interest, the evaluator will be excluded from the further evaluation process. Evaluators working in the same organisations as any Project Consortium Partner may be included in the evaluation process if deemed appropriate.





6.2. Full proposal stage – Stage 2

6.2.1. Submission of full proposal

A full proposal must be submitted by the Coordinator of each invited Project Consortium (see **Section 4.2** for the eligibility criteria and guidelines on Project Consortia) to the same Call Module before **2 April 2025**, **14:00 CEST** on the <u>CETPartnership Submission Platform</u>²⁸, in a similar manner to the pre-proposal, in collaboration with the other Project Consortium Partners (including Self-financed Partners). The difference from the submission of the pre-proposal (**Subsection 6.1.1**) is that the full proposal must include:

- A project description of max 30 pages (instead of max 10 pages).
- A Letter of Commitment by each Self-financed Partner (with information about its active participation and role).

The following changes between the pre-proposal and the full proposal will be allowed.

- 1. Addition of a Self-financed Partner.
- 2. Replacement of (a) Beneficiary Partner(s) deemed ineligible in Stage 1 with (a) Self-financed Partner(s).
- 3. Changes (other than the case 1 or 2 stated above) initiated by any relevant Funding Organisation or the Call Management.
- 4. Changes (other than the case 1 or 2 stated above) initiated by a Project Consortium and related to the Project Consortium, duration and budget, only when:
 - the Coordinator stays the same,
 - the changes are well motivated in relation to the project ambition and scope, and
 - the changes are approved by the relevant Funding Organisations and all the Project Consortium Partners.

However, addition of any Beneficiary Partner applying for funding from a Funding Organisation oversubscribed by more than four times its available budget in Stage 1 will be denied.

If any Funding Organisation turns out to be undersubscribed in Stage 1²⁹, the CETPartnership will encourage Project Consortia to include Beneficiary Partners applying for funding from the undersubscribed Funding Organisations to widen the involvement of Funding Organisations.

Changes in a Project Consortium other than the case 1 or 2 stated above must be notified with written proof from relevant Funding Organisations to the Call Management (callmanagement@cetpartnership.eu) before the panel meeting described in **Section 6.2.3**.

Please again consider that Funding Organisations may additionally require submission according to own submission procedure such as deadlines, portals and templates. See respective national/regional requirements in Annex C.

6.2.2. Eligibility check of full proposals

Eligibility checks will be performed on a submitted full proposal according to:

- Transnational eligibility criteria (see **Chapter 4**) by the Call Management.
- Call Module requirements (see **Chapter 8**) by a relevant TRI.
- National/regional requirements (see Annex C) by relevant Funding Organisations.
- The TRI deems the full proposal:

²⁹ Potential Funding Organisations will be found on the start page of the <u>CETPartnership Submission Platform</u> after Stage 1.



²⁸ https://cetp-submission.mur.gov.it/



- Eligible for funding in the Call
- Ineligible for funding in the Call

The Funding Organisations deem the Beneficiary Partners in the full proposal:

- Eligible for funding in the Call
- Ineligible for funding in the Call

A full proposal meeting all the transnational eligibility criteria and Call Module requirements can proceed to the next step. A full proposal with any ineligible Beneficiary Partners may proceed to the next step if the total effort of ineligible Beneficiary Partners only covers less than 25% of the total project efforts (measured in person months).

6.2.3. Evaluation of full proposals

Each full proposal will be individually evaluated according to the evaluation criteria described in **Chapter 5**, by an evaluation panel of at least three independent evaluators³⁰. The evaluation panel will then have a meeting to reach a consensus and provide a full score for each of the three main evaluation criteria in the range of 0–5, resulting in a total consensus score in the range of 0–15.

A ranking list will be developed for each Call Module with full proposals having a consensus score at or above 3 for all the three evaluation criteria and a total consensus score at or above 10.

6.2.4. Selection of full proposals

The Funding Organisations will agree on a list of full proposals to be funded following the ranking lists in the former step, the available budgets, and the same core principles as in **Subsection 6.1.4**. The outcome of Stage 2 will be notified by the Call Management to each Coordinator with a report on the eligibility checks and, if applicable, the evaluation of the full proposal, as well as information about redress, see **Section 6.3**.

6.3. Redress

The Coordinator of a Project Consortium, who considers that the outcome was based on an error in the selection procedure, can submit a written complaint. An eligible complaint must:

- be submitted as a single PDF document, including all relevant documents and written in English, to the Call Management (<u>callmanagement@cetpartnership.eu</u>) within 30 days of receiving the outcome.
- indicate which proposal the complaint applies to by stating the proposal code;
- state in what way the outcome is considered incorrect and what change is requested;
- focus on aspects concerning the outcome on the proposal (*e.g. admissibility or eligibility checks, evaluation procedure, etc.*), not its merits,
- raise procedural irregularities, factual errors, manifest errors of assessment or abuse of powers (e.g. lack of coherence between scores and comments, lack or inadequate reasoning of the conclusions, the existence of a conflict of interests, exceeding the limits of discretion, etc.). Mere repetitions of the content of the proposal or disagreements with the result or reasoning of the technical evaluation will not be considered.

³⁰ All independent evaluators declare their confidentiality, impartiality and independence prior to the start of the individual evaluation. They assess a conflict of interest prior to access to each proposal. In a conflict of interest, the evaluator will be excluded from the further evaluation process.







Only one request for review per proposal will be considered in Stage 1 and 2 respectively. The request cannot refer to the outcome of proposals submitted by other Project Consortia or under different or previous calls.

An eligible and complete request for review will be referred to a committee convened by the Call Management and comprised of staff who were not involved in the process for eligibility checks or evaluation of the proposal. All requests for review will be treated as confidential but shared with the relevant Funding Organisations.



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7. Project implementation

7.1. Funding arrangements and period

Funding arrangements will be made directly between the Project Consortium Partners and their national/regional Funding Organisations according to the Funding Organisations' procedure. The project must start before 15 December 2025 and finish in 36 months. It is highly recommended that all Project Consortium Partners in the Project Consortium synchronise their project start and end dates, even though their national/regional funding arrangements can be desynchronised.

7.2. Consortium Agreement (CA)

Each Project Consortium must have a signed Consortium Agreement (CA) between all the Project Consortium Partners, including intellectual property rights (IPR) issues. It is recommended to have it already at the project start or within 6 months after the project start and to involve the Coordinator's legal department in this process. There are several models for CA in Horizon Europe projects, which can be modified to fit a CETPartnership project (e.g. DESCA, DIGITALEUROPE MCARD-HEU and EUCAR).

7.3. Gender Equality Plans

The Beneficiary Partners must follow <u>HE Guidance on Gender Equality Plans (GEPs)</u>³¹. It means that public bodies as well as public and private higher education establishments and research organisations established in EU Member States and Associated Countries must have a GEP.

7.4. Changes in projects

Any changes in a project selected for funding must be communicated with and approved by relevant Funding Organisations and reported to the CETPartnership Knowledge Community Management (knowledgecommunity@cetpartnership.eu). Such changes may affect the funding from the CETPartnership.

7.5. Project reporting

The Coordinator must submit annual reports and a final report on the transnational level to the CETPartnership, see Task 1 in **Annex A**. The collected data will be used for monitoring purposes. Specific national/regional requirements may apply regarding the reporting.

7.6. Project communication and dissemination

Each project is expected to acknowledge the CETPartnership, EU and relevant Funding Organisations, have a webpage, to prepare popular scientific summaries and to actively participate in the CETPartnership Knowledge Community (see **Section 1.4**) for increased knowledge sharing and dissemination of results. For more details please read the **Annex A** and the <u>CETPartnership Communication Guidelines</u>³².

³²https://cetpartnership.eu/sites/default/files/documentation/CETP_Communication%20Guidelines%20to%20support%20Calls%20beneficiaries_0.pdf



³¹ https://op.europa.eu/en/publication-detail/-/publication/ffcb06c3-200a-11ec-bd8e-01aa75ed71a1/language-en/format-PDF/source-232129669



Specific national/regional requirements may apply regarding the communication and dissemination.





8. Call Modules

The Call consists of 11 Call Modules, addressing different energy technology and system challenges as well as different RDI approaches, thus complementing, and completing each other.

In addition to the transnational eligibility criteria (see **Chapter 4**) and national/regional requirements (see **Annex C**), specific Call Module requirements may apply, see **Call Module requirements** in the table below each Call Module title. More information about the Call Module requirements may be described in relevant sections of the Call Module text.





CM2024-01 Data spaces and interoperability

Target RDI approaches/TRLs	Project start: TRL 3 or higher	
	Project end: TRL 6 or higher	
Project Consortium Partners	Consortium possessing the necessary expertise across relevant disciplines.	
Project budget	Approximately EUR 5 million	
Call Module requirements	None	
Contact	TRI1 and TRI5	

Objectives

This Call Module will fund a pilot of an IT framework consisting of software services, which will enable the interoperable connection of data spaces at multi-lateral (i.e. involving different regions or countries) and cross-sector level. The pilot may use experience of multi-lateral interoperability successfully developed in other sectors (e.g. eProcurement, eID, eHealth) and will serve as a blueprint for the architecture and services in the energy sector. This will ensure future cross-sector interoperability.

This Call Module focuses on the development of an IT framework that could be used for the implementation of many different Use Cases at multi-lateral and cross-sector levels. In order to validate the approach and the IT framework, a specific Use Case is proposed, e.g. communication in the **EV-charging infrastructure enabling the provision/request of ancillary services to/from the electricity network through data exchange and integration between energy and mobility**.

Different Use Cases could be proposed, provided that they address multi-lateral and cross-sectoral applications.

In order to achieve the maximum impact, this Call Module is meant to fund **one single project**.

Background

Data spaces are ecosystems in which data is the strategic resource used by data providers, intermediaries, and users. These stakeholders can access them to share data and enable the functionalities of the energy systems (e.g. observability and control of networks, market participation of storage operators, EV charging, etc.).

According to the <u>European Interoperability Framework (EIF)</u>³³, "interoperability is the ability of organisations to interact towards mutually beneficial goals, involving the sharing of information and knowledge between these organisations, through the business processes they support, by means of the exchange of data between their ICT systems".

The energy transition will necessarily make use of multi-lateral data exchange. European data spaces in the energy field should rely on an interoperable IT framework for multi-lateral and cross-sector data exchange, in order to enable energy system integration from local to pan-European dimension.

Multi-lateral rules and opportunities for EU data access are fragmented (e.g. smart meter data in the Member States), making use of data collected in Member States particularly difficult. There are various data spaces in the energy sector that are not always interoperable among each other (e.g. electricity) and, more generally, among sectors (e.g. P2X).

³³ The European interoperability framework is a commonly agreed approach to the delivery of European public services in an interoperable manner. It defines basic interoperability guidelines in the form of common principles, models and recommendations. European Commission, Directorate-General for Digital Services, New European interoperability framework – Promoting seamless services and data flows for European public administrations, Publications Office, 2017, https://data.europa.eu/doi/10.2799/78681



Scope

This Call Module will fund a pilot of an IT framework consisting of software services, which will enable the interoperable connection of data spaces at multi-lateral and cross-sector level. The concepts of authorisation, authentication and cybersecurity must be considered by design.

The aim of the pilot project is to demonstrate the potential for multi-lateral data exchange and sharing by building on existing solutions, also in other sectors like healthcare or mobility sector, to show the potential benefits and added value of an EU-wide large-scale IT framework. It should build on existing data spaces and initiatives and draw inspiration from best practices in other areas, such as:

- concept of myHealth@EU³⁴ / eHealth³⁵
- concepts like eHealth Digital Service Infrastructure (eHDSI)³⁶ or Napcore³⁷
- CEF³⁸, CEF building blocks³⁹
- Once only principle ⁴⁰ / Once Only Technical System ⁴¹
- Gaia-X⁴²
- SIMPL⁴³

The Use Case(s) of this pilot project aims to demonstrate the potential of multi-lateral data sharing by using, where possible, the existing data authorisation bodies or access authorities (i.e. national authorities, contact or access points) and other EU organisations (e.g. European agencies) and to show the potential benefits and added value of a large-scale IT framework. The funded project shall support the development of interoperable European multi-lateral energy data spaces. It should design, develop, set up and operate a pilot network of nodes (representing different data brokers, holders, consumers, and providing IT services) interconnected by centralised services.

Target topics

Proposals must include the following:

- define and select the Use Case(s) (including necessary energy datasets) for the validation, that builds on energy data made available by the consortium partners to demonstrate added value of multi-lateral standardised data exchange
- define requirements (business, functional and non-functional) for an IT framework to enable EU-wide standardised exchange of energy data
- design the architecture and the specifications for the building blocks necessary for an IT framework based on experience of other sectors (nodes and central services) to enable EU-wide use of energy data; use as much as possible the existing IT infrastructure on EU and national levels e.g. CEF building blocks
- develop, customise or integrate technology to fulfil the agreed requirements, architecture and specifications, as indicated in points above

⁴³ <u>SIMPL: Rationalisierung von Cloud-to-Edge-Föderationen für wichtige EU-Datenräume | Gestaltung der digitalen Zukunft Europas</u>



³⁴ Electronic cross-border health services - European Commission (europa.eu)

³⁵ <u>eHealth : Digital health and care - European Commission (europa.eu)</u>

³⁶ Electronic cross-border health services - European Commission (europa.eu)

³⁷ NAPCORE | National Access Point Coordination Organisation for Europe

³⁸ Connecting Europe Facility - European Commission (europa.eu)

³⁹ Digital Homepage (europa.eu)

⁴⁰ The Once Only Principle System: A breakthrough for the EU's Digital Single Market - European Commission (europa.eu)

⁴¹ Once Only Technical System (europa.eu)

⁴² Home - Gaia-X: A Federated Secure Data Infrastructure



- test the Use Case(s) before implementation for ensuring effective interoperability. Facilities of the CETPartnership / ERA Net European Collaboration Network of Interoperability Testing are available for interoperability testing
- run the selected Use Case(s) over the implemented IT framework (validation of the process) The project shall address the scalability of the developed IT framework to the widest possible European geographical context and evidence the added value of multi-lateral use and exchange of energy data.

In order to validate the approach and the IT framework, a specific Use Case is proposed, i.e. communication in the charging infrastructure for electric vehicles, which enables the provision/request of ancillary services to/from the electricity grid through data exchange and integration, thus enabling a cross-sector connection of energy and mobility.

This demonstration Use Case should include the multi-lateral identification of the electric vehicle, the communication of the availability or reservation of charging points and the communication for the interaction of the charging point for the provision/request of ancillary services. For the communication, the existing standards and regulations have to be taken into account.

Please note that the scope of the solution for the pilot is the implementation of the communication framework and not the physical processes.

Expected results of this pilot:

- requirements, architecture and specifications for the technological building blocks for an IT and data framework to enable EU-wide use of energy data; following the principles of <u>EIRA</u>⁴⁴, which is based on the European Interoperability Framework (EIF)
- demonstrating the pilot of a working framework across at least 5 countries

Specific requirements:

- the use of Connecting Europe Facility (CEF) building blocks and the adoption of open standards should be considered in the definition of specifications
- the use of DCAT Application Profile⁴⁵ for data portals in Europe (DCAT-AP) as baseline specification for metadata records should be explored as cornerstone for semantic interoperability with other European data spaces
- ensure open-source results, made available through a public repository under a permissive license
- develop, test, deploy and operate a reusable IT framework for use of energy data with a sufficient number of nodes to demonstrate scalability and flexibility

Additionally, Project consortia shall consider overarching challenges, such as:

- Organisational challenges:
 - Federation of data spaces in the ecosystem
 - \circ $\,$ Mechanisms for the long-term maintenance of the data space
- Social challenges:
 - o Trust
 - o Privacy
 - Involvement of end users

⁴⁵ About DCAT-AP: <u>DCAT Application Profile for data portals in Europe | Joinup (europa.eu)</u>



 $^{^{44}\} https://joinup.ec.europa.eu/collection/european-interoperability-reference-architecture-eira$



Expected impact

Experience in other sectors (particularly the health sector) shows that in the development of such an IT framework it is advisable to start focusing on specific limited Use Case(s) although keeping in mind the overall picture, thus ensuring the modularity of the approach.

Scalability, replicability and maintainability can be achieved more efficiently if interoperability is considered by design. In addition, the transnationality of the CETPartnership provides a good opportunity to create a sustainable and accepted solution.

It is expected that the project will work closely with relevant initiatives at European level, exchange ideas and adopt or expand existing approaches, such as the CETP / ERA Net European Collaboration Network of Interoperability Testing, International Data Spaces e. V. or Gaia-X.

Dimensions of innovation

Projects shall drive innovation, lead to findings and create evidence-based knowledge in the three dimensions of innovation as outlined in Annex B as follows:

Dimension 1: Technologies, Infrastructures and System Solutions	Dimension 2: Organisation of Energy Systems	Dimension 3: Transition of Energy Systems
Develop software services	Federation of data spaces involved in energy sector, even if from different sectors (e.g. mobility) Mechanisms for the long-term operation of the data space	Trust Privacy Involvement of end users

Individual proposals have to address the development of technologies, infrastructures and system solutions (Dimension 1) as well as the outlined aspects in the dimensions 2 and 3.





CM2024-02 Energy system flexibility: renewables production, storage and system integration

Target RDI approaches/TRLs	Project start: TRL 3 or higher Project end: TRL increase of 1–2 from project start	
Project Consortium Partners	 Secondary and higher education establishments Research organisations Private for-profit companies, bringing in expertise, knowledge, and knowhow for the implementation of innovative and breakthrough solutions, such as: 	
	 system operators 	
	o SMEs	
	 spin-off companies 	
Project budget	Applied funding from the Call in the range of (but not limited to) EUR 1–2 million.	
Call Module requirements	None	
Contact	TRI1 and TRI2	

Objectives

This Call Module, developed in collaboration between the Mission Innovation (MI) Green Powered Future Mission (GPFM) and the CETPartnership <u>TRI1</u>⁴⁶ and <u>TRI2</u>⁴⁷, aims to increase opportunities for international cooperation and represents the implementation of the GPFM Flagship Project 2 (FP2) "Multilateral Research Programme" to take forward a selection of the identified Innovation Priorities (IP) for the power system decarbonisation and transformation. FP2 was launched by the GPFM at the Global Clean Energy Action Forum held in Pittsburgh (September 2022) as part of the <u>GPFM Action Plan 2022-2024</u>⁴⁸.

The <u>MI GPFM</u> aims to demonstrate that by 2030, power systems in different geographies and climates can effectively integrate up to 100% variable renewable energies (e.g. wind and solar) in their generation mix, and maintain a cost-efficient, secure and resilient system.

Scope

This Call Module addresses key aspects of the clean energy transition ranging from large-scale integration of renewable energy sources into the power grids, considering storage as a possible solution to deal with their intermittent nature, to broad technological and market aspects as well as approaches towards system integration. Moreover, digitalisation and standardisation, being key enablers for the deployment of innovative system flexibility solutions, need to be duly considered by the proposed projects.

Among the 50 Innovation Priorities considered in the GPFM Action Plan, 14 of them have been selected for the present Call Module as most relevant for the CETPartnership and for the short-term perspective of the GPFM Action Plan. The selection has been carried out by a task force set up within the GPFM during the development of the FP2 Multilateral research programme and by joint discussions between the GPFM and

⁴⁸ https://explore.mission-innovation.net/wp-content/uploads/2022/09/Green-Powered-Future-Mission-Action-Plan-2022-2024-1.pdf



⁴⁶ https://cetpartnership.eu/tri/1

⁴⁷ https://cetpartnership.eu/index.php/tri/2



the CETPartnership. These challenges are well aligned with the <u>CETPartnership SRIA</u>⁴⁹: funded projects are therefore expected to contribute to reach the targets of both initiatives. Proposals must address one or more of the following Innovation Priorities:

- 1. Large-scale renewable energy generation for improving system reliability & stability (GPFM IP 1.3.2)
- 2. Variable renewable energy flexibility provision & contribution to generation capacity (GPFM IP 2.1.1)
- 3. Innovation in energy storage technologies (GPFM IP 1.5.3)
- 4. Utility scale storage systems for innovative flexibility services (GPFM IP 2.4.3)
- 5. System stability assessment considering high VRE penetration (GPFM IP 2.3.1)
- 6. Enhanced TSO-DSO coordination platform for flexibility markets optimisation (GPFM IP 2.3.2)
- 7. Flexibility markets for innovative ancillary services by VRE and storage (GPFM IP 2.7.1)
- 8. Unlocking commercial and residential buildings flexibility potential (GPFM IP 2.5.2)
- 9. Connected data platforms for enhanced forecasting and flexible operation (GPFM IP 3.3.2)
- 10. Standardisation of devices and control platforms (GPFM IP 3.1.2)
- 11. Identify priority dataset for system security (GPFM IP 3.2.2)
- 12. Grid supporting technologies from inverter-based resources (GPFM IP 1.6.2)
- 13. Tools and solution for DSO flexibility management (GPFM IP 2.3.4)
- 14. Demand response, EV services and grid impact assessment (GPFM IP 2.5.4)

The Call Module mainly focuses on research and development, while demonstration and implementation are considered as subordinate. Nevertheless, it is expected to possibly involve industry, bringing in expertise, knowledge, and know-how for the implementation of innovative and breakthrough solutions.

The involvement of Research Performing Organisations (RPO), system operators and private technology and service providers in a Project Consortium will constitute a competitive advantage for the project proposal. The participation of SMEs and spin-off companies are considered preferential. Projects should preferably be designed building on top of existing initiatives or assets and propose replicable and scalable solutions.

The Call Module expects mainly international consortia, as it aims to engage with GPFM country member organisations, among which are included extra-European countries (countries outside the EU and not associated to Horizon Europe), contributing to foster the CETPartnership approach worldwide and link Mission Innovation to the CETPartnership Knowledge Community.

Target topics

The 14 selected Innovation Priorities listed above are clustered into 5 main R&I topics, and proposals must cover at least one or more of them:

- 1. Large-scale renewable generation and system stability and reliability
- 2. Energy storage technologies and systems for flexibility services
- 3. System stability and flexible operations
- 4. Innovative flexibility sources and demand side for flexibility markets
- 5. System digitalisation and related tools & technologies, including AI and digital twin.

⁴⁹ https://cetpartnership.eu/sites/default/files/documentation/cetp_sria_1.0.pdf





Expected impact

This Call Module is intended to concentrate efforts and financial resources to accelerate the deployment of key innovations thus enabling the realisation of clean energy solutions in the near future. The Call Module, coherently with CETPartnership and GPFM objectives, has the goal of demonstrating that power systems, regardless of geography or climates, can effectively integrate up to 100% variable renewable energy in their generation mix by 2030 while ensuring the system is cost-efficient, secure and resilient. The potential impact of this Call Module is that by supporting projects involving partners outside of Europe, the Call Module will facilitate the dissemination of this approach globally. Consequently, this may prompt more countries to embrace clean energy technologies and practices. The participation of partners from member countries of the GPFM (even if not members of the CETPartnership) is not a compulsory prerequisite but a preferential attribute.

Synergies with one or more projects supported under the following Horizon Europe topics are strongly recommended where relevant and applicable:

- HORIZON-CL5-2023-D2-01-04, Battery management system (BMS) and battery system design for stationary energy storage systems (ESS) to improve interoperability and facilitate the integration of second life batteries
- HORIZON-CL5-2023-D2-01-05, Hybrid electric energy storage solutions for grid support and charging infrastructure
- HORIZON-CL5-2024-D2-01-02, Non-Li Sustainable Batteries with European Supply Chains for Stationary Storage.





CM2024-03A/03B Advanced renewable energy (RE) technologies for power production

Target RDI approaches/TRLs	CM2024-03A: TRL 3–5 Project start: TRL 3 or higher Project end: TRL 4 or higher CM2024-03B: TRL 5–7 Project start: TRL 5 or higher Project end: TRL 6 or higher
Project Consortium Partners	 Secondary and higher education establishments Research organisations Private for-profit companies such as: SMEs Spin-off companies Large companies Technology providers
Project budget	CM2024-03A: in the range of (but not limited to) EUR 1–2 million CM2024-03B: in the range of (but not limited to) EUR 2.5–5 million including possible self-financing.
Call Module requirements	Projects applying as IOA shall comprise at least one industry partner / private for- profit companies
Contact	<u>TRI2</u>

The following RDI approaches, Research-oriented approach (ROA) and Innovation-oriented approach (IOA), apply to CM2024-03A/03B respectively:

- **Research-oriented approach (ROA)** aims to create knowledge or explore the feasibility of a new or improved technology, product, process, service or solution and includes applied research, technology development and integration, testing, demonstration and validation of a small-scale prototype in a laboratory or simulated environment.
- Innovation-oriented approach (IOA) aims to develop plans and arrangements or designs for new or improved products, processes or services and includes prototyping, testing, demonstrating, piloting, large-scale product validation in an operational environment, and market replication.

Objectives

These Call Modules, following the challenge of the CETPartnership <u>TRI2</u>⁵⁰, aims to contribute to global leadership in renewables, with specific reference to the key actions 1 and 2 of the <u>SET Plan</u>⁵¹. See also the relevant IWGs' Implementation Plans in the section Expected impact below.

⁵¹ https://energy.ec.europa.eu/topics/research-and-technology/strategic-energy-technology-plan_en



⁵⁰ https://cetpartnership.eu/index.php/tri/2



Building on the <u>CETPartnership SRIA</u>⁵², the Call Modules address critical gaps in R&I and push the boundaries of renewable energy technologies in order to bring onto the market more efficient, reliable, cost-effective and sustainable solutions for a net zero-emission power system.

The Call Modules target innovative projects in order to have a balanced portfolio of RE technologies for power production at different TRL stages. CM2024-03A calls for ROA (Research-Oriented Approach) projects, and CM2024-03B calls for IOA (Innovation-Oriented Approach) projects. Projects can apply for either CM2024-03A (ROA) or CM2024-03B (IOA), according to the targeted TRL at the end of the project.

Scope

The Call Modules are open to all the broad portfolio of RE zero-emission power technologies. Specific focus is on RE technologies for power generation on a utility scale or for distributed generation such as: onshore and offshore wind, ocean energy (tidal and wave) and other offshore renewables, solar energy (PV and CSP/STE), etc. Bioenergy for power generation (with carbon capture and storage (BECCS)) is also in scope. Please note that bioenergy applications dedicated to fuel production are considered in CM2024-05. Projects are expected to contribute to one or more of the following challenges:

- Integration of generation facilities and technologies combining different renewable energy sources (RES) and/or storage on the same site/point of connection to the grid.
- Hybridisation: Producing power together with other energy vectors with the objective of optimising the overall system efficiency (PV-T, PV-Hydrogen, CSP-STE power and heat, biomass power and heat, power and H₂ or other energy vectors).
- Advancing technologies and improving performance: Improving the efficiency and performance of renewable technologies through innovative/improved components, materials and technologies.
- Improving operational efficiency: Developing advanced monitoring and predictive analytics, real-time
 monitoring of renewable energy assets for early detection of issues to prevent system failures and maximise energy generation.
- Next generation RES: New breakthrough and emerging technologies: exploring innovative approaches to increase efficiency or sustainability of RE technologies.
- Site-specific marine/atmospheric modelling and forecasting: Developing marine / meteorological models on a sub-regional scale to improve performance, reliability, availability of RES.
- Digitalisation and digital twins: Design, development and application of digital twins for renewable energy technologies, such as wind turbines and solar panels.

Target topics

Projects shall address one or more of the following topics:

Bioenergy with carbon capture and storage (BECCS) for power generation

- High efficiency biomass (co)generation of power with improved performance and higher share of power production ratio, using residues / wastes as feedstocks, with carbon capture and storage (BECCS)
- Integrated cogeneration/CHP (combined heat and power) systems enhancing annual total efficiency and power capacity factor, with carbon capture and storage (BECCS)

⁵² https://cetpartnership.eu/sites/default/files/documentation/cetp_sria_1.0.pdf





Concentrated solar power (CSP) / solar thermal energy (STE)

- Line-focus solar power plants technology: Component development; process innovation and cost optimisation for molten salts systems; solar collector fields with silicone oil as a heat transfer fluid (HTF)
- Central Receiver power plants technology: Innovative concepts, materials and components for central receiver molten salt technology; quality characterisation and standardisation of receivers for tower power plants; particle receiver technology; solar thermal chemical receiver
- Reliable and cost-effective heat transfer media to innovative high-temperature thermal storage systems; next generation of thermal energy storage (TES) technologies for CSP/STE applications; quality characterisation and standardisation of heat transfer media
- Digitalisation of CSP plants for a more efficient flexibility, monitoring, operation maintenance and control, including interfaces for remote control
- Materials: Innovative coatings for mirrors and absorbers; quality characterisation and standardisation of reflectors (fouling and degradation)
- Integration of meteorological forecasts: Yield determination and standardisation of hybrid power plants (PV+CSP)

Ocean energy

- Direct Generation Wave Energy Converter design and development: Direct generation technologies that can directly transfer wave motion into electricity through the properties of electroactive metamaterials, e.g. Dielectric Elastomer Generators (DEGs) and dielectric fluid generators
- Dry-testing of power take-off for wave energy devices to debug, improve, stabilise, fine-tune and optimise wave energy devices before offshore operations
- Tidal stream power take-off: Improving the survivability and efficiency of tidal blades/drivetrains to enhance performance and reliability of the device

Cross-cutting offshore renewables technologies (for ocean/marine renewables, floating wind/PV, etc.)

- Critical technologies for arrays: Intra-array cabling, subsea hubs or other subsea electrical architecture etc. applicable to multiple device types
- Materials for moorings, foundations and components: Materials with improved fatigue, damping, stiffness, bio-fouling management or other cost-reducing characteristics
- Mooring and foundations: Advanced mooring and connection systems for floating ocean/offshore energy devices; innovative foundations for bottom-fixed devices integrating biodiversity and sustainability aspects
- Connections and cabling systems: Solutions to reduce the cost of connection and cabling systems, maintenance requirements and costs, dynamic cable repair solutions
- Operation and maintenance (O&M): Innovative solutions to reduce costs of maintenance and optimise operations, including data analytics and predictive maintenance; instrumentation for condition monitoring; autonomous solutions and vehicles; self-healing materials
- Site-specific marine observation, modelling and forecasting: marine / meteorological data to improve performance, reliability, availability of offshore renewables





Solar photovoltaics

- Performance enhancement and cost reduction through advanced PV technologies
- Lifetime, reliability and sustainability: Advanced PV technologies and applications; low environmental impact materials, processes, products
- Digitalisation for O&M: Advanced data analytics; digital twin of assets and components; predictive maintenance
- New applications through integration of PV: Agro-voltaic and landscape integration; floating PV; infrastructure integrated PV (IIPV)

Wind energy (offshore and onshore)

- Next generation of wind energy systems: New technology solutions in rotor, drive train, support structures and electrical system; smart rotor technology to reduce loads; adaptive blade and turbine control
- Digital solutions and digital twins for turbine and optimised wind energy applications, big data analytics and AI combined with system modelling for control and performance optimisation
- O&M: Digital solutions for wind energy operation, maintenance and installation, optimisation tools for operational efficiency
- Lifetime extension: Solutions for control and monitoring of the degradation; self-diagnostic systems and multi-sensor constructions; innovative solutions to extend the lifetime of wind farms
- Sustainable wind farms: Modelling of wind farm impacts and cumulative environmental impacts on ecosystems; mitigation and deterrent technologies preventing collision of birds and bats with the wind turbine rotor; nature-inclusive design
- Site allocation and public acceptance: Tools to map stakeholder concerns; new ways, practices and tools for increasing public dialogue, enhancing social acceptance and facilitating deployment

Hybridisation and integration

- Site and system integration of co-located RES (onshore and offshore) and/or with storage: Site and technology integration of multiple RES and/or with energy storage and power-to-X
- Hybrid systems: Combined electricity generation with heat or other energy carriers in hybrid systems

Expected impact

Projects shall address one or more of the following outcomes:

- Increase the energy conversion efficiency, contributing to zero-emission power production
- Increase technology performance (with reference to SET Plan Implementation Plans⁵³) and/or lifetime
- Increase system efficiency by new modelling approaches, tools and methodologies
- Decrease investment cost and LCOE and/or improve the overall economics of the energy technology
- Optimise and decrease cost by coupling different power production technologies on the same site
- Contribute to **the security of supply** combining different renewable energy sources (RES) and/or storage on the same site

Projects shall also contribute to sustainability:

• Reduce **environmental impact** (e. g. land use, effects landscape, on biodiversity and animal life) or significantly improve multiple use of occupied land surface / or maritime space

 $^{^{53}\,}https://set is.ec.europa.eu/implementing-actions/set-plan-documents_en\# implementation-plans$





- Minimise the use of **critical raw materials** (CRM)
- Consider extension of the **end of life** and apply **circularity-by-design** approaches
- The following SET Plan Implementation Plans shall be considered as references concerning impact KPIs:
 CSP/STE: Initiative for Global Leadership in Concentrated Solar Thermal Technologies Updated
- Implementation Plan (2023)
- Ocean Energy: Ocean Energy Implementation Plan (2021)
- PV: Implementation Working Group (IWG) on Photovoltaics (PV) Implementation Plan (2023 revision)
- Wind: 2nd SET Plan Implementation Plan for offshore wind (2022)
- Bioenergy: Implementation Working Group (IWG) on bioenergy and renewable fuels (for the bioenergy to heat and power R&I activities and targets)





CM2024-04 Carbon capture, utilisation and storage (CCUS)

Target RDI approaches/TRLs	Project end: TRL 5 or higher Activities at lower TRLs may be included if they contribute to the higher TRL goal of the overall project. See additional information under Scope in the text below.	
Project Consortium Partners	 Secondary and higher education establishments Research organisations Private for-profit companies Public bodies (local/regional governments) Non-profit organisations Proposals must demonstrate the interest of industry partner(s) by actively involving them in the project 	
Project budget	Applied funding from the Call in the range of (but not limited to) EUR 1–4 million.	
Call Module requirements	Proposals targeting lower TRL than indicated above are ineligible. Active industrial involvement in research and innovation activities.	
Contact	TRI3	

Objectives

This Call Module, following the challenge of the CETPartnership <u>TRI3</u>⁵⁴, aims to contribute to global decarbonisation efforts and accelerate development and implementation of capture, utilisation and storage (CCUS) technologies by supporting targeted research and innovation activities. It will support global efforts to reduce CO₂ emissions by more than 50 percent by 2030 compared to 1990 and further efforts for climate neutrality.

Scope

The Call Module supports projects to develop and implement CCUS technologies, primarily in the industrial and energy sector.

To accelerate the time to market for the CCUS technologies, projects require cost-shared participation from the industrial sector, especially from energy intensive and heavy industries, which will benefit strongly from implementing the technologies.

Proposals must illustrate the potential for upscaling to industrial size either in a demonstration phase or an early-commercial phase. Proposals focusing on developing new pilot and demonstration facilities are of special interest.

In addition to technological solutions, proposals should also address environmental, social, and economic implications that might impact industrial application of the proposed technology. Proposals addressing only environmental, social or economic implications of existing and commercial ready technologies are outside the scope of the Call Module.

The term CCUS refers to all areas of the CCU and CCS chains. It encompasses a wide spectrum of technologies to capture CO_2 from point sources or directly from the air, transport captured CO_2 through multi-modal approaches and either store it in porous geological formations that are typically located several kilometres



⁵⁴ https://cetpartnership.eu/index.php/tri/3



under the earth's surface, onshore or offshore (CCS), or use the CO_2 to produce valuable products like fuels or energy, chemicals, and other materials (CCU). Under this call, CCU does not include the use of CO_2 as a non-reactive working fluid, unless it is combined with other renewable systems (such as geothermal) to constitute a CCUS system.

This Call Module complements CM2024-09. In case of uncertainty about where to best propose your project, consult with relevant Funding Organisations or TRIs.

The acceleration of CCU/CCS technology deployment also depends on costs, markets and supporting frameworks. The Australian Renewable Energy Agency (ARENA) has developed and applied the concept of a Commercial Readiness Index, CRI, as shown in the figure below. The CRI casts technologies in terms of their commercial value proposition and ability to obtain financing for deployment.

Proposals must illustrate how their projects will help accelerate the time to market of affordable, cost-effective, low environmental impact and resource efficient CCU/CCS technologies. References to CRI and TRL should be included in applications (as seen in the figure below).

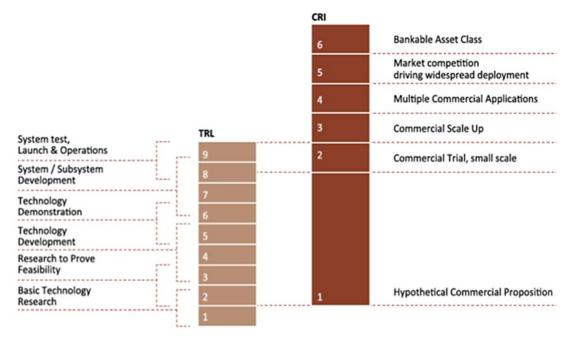


Figure 8.1. Technology Readiness level (TRL) and the Commercial Readiness Index (CRI)





Target topics

Projects must address one or more of the research and innovation activities described by the <u>CCUS</u> <u>Roadmap to 2030</u> of the SET Plan IWG9⁵⁵ and the <u>Mission Innovation Research Priorities</u>⁵⁶, with special emphasis on the following topics:

- CO₂ capture from energy intensive or heavy industry sectors (waste to energy, cement, iron/steel, aluminium, other metals, etc.), power generation, maritime transport, and hydrogen production from natural gas.
- Advancing lower cost CO₂ capture technologies that can effectively remove 95-100% of CO₂ from flue gases with dilute CO₂ concentrations.
- CO₂ transport and storage infrastructure (pipelines, ships and other non-pipeline transport, intermodal options, monitoring and metering within CO₂ networks, temporary storage, well integrity and well technology).
- Developing commercial CO₂ storage sites effective sites, including elements that are needed for screening and characterisation, safe management, and low-cost effective monitoring.
- Enabling CCUS technologies, including the CO₂ capture, conversion, and utilisation value chain.
- Negative emission technologies: carbon dioxide removal (CDR), reactive capture (RC), direct air capture (DAC), biomass with CCS (BECCS), and biomass carbon removal and storage (BiCRS).

Proposals must also address at least one of the following topics:

- Improvement of the cost-efficiency and energy-efficiency along the value chain (scale-up, storage at basin-scale including hubs, by digital tools, or by effective collaboration among the stakeholders etc.).
- Faster scale-up of CCU/CCS technologies at lower risk (by design, demonstration, development of legal framework, measures to strengthen the innovation system, knowledge sharing from full-scale operations, integration into the energy system, etc.).
- Development of lower cost solutions for efficient CO₂ capture from hydrogen produced using natural gas, and new technologies for processing, shipping, transport, and storage of hydrogen.
- Design and manufacturing of new materials that can make CCU/CCS more affordable.
- Development of CCU/CCS market and business case.
- Assessments of risks to the environment and human health throughout the CCU/CCS life cycle and development of mitigation approaches and strategies.
- Development of circular economy strategies to reduce CO₂ footprint throughout the CCU/CCS life cycle.
- Development of best practices and strategies for educating the general public about the benefits and risks of CCU/CCS.
- Development of strategies for engagement between CCU/CCS project developers and communities that lead to projects with mutual benefits and social acceptance.
- Development of a robust life-cycle assessment (LCA) and techno-economic analysis (TEA) for full CCU/CCS value chains and life cycles. Alternatively, development of a more complex sustainability assessment addressing social sciences and humanities (SSH) disciplines (e.g., sociology, social psychology and economics).
- Develop net negative CO₂ emission solutions, such as direct air carbon capture and storage (DACCS) or Biomass Carbon Removal and Storage (BiCRS).

⁵⁶ https://www.energy.gov/fecm/articles/accelerating-breakthrough-innovation-carbon-capture-utilization-and-storage



⁵⁵ https://www.ccus-setplan.eu/wp-content/uploads/2021/11/CCUS-SET-Plan_CCUS-Roadmap-2030.pdf



• Development of technologies and approaches for monitoring and managing basin-wide effects and impacts from multiple CCS projects within a basin.

Access to top class research infrastructure is key for reaching the objectives of this call. Project proposals should, if relevant, seek to maximise synergies with existing infrastructures, such as, for example ECCSEL⁵⁷, members of the International Test Centre Network ⁵⁸, the Alberta Carbon Conversion Centre (ACCTC ⁵⁹) or similar world class infrastructures.

Expected impact

Funded projects must advance the state-of-the art for CCU/CCS technologies and contribute new knowledge and competence that bring CCU/CCS closer to commercialisation by bridging the gap between technology development and its implementation by the industry.

Funded projects are expected to lead to at least one of the following:

- CO₂ capture on an industrial scale by early 2030s.
- CO₂ storage on megaton scale by early 2030s and gigaton scale by 2050.
- Pave way for deployment of large-scale infrastructure for CO₂ capture from multiple sources, cross-border CO₂ transport, and CO₂ storage of ten million tons of CO₂ annually by mid 2030s.
- Be a bridge to implementation of CO₂ utilisation projects on an industrial scale by early 2030s that will have a sustainable and significant effect on reducing CO₂ emissions.
- Pave way for net zero or negative CO₂ emission technologies implemented on an industrial scale by mid 2030s.

⁵⁸ International Test Centre network



⁵⁷ ECCSEL -Carbon dioxide research facilities

⁵⁹ Alberta Carbon Conversion Technology Centre



CM2024-05 Hydrogen & renewable fuels

Target RDI approaches/TRLs	Project end: TRL 5 or higherActivities at lower TRLs may be included if they contribute to the higher TRL goal of the overall project.The Social Readiness Level (SRL) is also relevant to consider when evaluating opportunities for deployment and commercialisation.	
Project consortia partners	 Higher education establishments Research organisations Private for-profit companies Public bodies (local/regional governments) Non-profit organisations 	
Project budget	See Section 4.3.	
Call Module requirements	Industrial involvement in research and innovation activities	
Contact	TRI3	

Objectives

This Call Module, following the challenge of the CETPartnership <u>TRI3</u>⁶⁰, aims to accelerate the substitution of fossil fuels by facilitating the development and implementation of technologies for effective and efficient production, distribution, storage and end-use of hydrogen (blue and green)⁶¹, and renewable and advanced fuels⁶², including aspects related to security of supply, through support to research and innovation activities.

Background

Hydrogen plays a key role in the clean energy transition, since it can be used for many essential chemical processes, as a fuel to power gas turbines and fuel cells, and as an input to produce electro fuels (e-fuels)⁶³, biofuels and other hydrogen carriers like ammonia. Further development of hydrogen technologies is necessary to facilitate process integration and cost reduction.

Hydrogen can be produced from fossil fuels, *i.e.* natural gas with CCS (so-called blue hydrogen), or from biomass or renewable electricity (so-called green hydrogen). High purity (>99.9%) of hydrogen can be achieved by water electrolysis, by natural gas reforming, and by gasification of biomass and other solid feedstock (coal, waste plastics and municipal solid waste) through further hydrogen separation or purification. Integration of hydrogen production with CCS offers significant opportunities for cost reduction and needs to be implemented in a large scale. Hydrogen production with bio-CCS can be done through anaerobic digestion, fermentation, gasification or pyrolysis and is attractive, as it would deliver negative emissions, although it would compete with other sources of demand for biomass.



⁶⁰ https://cetpartnership.eu/index.php/tri/3

 $^{^{\}rm 61}$ Produced with maximum emission of 3 kg CO_2eq/kg H_2 (EU taxonomy).

⁶² Biofuels, bioliquids, biomass fuels and renewable fuels of non-biological origin (Directive (EU) 2023/2413)

⁶³ Electro fuels or e-fuels are a class of synthetic fuels and drop-in replacement fuels that are made by storing energy from renewable sources in the chemical bonds of liquid or gas fuels, aiming to be a carbon-neutral fuel. The primary targets are butanol, biodiesel, and hydrogen, but include other alcohols and carbon-containing gases such as methane and butane.



Renewable fuels are environmentally friendly energy carriers and can offer important, flexible and cost-effective options required to achieve a sustainable, net-zero energy system, particularly when they are produced with surplus electric power (i.e. power-to-X) and CCUS. Example of renewable fuels are thermo-, photo- and electrochemical solar fuels, as well as advanced biofuels from sustainable biomass⁶⁴. The provision of such renewable fuels is crucial for sectors that are difficult to electrify: the industrial, residential and especially transport sectors, with heavy-duty road transport, shipping, and aviation.

The use of renewable ammonia is expected to increase for both fertiliser and e-fuels. The advantage of renewable ammonia is that its production does not require a CO_2 source, it is easy to transport, and it is an established commodity, although it is difficult to handle on board when it is used as a shipping fuel. Thus, ammonia can be produced at remote locations with access to cheap renewable electricity but requires specific safety conditions for handling and using as transport fuel.

Advanced fuels with reduced emissions are expected to impact aviation and shipping in all countries, most likely as sustainable fuels for aviation and as ammonia or methanol for marine applications. For short distance ferries, batteries or hydrogen will be an option.

Scope

The Call Module supports projects to develop and implement technologies for effective and efficient production, distribution, storage and end-use of hydrogen (blue and green) and renewable and advanced fuels. To accelerate the time to market for the technologies, the Call Module seeks innovative projects, which have industrial involvement and can support new or already existing pilot or demonstration facilities. The Call Module also addresses environmental, societal and economic challenges requiring solutions. It means that proposals must illustrate how the projects will help accelerate the time to develop and implement environmentally friendly, resource- and cost-efficient technologies to produce, distribute, store and use hydrogen and renewable fuels along the whole value chain.

The Call Module is in line with the SET Plan priorities and its new directions ⁶⁵ and strives to complement the Horizon Europe work programmes and other funding opportunities including the national and regional programmes of the Funding Organisations in the CETPartnership. It is also in line with the priorities set by the Mission Innovation Clean Hydrogen mission and international cooperation is stimulated.

Target topics

Projects must address one or more of the following research and innovation topics described by the SET Plan IWG on Renewable Fuels and Bioenergy for Sustainable Transport ⁶⁶, the <u>ERA pilot on Green</u> <u>Hydrogen</u>⁶⁷ and the Research Priorities (Houston 2017) ⁶⁸ :

- Hydrogen and renewable fuel production using new and improved processes
- Reliable and low-cost production technologies of new and advanced fuels
- Hydrogen and renewable fuel distribution using new and adapted infrastructures, and in the case of hydrogen considering different types of carriers
- Secure and safe fuel storage, in the case of hydrogen including geological storage, and using solid and liquid carriers

- ⁶⁶ Action 8 Implementation Plan https://setis.ec.europa.eu/system/files/2021-07/setplan_bioenergy_implementationplan.pdf
- ⁶⁷ https://research-and-innovation.ec.europa.eu/research-area/energy/hydrogen_en#set-plan-and-era-pilot-on-green-hydrogen



 ⁶⁴ Advanced biofuels mean biofuels that are produced from the feedstock listed in Part A of Annex IX, <u>Directive (EU)2018/2001</u>.
 ⁶⁵ COM/2023/634 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2023:634:FIN

⁶⁸ Mission Innovation research priorities



- New and adapted end-use technologies, including the industrial, residential and transport (e.g. heavyduty vehicles, off-road and agricultural machinery, and including aviation and maritime) sectors
- Projects are also required to consider one or several of cross-cutting dimensions, such as:
- Consumer attitudes, risk perception and levers which could influence technology acceptance
- Life cycle, techno-economic and environmental impact analyses
- Barriers, opportunities, and solutions in scaling up and market uptake
- System analysis and process integration considering continuity/intermittence
- Infrastructure and distribution aspects, including pipelines considering reuse and cost competitive materials
- Monitoring and safety aspects
- Digitalisation

Expected impact

Projects are expected to have a significant impact on accelerating the development and implementation of hydrogen, advanced and renewable fuels technologies and provide results that will lead to significant CO₂ reduction by 2030. Projects must contribute to new knowledge and new competences for cost-effective and cleaner technological solutions to substitute fossil fuels.





CM2024-06 Heating and cooling technologies

Target RDI approaches/TRLs	Project start: TRL 3 or higher Project end: TRL 4 or higher All projects must have a valid proof-of-concept before starting, for all Work Pack- ages.	
Project Consortium Partners	 Partners from a broad geographic spectrum. Private for-profit companies (small, middle-sized, and large companies) Research organisations Secondary and higher education establishments Non-profit organisations 	
Project budget	Applied funding from the Call in the range of (but not limited to) EUR 1.5–5 million.	
Call Module requirements	Industrial involvement in project activities.	
Contact	<u>TRI4</u>	

Objectives

This Call Module, following the challenge of the CETPartnership <u>TRI4</u>^{69, 70}, aims to contribute to efficient zero-emission heating and cooling solutions", as formulated in the CETPartnership SRIA.

Background

The overarching goals are to provide enhanced and improved heating and cooling technologies and systems for all major parts or climate zones of Europe around 2030 and to enable 100% climate-neutral heating and cooling by 2050. The energy crisis caused by the war in Ukraine has clearly shown that Europe needs to repower and rethink its heating and cooling policy (ref. <u>REPowerEU</u>⁷¹), and the revised <u>Renewable Energy</u> <u>Directive</u>⁷² (RED III) increases focus on the heating transition. Better, cheaper, easier applicable and climate-neutral heating and cooling technologies are needed to provide thermal comfort while phasing out fossil fuel-fired dependence.

Scope

The Call Module supports 1. pilot and demo projects and 2. applied research and development projects that will develop technologies, methods, knowledge or innovations for heating and cooling:

- 1. Pilot and demo projects (achieving TRL 7, 8 or 9 after project completion) must be realised in real-life operational environments and address at least one of the following compared to state-of-the-art today:
 - o cost reduction
 - o increase in competitive market opportunities
 - o increase in environmental protection

⁷² https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive_en





⁶⁹ https://cetpartnership.eu/tri/4

⁷⁰ See Challenge 4 in <u>CETP SRIA v1.0-endorsed (cetpartnership.eu)</u>

⁷¹ https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3131

In addition, projects could address innovations impacting societal acceptability, safety, and/or circularity.

- 2. Applied research and development projects (achieving TRL 4, 5 or 6 after project completion) must have a valid proof-of-concept before starting, typically develop the innovation in detail in a laboratory or similar setting, and address at least one of the following compared to state-of-the-art today:
 - significant cost reduction
 - o significant increase in competitive market opportunities
 - o significant increase in environmental protection
 - o better tools and methodologies

In addition, projects could address innovations significantly impacting societal acceptability, knowledge development, experience sharing, safety, and/or circularity.

Proposals are expected to explain their contribution to the objectives of the Call Module and **quantify this contribution** to the extent that this is possible.

Proposals are encouraged to consider cross-cutting issues such as economic modelling, social aspects, environmental concerns, etc. However, applicants must ensure that their proposed work meets national funding instruments. Proposals that exclusively consider research on sustainability or social acceptance cannot be funded.

This Call Module complements various Call modules in the Call. In case of uncertainty about where to best propose your project, consult with relevant Funding Organisations or TRIs.

- PV/T is covered in CM2024-03.
- Concentrated solar power is covered in CM2024-03, while concentrated solar for thermal applications in the industry is covered by this Call module (CM2023-06).
- Geothermal energy technologies are covered in Call module CM2024-07.
- Thermal storage technologies to be integrated into the built environment or industrial applications are covered in this Call module, whereas thermal storage technologies with a focus on subsurface utilisation are referred to in Call module CM2024-07.
- Projects focusing on integrating heating and cooling in regional or industrial energy systems or the built environment are referred to CM2024-08, 09, and 10, respectively.

Target topics

Projects should address one or more of the following topics to develop a secure, sustainable, competitive and affordable climate-neutral heating and cooling supply:

Heat and cold sources, Innovative approaches for solar thermal, local and regional excess resources, renewable cooling technologies, concentrated solar for (industrial) thermal energy purposes, ambient heat and cold from the air, surface water, sewers etc., shallow geothermal⁷³ biomass and organic waste and excess heat from industry.

Thermal storage, new storage technologies and storage-related innovations aiming at, e.g. small-scale hour-to-day thermal storage in industry and the built environment, smart systems balancing supply and demand, excess power to thermal energy, seasonal thermal storage integrated into a building or DHC (District heating and cooling) system.

Heating and cooling networks, conversion, and integration, including but not limited to innovations for more cost-efficient heating and/or cooling networks and their operation, retrofit of heating and/or cooling

⁷³ For shallow geothermal inclusion, contact your funding agency to determine the relevant Call Module, as national descriptions may vary.







networks, conversion technologies such as heat pumping technologies, in the built environment and industry.

End-use systems: innovative distribution systems within the end-user system (typically a building or a home) are relevant to the heating and/or cooling system because the temperature level matters. This Call Module is expected to encompass projects both relating to the built environment or industrial end-users. For the built environment, the projects may focus on district heating and/or cooling systems and other collective systems, but also on individual solutions.

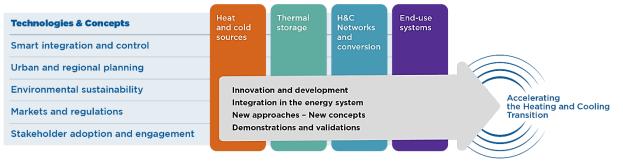


Figure 8.2. Heating and cooling technologies and concepts

The vertical bars in Figure 8.2 indicate the technological scope. The horizontal bars indicate the dimensions which successful projects could address. The arrow in the figure symbolises the forward and future-oriented approach that builds on these various aspects.

Successful projects in the Call Module should address technologies or concepts, and should contribute to one or more relevant **cross-cutting**, non-technological dimensions whenever appropriate. Figure. 8.2 highlights the central role of 'Technologies and concepts', and also indicates the cross-cutting, non-technological themes in the horizontal bars. A close interconnection between sources and their temperature level, conversion and distribution technologies, flexibility for the energy system and end-user requirements should be sought for heating and thermal storage operations. Projects should demonstrate their market relevance and potential impact.

Proposals are encouraged to describe how the project will support the energy transition with a view on circularity, resource efficiency and recovery, recycling, and substitution of critical raw materials. Projects that aim at technologies with little or no critical raw materials⁷⁴ may identify this as a project quality in their project plan.

Applicants must ensure that their proposed work agrees with the funding instrument of their relevant Funding Organisation – consult Annex C to the Call.

Expected impact

Projects funded in this Call Module should improve business cases and/or increase the competitive market opportunities and environmental protection, compared to state-of-the-art today, through research and innovation. The projects' results must emphasise market-driven innovation activities, aimed to be ready for large-scale implementation around 2030. However, projects may include lower TRLs depending on national funding rules.

⁷⁴ See <u>Critical raw materials - European Commission (europa.eu</u>), and including copper and nickel, in line with the <u>Critical Raw</u> <u>Materials act</u>







Project outcomes are expected to help accelerate the time to market of secure, sustainable, competitive, affordable and climate-neutral heating and/or cooling solutions. Projects can also focus on bringing upcoming technologies to a level of validation in a relevant environment or integrating their activities into already viable and ongoing demonstration or piloting projects.





CM2024-07 Geothermal energy technologies

Target RDI approaches/TRLs	Project start: TRL 3 or higher Project end: TRL 4 or higher All projects must have a valid proof-of-concept before starting, for all Work Pack- ages.	
Project Consortium Partners	 Partners from a broad geographic spectrum. Private for-profit companies (small, middle-sized, and large companies) Research organisations Secondary and higher education establishments Non-profit organisations 	
Project budget	Applied funding from the Call in the range of (but not limited to) EUR 1.5–5 million	
Call Module requirements	Industrial involvement in project activities	
Contact	<u>TRI4</u>	

Objectives

This Call Module, following the challenges of the CETPartnership <u>TRI4</u>⁷⁵ and <u>TRI2</u>⁷⁶, addresses various geothermal energy technologies and aims to contribute to Challenges zero emission heating and cooling solutions (Challenge 4) and zero emission power technologies (Challenge 2) described in the CETPartnership <u>SRIA</u>⁷⁷.

Scope

This Call module targets research, development and innovation in how geothermal energy is developed, supplied and integrated into Europe's future energy system. The scope includes:

- Geothermal energy for heating and cooling.
- Geothermal energy for power generation.
- Underground thermal energy storage (UTES).
- Geothermal energy with the co-production of minerals.

The Call Module supports 1. pilot and demo projects and 2. applied research and development projects that will develop technologies, methods, knowledge or innovations for geothermal energy:

- 1. Pilot and demo projects (achieving TRL7, 8 or 9 after project completion) must be realised in real-life operation environments and enable at least one of the following compared to state-of-the-art today:
 - \circ cost reduction
 - o increase in competitive market opportunities
 - o increase in environmental protection

⁷⁷ https://cetpartnership.eu/sites/default/files/documentation/CETP%20SRIA_v1.0_endorsed_compressed_0.pdf



⁷⁵ https://cetpartnership.eu/tri/4

⁷⁶ https://cetpartnership.eu/tri/2



In addition, projects could address innovations significantly impacting societal acceptability, safety, and/or circularity.

- 2. Applied research and development projects (achieving TRL4, 5 or 6 after project completion) must have a valid proof-of-concept before starting, typically work in a laboratory or similar setting and address at least one of the following compared to state-of-the-art today:
 - significant cost reduction
 - o significant increase in competitive market opportunities
 - significant increase in environmental protection and/or reduction of risks associated with the development or operation of a geothermal installation
 - o better tools and methodologies

In addition, project output could significantly impact societal acceptability, knowledge development, experience sharing, safety, and/or circularity.

The Call Module considers all geological depth levels.

Proposals are expected to explain their contribution to the objectives of this Call Module and quantify this contribution to the extent that this is possible.

Proposals are encouraged to consider cross-cutting issues such as economic modelling, social aspects, environmental concerns, etc. However, applicants must ensure that their proposed work meets national funding rules. Proposals that exclusively consider research on sustainability or social acceptance cannot be funded.

This Call module complements other Call Modules in this Call. In case of uncertainty about where to best propose your project, consult with relevant Funding Organisations or TRIs.

- Thermal storage focusing on geological storage is covered in this Call Module (CM2024-07), while CM2024-06 focuses more broadly on thermal storage technologies.
- Projects focusing on integrating geothermal energy and thermal storage in regional or industrial energy systems or the built environment are referred to CM2024-08, 09, and 10, respectively.

Target topics

Successful projects should address one or more of the three topics shown in Figure 8.3, which cover all stages in the development cycle of a secure, sustainable, competitive, and affordable geothermal installation.

Identifying and assessing geothermal and underground thermal energy storage (UTES) resources, reserves and reservoirs: Innovative and improved prospecting and exploration techniques and modelling methods to identify and assess geothermal resources at all depth levels.

Geothermal & underground thermal energy storage (UTES) resource development: New drilling and well completion technologies, reservoir optimisation, stimulation and innovative systems to manage induced seismicity.

Geothermal operation and integration into the energy system: Innovative concepts with geothermal energy as part of the energy system; geothermal reservoirs for heating, cooling and storage; innovative power cycles; novel revenue streams from additional side benefits from geothermal utilisation (such as mineral extraction); innovative applications in the built environment and industry. For operation, novel approaches to improve well injectivity and reliability and availability of injection operations; novel equipment, materials and methods for lowering and optimising operating expenses; disruptive smart reservoir management technologies; and innovative approaches to managing induced seismicity during production.





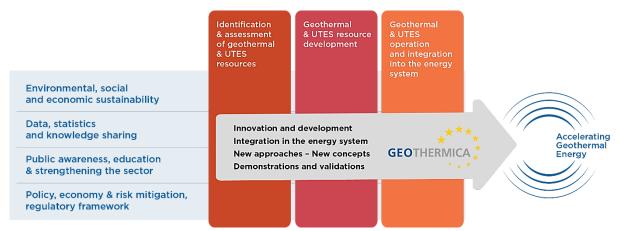


Figure 8.3. Geothermal energy technologies

The vertical bars in Figure 8.3 indicate the technological scope. The horizontal bars indicate the cross-cutting, non-technological dimensions that are relevant for geothermal energy technologies: sustainability and safety, knowledge sharing, enhancing public awareness and the sector's strength, and activities related to policies and regulations (Figure 8.3).

Successful projects in this Call Module should contribute to one or more relevant cross-cutting, non-technological dimensions. A close interconnection between sources and their temperature level, conversion and distribution technologies, flexibility for the energy system and end-user requirements should be sought for heating and thermal storage operations. Projects should demonstrate their market relevance and potential impact.

Proposals are encouraged to describe how the project will support the energy transition with a view on circularity, resource efficiency and recovery, recycling, and substitution of critical raw materials. Projects that aim at technologies with little or no critical raw materials⁷⁸ may identify this as a project quality in their project plan.

Project Consortium Partners must ensure that their proposed work agrees with the funding instrument of their relevant Funding Organisation – consult Annex C.

Expected impact

Projects funded in this Call Module should improve business cases and/or increase the competitive market opportunities and/or improve tools and methodologies and/or environmental protection, social acceptability, strategic knowledge, safety and/or circularity for geothermal energy. The projects' results must emphasise market-driven innovation activities, aimed to be ready for large-scale implementation around 2030. However, projects may include lower TRLs depending on national funding rules.

Project outcomes are expected to help accelerate and implement geothermal energy solutions. Projects can also focus on bringing upcoming technologies to a level of validation in a relevant environment or integrating their activities into already viable and ongoing demonstration or piloting projects.

⁷⁸ See <u>Critical raw materials - European Commission (europa.eu)</u>, and including copper and nickel, in line with the <u>Critical Raw</u> <u>Materials act</u>







CM2024-08 Integrated regional energy systems

Target RDI approaches/TRLs	Project start: TRL 4–6 Project end: TRL 7 or higher
Project Consortium Partners	 Participation of public and private organisations or networks and clusters or existing initiatives is encouraged. Private for-profit companies Public bodies (municipalities, local and regional governments) Innovation clusters Infrastructure providers and operators Interregional and transnational innovation ecosystems such as Cluster networks Start-ups networks Secondary and higher education establishments Research organisations
Project budget	Applied funding from the Call in the range of (but not limited to) EUR 1.5–5 million
Call Module requirements	None
Contact	TRI5

Objectives

This Call Module, following the challenge of the CETPartnership <u>TRI5</u>⁷⁹, aims to contribute to the regional challenges of the energy transition by supporting need owners⁸⁰ in a regional/geographical context to develop model system solutions that can be transferred to other regions. These solutions should provide opportunities and synergies for active participation in the energy system and have a high potential for implementation. Solutions should be replicable, i.e. there should be a high probability that the solution can be replicated in similar environments across Europe. As the impact of the projects is central for this Call Module, it is preferable if they target regions and sectors with high potential for improvement.

Scope

This Call Module supports projects to demonstrate how local stakeholders, regulations and markets enable various technologies on different levels to work together in an integrated system to address the regional challenges of the energy transition.

It follows the implementation of the <u>SET Plan Action 4: Increase the resilience and security of the energy</u> <u>system</u>⁸¹. Funded projects in this Call Module should contribute to this by addressing specific regional aspects that can be transferred to other European regions, following Challenge 5 in the <u>CETPartnership</u> <u>SRIA⁸²</u>.

⁸² https://cetpartnership.eu/sites/default/files/documentation/CETP%20SRIA_v1.0_endorsed_compressed_0.pdf



⁷⁹ https://cetpartnership.eu/tri/5

⁸⁰ "Need-owner" refers to the role of an entity (e.g. public agency, local/regional authority, energy grid manager/owner, company, building owner etc.), that seek a solution to a specified need (problem) within its area of operation. The "need-owner" has practical insights into what the actual need is and an interest to be involved in the development of a solution. This ensures the development of an optimal solution and facilitates the "need-owner(s)" acceptance and implementation of the solution. There can be more than one "need-owner" to the same need.

⁸¹ https://setis.ec.europa.eu/system/files/2022-02/SET%20Plan%20ENERGY%20SYSTEMS%20Implementation%20plan.pdf



Therefore, proposals must define measurable Key Performance Indicators (KPIs) to prove and quantify their approach. This can be done, for example, by referring to existing local/regional climate, energy and implementation plans or roadmaps and describing their contribution to these plans.

The following are some examples of regional challenges for the energy transition, even though applicants can also choose their own challenge covering a relevant solution approach.

- Increase the share of renewables among all energy sectors and / or the holistic energy efficiency in the region by smart solutions
- Increase sustainability and circularity along the whole value chain of renewables
- Increase the seasonal shift of renewable energy in the targeted region
- Increase the hosting capacity of the system to reduce energy dependence and improve the added value in the region
- Increase resilience in the regional energy system
- Demonstrate and validate solutions to overcome energy poverty and contribute to a just energy transition
- Enable citizens, need-owners and other stakeholders to take part in the related value chains

As one of the Call Modules for systems integration, funded projects should have focus on appropriate systems approaches in a specific local and regional context, rather than primarily on the technological development of individual solutions, which should then only be one aspect of a wider framework. The project's starting point will ideally build on existing results and initiatives and combine them together into an integrated systems approach that offers a solution for a well-defined need in the region involved in the project. Addressing the needs of a region requires the involvement of regional or locally anchored transition ecosystems with the need owners of the region at the centre. Projects funded in this Call Module are expected to have greater relevance to the energy system as they focus on demonstration rather than development. Projects shall drive innovation, lead to findings and create evidence-based knowledge in the three dimensions of innovation described in the **Integrative Innovation Model** (see Annex B).

The Call Module supports a portfolio of projects dealing with solutions for different regional characteristics and bring them together on a European level. The characteristic can be freely described by the consortium, according to their perception of what is relevant in their specific geographical context e.g. industrial or agricultural setting, wind or solar dominated system, and may or may not include geographical terrain (e.g. plains or mountain valleys), specific infrastructure such as heating grid, etc. Examples of possible starting points of potential projects:

- Refer to existing local/regional climate, energy and implementation plans or roadmaps
- In order to increase the regional relevance of the projects, they should build on the knowledge, experience and networks developed in the framework of ongoing or recently completed projects
- Use of flexibility of locally and regionally available energy sources for meeting the individual local and regional requirements in terms of generation, demand and goals
- Increase participation of regional need owning private and public companies and utilities, institutions, and people, intending to implement innovative solutions in order to take an active role in the future energy supply and energy system (producing energy, providing flexibility, etc.)
- Design the structure around integrated approaches, involving cross-sectoral and interdisciplinary research and innovation.

This Call Module does not support the singular technological development of individual solutions, although technological development can be part of the project. To achieve better evaluation results, applications





should build on ongoing or recently completed demonstration projects, and make use of existing test infrastructure, knowledge, collaboration of key demos, transfer of results, openness, etc. We encourage consortia to further develop already existing regional initiatives by adding either new aspects/objectives or new partners.

For this reason, we recommend that applicants carefully check the national requirements for consortia of the respective funding organisations. This can be decisive for the composition of applicant consortia and their eligibility for funding.

Target topics

In order to meet the challenges on the regional level of the energy transition, proposals should cover aspects like listed below.

Examples of specific regional aspects covered by the projects

- Develop integrated regional and local energy systems that enable a secure, resilient, and fossil free regional energy supply, up to and beyond 100% in the dynamic local or regional supply
- Include regional infrastructures as well as the user and consumer structures driven by local municipalities, communities, industry, and stakeholders from different sectors
- Develop a replicable model for a region that can either be dominated by large urban systems, the integration of municipalities or smart energy communities, or have a focus on the integration of, for example industry, agriculture or the tourism sector
- Leverage synergies and utilise flexibilities in locally and regionally available energy sources (including aspects of heating, cooling, electricity and local fuels)
- Involve cross-sectoral integration of multiple (economic) sectors like transport, industry, trade, etc.
- Coordinate and link research activities with e.g. living labs to facilitate the development and field-testing of prototypes

Examples for contributions to a secure and resilient European energy system

- Contribute to inter-regional exchange of energy
- Demonstrate the ability of providing management of flexibility by cross-energy vector coupling, and by efficiently integrating different energy carriers as a blueprint for other regions in Europe
- Work on harmonised business processes for solutions by developing interoperable solutions
- Development of regional climate strategies and Key Performance Indicators (KPI's) for climate neutral energy systems that can guide policy makers and actors when adopting market design on European level

Expectations for regions through transnational collaboration

- Building transnational projects will contribute to a deeper understanding of the different infrastructural and socio-economic contexts and provide the opportunity to involve regional actors with sufficient capacity to take up the results of the funded projects
- Knowledge transfer and the transfer of solutions to other regions with similar conditions, gain in larger markets for solution providers and more efficient use of resources and will speed up the co-transition of regional energy systems
- The benefit for addressing also cross-cutting issues in a transnational approach is that good practice and learnings can be shared across Europe to make the transition pathways robust across Europe





Expected impact

Projects shall drive innovation, lead to findings and create evidence-based knowledge in the **"Three Dimen**sions of Innovation for System Solutions" (see Annex B) and by that achieve impacts in the three dimensions. Projects shall use the three dimensions of innovation as a framework for the description of their expected outcomes. Projects funded in this call module are not intended to cover only the technology level. For integrated solutions, we expect that in the best case all layers are covered within the project. The projects must clearly describe how the results will subsequently be utilised to have an impact in the regions concerned or in other, similar regions. The chances of achieving this impact must be assessed, taking into consideration that projects based on previous or ongoing transnational projects have a better chance to roll out solutions at the regional level as well as to transfer solutions to other regions. Furthermore, it must be specified which stakeholders will implement the actions. If these are not part of the consortium, it must be explained how they are to be reached. Proposals should have integrated the local or regional public authorities as partners or via Letter of Intent (LoI).

Projects should reflect the needs of a region of interest and cover as many local target groups as possible. Furthermore, the consortium should be able to implement the outlined exploitation plan successfully and independently after the end of the project.

For proposals that intend to work with former ERA-Net Projects, Interreg transnational Projects, Demonstration, Real-Lab or Living-Lab approach, it is recommended to consider the JPP SES Living Lab and Test Bed Network⁸³ when looking for partners. For Matchmaking opportunities please register at CETPartnership's B2Match⁸⁴ site.

For proposals that intend to work with data service solutions, it is recommended to consider the JPP SES network of Digital Platform Providers⁸⁵ when looking for partners.

To help in developing proposals building on suitable transnational projects, the keep.eu⁸⁶ database can be used.

Synergies with the projects supported under the Horizon Europe call <u>HORIZON-CL5-2023-D3-01-01</u>: <u>Renewable Energy Valleys to increase energy security while accelerating the green transition in Europe</u> are strongly recommended.

Dimensions of innovation

Projects shall drive innovation, lead to findings and create evidence-based knowledge in the three dimensions of innovation described in Annex B. Individual proposals have to address aspects <u>at least in 2</u> of the three dimensions. In order to realise this, they are encouraged to consider the project design options described in Annex B. Here some examples, how different aspects connect with the three dimensions.



⁸³ https://www.eranet-smartenergysystems.eu/Partners/Living_Labs

⁸⁴ <u>Clean Energy Transition Partnership (CETPartnership) - Home (b2match.io)</u>

⁸⁵ https://www.eranet-smartenergysystems.eu/Partners/Digital_Platform_Providers

⁸⁶ https://keep.eu/



CM2024-09 Integrated industrial energy systems

Target RDI approaches/TRLs	Project start: TRL 3 or higher Project end: TRL 8 or lower	
Project Consortium Partners	 Secondary and higher education establishments (social science, humanities, technology, economic and science disciplines) Research organisations Private for-profit companies (such as industrial companies, suppliers of technology and services) Public bodies (may include municipal companies) 	
Project budget	Applied funding from the Call in the range of (but not limited to) EUR 1.5–5 million At least one industrial end-user must participate in the Project Consortium TRI6	
Call Module requirements		
Contact		

Objectives

This Call Module, following the challenge of CETPartnership TRI6⁸⁷, aims to develop and demonstrate a set of technical solutions for integrated industrial energy systems that enables efficient carbon-neutral industrial production sites and takes industrial energy systems into development as part of the entire energy system. It focuses specifically on integrated solutions across industries, across energy sectors and across public and private sectors⁸⁸.

Special emphasis in the Call Module is placed on solutions for system- and process-level integrations for efficient industrial power, heating, and cooling. The main industries that are considered include iron & steel, cement, pulp & paper, chemical, and food and beverage industries.

The Call Module will contribute to an innovation-based growth of the European economy and the European energy transition by supporting projects that accelerate the development of clean technologies by capitalising on synergies between programmes, both nationally and internationally, as well as by addressing key cross-cutting issues, lead to faster market uptake, upscaling, and increase EU's technological independence and global competitiveness⁸⁹. Projects are expected to increase their Technology Readiness Level (TRL) up to TRL 8 throughout the duration of the project so that they move closer to commercial readiness.

The Call Module will address topics such as sustainability, circularity, environmental impact, integration with local and regional energy systems, energy storage, CCUS and digitalisation and Artificial Intelligence. There are synergies with TRI3⁹⁰ and TRI4⁹¹ within the CETPartnership.

Background

In the future, electricity will play a significant role as a "primary" energy source for the industries, and new innovations are needed to accomplish the transformation of industrial electrification. Further, a large share of the industrial energy supply shall be based on renewable sources. Where carbon emissions cannot be avoided, CO_2 shall be captured, utilised for production of preferably long-lifetime products, or permanently

⁸⁹ <u>https://setis.ec.europa.eu/set-plan-</u> -report-2022_en



⁸⁷ https://cetpartnership.eu/tri/6

⁸⁸ https://cetpartnership.eu/sites/default/files/documentation/cetp_sria_1.0.pdf

⁹⁰ https://cetpartnership.eu/index.php/tri/3

⁹¹ https://cetpartnership.eu/index.php/tri/4



stored. To produce negative emissions, capture, utilisation in long-lifetime products and storage of biogenic CO_2 from the exhaust gases, i.e., bio-CCUS, is an option.

While the energy transition of industries advances, industrial energy systems shall integrate with local, regional, and national heat and power networks and systems. Moreover, the energy and industrial systems shall together integrate as renewable power will also be used to produce hydrogen, which can be utilised as energy carrier or raw materials in industrial processes or with CO₂ utilisation (CCU) to synthesise electro products for the replacement of fossil-based fuels and chemicals.

The integration of industrial energy systems with local, regional, or trans-regional energy systems supports national and European goals for carbon neutrality. As research, development, and innovation activities (RDI) for industrial carbon-neutrality are already funded at a national level in many countries, a broader experience and knowledge sharing at an international level will be an advantage. Transnational co-operation will boost efficient technology transfer and leverage complementarities for building competitive European value chains.

Scope

This Call Module is in line with the <u>REPowerEU Plan</u>⁹² and has a focus on the need for reducing energy consumption, substituting fossil fuels, and accelerating Europe's clean energy transition to bring down emissions and dependencies⁹³. Therefore, the Call Module welcomes proposals for research, development and innovation projects that address one or more of the following challenges:

Challenge 1 – Reducing emissions from the industrial energy system

This challenge is addressed to projects that will contribute to reducing the industry's process-related emissions, in particular emissions to air. The objective is to support technological leaps and industry's ambitions to change to more sustainable production by integrated industrial energy systems.

Process-related emissions refer to emissions directly from industrial processes according to environmental reporting as well as to emissions that occur during the combustion of residual products from fossil raw materials in production processes, such as flaring of industrial residual gases. Emissions with an indirect connection to industrial processes are, for example, combustion emissions from on-site power and heat production.

Projects that focus on reduction of indirect emissions from industry can only be supported in cases where a reduction in direct emissions from processes is also included in the project or when they involve a technological leap for the industry. Therefore, projects that only involve conventional fuel changes will not be funded.

Challenge 2 – Integrating energy and resource efficient industrial energy systems

This challenge is addressed to projects that will contribute to increasing knowledge and develop new and innovative processes and system integrations that will improve sector coupling in an energy and resource efficient way between industrial energy systems and the energy system in general. System-level integrations across sectoral boundaries will provide support for a more flexible and robust European energy system based on a high degree of variable renewable energy sources.

The projects in this area can include the role of industry in a larger perspective, i.e., integration between processes within an industrial site, between different industries or integration between an industrial site and

⁹³ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secureand-sustainable-energy-europe_en



⁹² https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2022:230:FIN



the surrounding local or regional energy system, to create an energy- and resource-efficient system from a holistic perspective. The area thus comprises industrial and cross-sectoral symbiosis, including new industrial and system-integrated structures, i.e., projects that study physical exchanges of energy, material or residual streams in the form of, for example, excess heating or cooling, operational and municipal wastes, and residual materials and flows. This area can thus help create circular economy solutions for industry and local communities and regions.

Challenge 3 – Removing carbon emissions from industrial energy systems

This challenge is addressed to projects that will contribute to removing industrial greenhouse gases from the carbon cycle through emission separation combined with long lifetime utilisation or long-term storage of carbon. Special emphasis is placed on greenhouse gases of biogenic origin and on CO₂ removed from the atmosphere to advance development of carbon sinks. The challenge is also addressed to projects that enable industries to implement bio-CCU to produce chemicals from their biological CO₂ emissions, or such energy carriers that would serve as energy storages and support balancing of the renewable-based future energy system. CCU production pathways might involve bioprocesses, e.g. with algae, or synthesis processes with clean hydrogen. Implementation of CCU, might open new business opportunities beyond today's industrial production.

Target topics

Following are examples of topics that proposals could cover to meet the above challenges:

Challenge 1 – Reducing emissions from the industrial energy system

- Industrial electrification
- Energy and resource efficient process technologies
- Solar CSP/STE for reducing emissions from heat demand in industries

Challenge 2 – Integrating energy and resource efficient industrial energy systems

- Solutions for advanced industrial sector coupling
- Solar CSP /STE for coupling electricity and heat in industries
- Recovery of excess heat and upgrade (e.g. with heat pump) for reuse within or outside the industrial site

Challenge 3 – Removing carbon emissions from industrial energy systems

- Industrial Bio-CCUS
- CO₂ logistics supporting value chain development for CCU
- Clean hydrogen for energy-intensive industrial applications

Cross-cutting issues:

- Circular industry, industrial symbioses and infrastructure
- Digitalisation and Artificial Intelligence

This Call Module complements other Call Modules in the Call:

• Concentrated solar for thermal applications in the industry is covered by CM2024-06, while it is covered by this Call Module if linked to industry application and energy system integration.





• CCU/S technology is covered by CM2024-04, while it is covered by this Call Module if linked to industrial processes, industry symbiosis and energy system integration.

In case of uncertainty about where to best propose your project, consult with relevant Funding Organisations or TRIs.

Expected impact

The expected impact from projects funded in the Call Module are that they contribute to making European industry a part of a climate-neutral economy. Funded projects will strive to:

- increase European industry's competitiveness.
- support the development and pre-commercialisation of future disruptive technologies.
- support a wider use of renewable energy sources as well as emission control technologies for reducing industrial emissions.
- integrate renewable energy into the industrial energy system to aid increased industrial electrification.
- Increase resource -and energy efficiency of industrial energy systems through novel process and system integrations.
- increase circularity through, for example CCU or the reuse of industrial excess heat.
- Increase the use of Bio-CCUS in industrial processes.
- develop sustainable bioenergy and biofuels.
- develop and integrate hydrogen-based technologies into the industrial energy system and infrastructures.

Projects that are funded are expected to provide solutions to the challenges in the call module through new knowledge, skills, and technologies. The funded projects will also be expected to include need-owners, industrial advisory boards and/or a challenge driven approach to improve fit with industrial needs, to foster industrial acceptance and to boost exploitation of research results. Projects shall participate in CETP's working groups and workshops to share information, knowledge, ideas, and results to strengthen national and regional research, development and innovation policies.

Involvement of industry either directly as a partner or partners in the project consortium or in an industrial advisory or steering board is an advantage. Involvement of sectoral industrial associations in project's advisory board is encouraged to foster wide deployment of the developed solutions across Europe.

Projects are encouraged to advance solution development towards TRL 7 by the end of the project so that the consortium members are ready to apply for follow-up funding for piloting or demonstration projects from other funding programs like EU's Innovation fund⁹⁴. This drives clean energy solutions faster towards commercial readiness and contributes to a more competitive European industry and a sustainable and decarbonised European energy system based on renewable energy sources.

Dimensions of innovation

Projects shall drive innovation, lead to findings and create evidence-based knowledge in the three dimensions of innovation as outlined in the Integrative Innovation Model as follows:

⁹⁴ https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/innovfund





Topics	Dimension 1: Technologies, In- frastructures and System Solutions	Dimension 2: Or- ganisation of En- ergy Systems	Dimension 3: Transition of En- ergy Systems
Challenge 1 – Reducing emissions from the industrial energy system	x		
Challenge 2 – Integrating energy and resource effi- cient industrial energy systems	X	X	X
Challenge 3 – Removing carbon emissions from the carbon cycle in industrial energy systems	x	х	

Individual projects are expected to have a strong focus on the technology dimension (Dimension 1). However, some challenges require additionally considering aspects that address dimensions 2 and 3.





CM2024-10 Clean energy integration in the built environment

Target RDI approaches/TRLs	Project start: TRL 3 or higher	
	Project end: TRL 5 or higher	
Project Consortium Partners	 Private for-profit companies (small and medium-sized enterprises (SMEs)) Public bodies (municipalities, local and regional governments) Innovation clusters Ecosystems and programmes Infrastructure providers and operators Interregional and transnational innovation ecosystems such as Cluster networks Start-ups networks Secondary and higher education establishments Research organisations 	
Project budget	Applied funding from the Call in the range of (but not limited to) EUR 1–5 million	
Call Module requirements	Proposals targeting lower TRL than described above are ineligible	
Contact	<u>TRI7</u>	

Objectives

This Call Module, following the challenge of the CETPartnership <u>TRI7</u>⁹⁵, aims at enabling transnational projects to provide new solutions for the built environment and develop from a pure energy consumer into a prosumer (producer-consumer) of renewable energy and from a passive into an active and integrated role in the future energy landscape.

Scope

Proposals applying to this Call Module should clearly include integration aspects to demonstrate their expected role in the built environment, reflecting integrated approaches used in the <u>New European</u> <u>Bauhaus</u>⁹⁶. This should be achieved by focusing on the physical, technical and, where applicable, aesthetical integration of clean energy conversion and storage technologies for power, heating and cooling as well as mobility concepts into buildings and more generally into the built infrastructure. The proposals should also demonstrate their contribution to technology improvements through new solutions and capabilities, proof of concepts or optimisations including formalised test and validations. Three challenges are defined in this Call Module, namely:

Inree challenges are defined in this Call Module, namely:

- Challenge 1: Transformation of the building / built environment to an active part within the energy system
- Challenge 2: Digitalisation of the whole life cycle of a building (planning, construction, commissioning, operation, decommissioning and disposal)
- Challenge 3: Development of new concepts and technologies to renovate and refurbish the built environment

⁹⁵ https://cetpartnership.eu/index.php/tri/7

⁹⁶ https://new-european-bauhaus.europa.eu/



Proposals should identify any foreseen application of the developments in different building contexts:

- Existing and new buildings
- Residential (urban, rural and isolated) and non-residential buildings (large public and private buildings, commercial malls, service and mobility infrastructures, logistics platforms such as ports, airports, railway terminals, roads, large parking areas)
- Old, historical and special buildings (cultural and built heritage)
- Different climate and geographical areas

Proposals should also include a perspective for technology transfer including plans for verification and validation, data management and exploitation.

Target topics

The following are examples of target topics that proposals should cover to meet the challenges listed under the Scope.

Challenge 1

- Production of renewable energy within the building / built environment
- Seamless integration of renewable energy technologies like PV, small wind etc. in the urban environment
- Integration of electrical and thermal storage to increase self-supply and efficiency in buildings
- Integration of e- mobility concepts to reduce emissions
- Building-to-building energy and Active Buildings concepts
- New air-conditioning and ventilation concepts
- New active building elements like facades, windows, switchable thermal insulation and their building integration

Challenge 2

- Digitalisation of in-building energy management
- Increase of self-consumption and energy efficiency during operation through digitalisation
- Active energy production and storage management within buildings through digitalisation
- Digitalisation of networks for heating and cooling
- Building Information Modelling (BIM) from the cradle to the grave
- New circular-oriented services at different levels of the Construction and Demolition Waste (CDW) supply/value chain

Challenge 3

- Prefabricated elements to boost the renovation processes
- New planning tools for efficient renovation pathways
- Novel holistic plus economically viable renovation concepts including demonstration, LCA, etc.
- Serial renovation
- Specific renovation concepts and solutions for heritage buildings
- LCA including grey energy of renovation





• "User" acceptance and economic viability of renovation

In addition to proposing technological solutions, proposals should also address the environmental, social, and economic implications that might impact the adoption of the proposed technology into the built environment. Proposals addressing only environmental, social, and economic aspects of existing and commercially-ready technologies are not eligible for funding.

Expected impact

Projects funded in this Call Module should develop technologies and methodologies to raise energy production and energy storage capacities within the built environment and to increase the overall energy efficiency compared to state-of-the-art today. These developments need to focus on the integration aspect into the existing or new built environment. Projects are expected to provide results to lower the environmental footprint of the built environment and to accelerate the transformation from being only consumers to prosumers and from an exclusive passive role to an active role in the overall energy system. Project outcomes are expected to help accelerate the time to market of sustainable, competitive and affordable solutions for new buildings and the renovation of the existing built environment. Projects should also focus on upcoming validation and standardisation of newly developed technologies.



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CETPartnership Joint Call 2024

Annex A. Reporting and Knowledge Community Work Package

A proposal must foresee a **Reporting and Knowledge Community Work Package** with necessary resources (efforts (measured in person months) and budgets). Appropriate resources depend on the Project Consortium composition, project duration, etc. As a general guideline, the work package should include reporting (Task 1, covering 10 days/year/project), and contribution to the CETPartnership Knowledge Community (**Knowledge Community**) co-creation activities (Task 2, covering up to about 3% of the total project efforts (measured in person months)).

The Knowledge Community activities mostly take place online, with the support of a dedicated management team (CETPartnership Knowledge Community Management, **KCM**,

<u>knowledgecommunity@cetpartnership.eu</u>) and the <u>Digital Information-System for Communication and</u> <u>Collaboration, DISCCO</u>⁹⁷.

Task 1. Reporting

The Coordinator must submit annual reports and a final report on the transnational level to the CETPartnership. For a project with a duration of 36 months, the first annual report will cover the initial year, the second report the first two years, and the third and final report the entire project duration. The reporting includes a publishable factsheet and deliverables.

Task 2. Collaboration in the CETPartnership Knowledge Community cocreation activities

The Knowledge Community offers various activities for collaboration and discussion on different topics and formats. Participation of funded projects depends on the Project Consortium Participants' objectives, target topics, RDI approaches, etc. Considering the expected benefits, a Project Consortium should plan the participation with appropriate Project Consortium Partners and resources.

Since the Knowledge Community will annually decide its topics, and since a Project Consortium will decide its participation in specific activities throughout the project duration, please be referred to a tentative portfolio in Table A1 and estimate efforts of the Project Consortium Partners.

Please note that certain types of Project Consortium Partners may be more appropriate to carry out some activities than others, e.g. some national/regional funding programme can only support public organisations in dissemination activities. Consult with relevant Funding Organisations in case of uncertainty.

Table A1. Subtasks in Task 2: Collaboration in the CETPartnership Knowledge Community co-creation activities			
	Sub-	Description	Indicative
	task		effort (%)*

97 https://discco.eu/SitePages/Home.aspx





2.1	 Participation in CETPartnership Knowledge Community events (4–5 events/year) Annual CETPartnership Conference (online) Thematic webinars/workshops for knowledge sharing on topics of relevant Call Module(s) (onsite/hybrid, 1–2 sessions/year/project) Working group meetings on cross-cutting issues (2 sessions) 	40
2.2	 Peer-to-peer exchange on project progress (online and mandatory) Peer-to-peer feedback exchange among projects, Funding Organisations, TRI leading experts and KCM 	25
2.3	.3 Collaboration on specific topics For example working on a joint document, deep-diving in working groups interested in your project outcomes, or organising joint events (e.g. webinars/seminars) on a thematic topic (depending on scope of your project)	
2.4	Representing the Knowledge Community externally For example on social media or at external events such as the European Sustainable Energy Week	10

* % of each subtask in Task 2 (measured in person months). The activities may be suitable to cover up to about 3% of the total project efforts and are voluntary except for Subtask 2.2.





Annex B. Three dimensions of innovation for system solutions

The transition of our energy system requires the further development of clean technologies to convert, store and transport energy. It further requires a clear vision of the future design of our energy systems to make the best use of new technologies and to seamlessly integrate them into a highly performant and efficient technology–service ecosystem. This however imposes investigation into how different technologies and infrastructures can interoperate seamlessly across single energy vectors and sectors. Moreover it also requires investigation into how the interplay of the different actors and technologies in the whole network, from production to end-use, can be organised in a way so that the various forms of renewable energy can be combined for a continuous and flexible supply of services and processes. On top of all that, it is necessary to consider how a controlled and well-regulated "Just Transition" from established energy systems to the new, clean energy systems can be facilitated. This concerns organisations and companies as well as individuals, citizens and communities, in short all parts of society. We need to answer the question about how the new solutions finally become part of our everyday businesses and lives, how and by whom decisions are taken to adopt a new solution and how we can involve the responsible stakeholders in the innovation process. Not to forget that we always need to keep the implications on nature, ecology and resources in focus, with CO_2 and the climate crisis as a leading motive.

The CETPartnership **Integrative Innovation Model** as described below is meant as a framework that facilitates a structured approach for fostering different dimensions of innovation in project design. The three dimensions have been designed to classify activities in groups with similar character, which also require a common set of skills and quality assuring guidelines. In all three dimensions, barriers can be identified for approaches with the research, development and innovation (RDI) toolbox. The systematic can be applied as well to the RDI activities, as to the crosscutting issues that have been described in the <u>CETPartnership</u> <u>SRIA</u>⁹⁸. It can be used to better describe the research questions, activities and planned outcomes as well as intended impacts of a project. It can also be used to cluster projects e.g. for the work in the knowledge community.

Dimension 1: Technologies, infrastructures and system solutions

"Which technologies, infrastructures and their combination into technical system solutions do we need and how can we provide them?"

The focus is here on the design and production of technologies to convert, store and transport clean energy. This includes how different technologies and infrastructures can technically interoperate seamlessly across single energy vectors and sectors, achieving flexibility and sector coupling. It also comprises technical aspects of CO₂ management systems and circularity. Moreover, it concerns aspects of operation and maintenance of infrastructures and components.

Dimension 2: Organisation of energy systems

"How do we organise the interaction of players from different sectors in the operation of energy systems".

⁹⁸ https://cetpartnership.eu/sites/default/files/documentation/cetp_sria_1.0.pdf



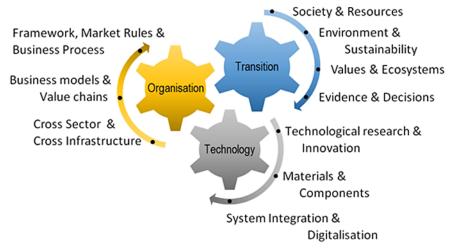


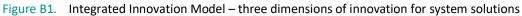
This concerns how the interplay of the different actors and their related system elements in the whole network, from production to end-use, can be organised in a way, so that the various forms of renewable energy can be combined for a continuous and flexible supply of services and processes. This includes aspects of the exchange of values between the actors (with their related system elements) – like market and business models or communities. It also includes aspects of the legal and regulatory framework. Moreover, it also considers the interaction related to CO_2 management. Interactions of players to assemble and disassemble the systems are also considered to be part of their operation, including organisational aspects of circularity.

Dimension 3: Transition of energy systems

"How do the new solutions become an integral part of the daily lives and businesses of citizens, communities and regions, companies and infrastructure providers?"

This comprises the nurture and facilitation of innovation ecosystems as well as the design of systems, technologies and services at the human-technology interface. But it also affects the change in companies with their personnel and organisational structures, aspects of social acceptance, the change in values and user behaviour as well as cultural discourse (e.g. spatial planning), and other socio-technical aspects. The sustainable provision of materials, components and systems in global supply chains is an essential prerequisite for the successful energy transition. In the course of the transition, impacts on the climate (with a focus on the CO₂ effect and climate crisis as a leading motivation), nature and ecology as well as resources in general must be kept in view.





Three dimensions in CETPartnership projects

The methods and approaches used to create project outcomes in the different dimensions could be clearly defined. According to the aspects considered and particularly in case that more than one dimension is addressed, inter- or transdisciplinary teams with partners and/or experts from different backgrounds can be of great value to the project. E.g. already in the technological dimension, when it comes to the integration of technologies and infrastructures, expertise from different technology and infrastructure sectors is required. If a project intends to address aspects in the second or third dimension, expertise in economics, market design, management and organisation, social sciences, communication, industrial design, co-creation, etc. may be required. In case a proposal covers more than one of the dimensions, it is also important that the risk







assessments for the project fully consider all dimensions involved in that project and not just potential aspects of one dimension.

While different Call Modules of the Call could ask a funded project to cover more than one of the dimensions, every part and work package of the project does not necessarily address all the required dimensions. This would also help to cope with different funding schemes and instruments that relevant Funding Organisations provide. Some Funding Organisations may be able to fund project parts that concentrate on or include a non-technological dimension, others may not. The Project Consortium Partners need to make sure that their relevant Funding Organisations can support their specific work packages or tasks.

Thus, a project could address one (see P1 in Figure B1) or more (P2, P3 and P4) of the three dimensions. Project Consortium Partners could be specialised and implement a particular work package, addressing only one of the dimensions which relevant Funding Organisations are able to support. Alternatively, they could combine technological aspects, which are required by the funding scheme of their Funding Organisations with non-technical aspects, so that their parts of the project can be funded.

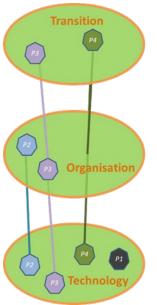


Figure B2. Examples of projects addressing the three dimensions of innovation

CETPartnership Knowledge Community

The <u>CETPartnership Knowledge Community</u>⁹⁹ is an integral part of the CETPartnership and aims to leverage exchange and co-create knowledge involving CETPartnership funded projects, RDI experts and other national, transnational and international stakeholders. It is intended to act as an information platform, to develop and present state-of-the-art knowledge, to lead discussions and to strengthen multilateral collaboration between research, industry, policy and society in the field of the clean energy transition. Through strategic knowledge management, outcomes of RDI will provide an evidence and fact base for policymaking to support the clean energy transition in domains of innovation, market entry and diffusion as well as regulation and procurement.



⁹⁹ https://cetpartnership.eu/about/knowledge-community



The Knowledge Community is committed to enhancing collaboration and knowledge co-creation in thematic challenges addressed by TRIs and in cross-cutting dimensions aligned with the <u>CETPartnership SRIA</u>^[2]. We have implemented a robust monitoring and reporting framework that not only evaluates the progress of the funded projects and the effectiveness of the entire community, but also integrates these insights directly into the knowledge creation processes of the partnership. Above all, joint knowledge generation and dissemination shall help the funded projects to improve their efficiency, results, and outreach. The Knowledge Community will also relate to the Impact Network partners of the CETPartnership who can contribute to dissemination and exploitation of knowledge.

The <u>CETPartnership Impact & Exploitation</u>¹⁰⁰ supports the funded projects in exploiting results and maximising impact through various means. The Impact Network includes Living Labs, validation test beds, industry associations, innovation clusters, and networks of SMEs and start-ups across Europe. The Impact Library offers training, tools, and interaction concepts to identify and engage the various stakeholder groups, to exploit the key results, and to plan effective market and commercialisation strategies. In addition, online training and match-making events support projects at different stages of the journey from lab to market.

Projects shall use the Knowledge Community as their main contact to the CETPartnership. To ease reporting and monitoring as well as knowledge management and access to the Impact & Exploitation support measures, CETPartnership operates a <u>Digital Information-System for Communication and Collaboration</u> (<u>DISCCO</u>)¹⁰¹. Projects will be invited to exchange with each other and the CETPartnership management entities in well protected workspaces.

^[2] https://cetpartnership.eu/sites/default/files/documentation/CETP%20SRIA_v1.0_endorsed_compressed_0.pdf ¹⁰⁰ https://cetpartnership.eu/about/impact-exploitation



¹⁰¹ https://discco.eu/SitePages/Home.aspx

Annex C. National/regional requirements

AUSTRIA – AUSTRIAN RESEARCH PROMOTION AGENCY-ÖSTERREICHISCHE FORSCHUNGSFÖRDERUNGSGESELLSCHAFT MBH (FFG)

a) National/Regional information and eligibility criteria

) National/Regional information and eligibility criteria		
	Paul Kuttner paul.kuttner@ffg.at +43 5 7755 5069 Helfried Mährenbach	
	helfried.maehrenbach@ffg.at +43 5 7755 5058	
Contact Point	Johannes Bockstefl johannes.bockstefl@ffg.at +43 5 7755 5042	
	For Call Module 5: Johannes Fritzer johannes.fritzer@ffg.at +43 5 7755 5032	
Funding commitment	Call Modules 1, 2, 3, 8 and 10: 3.5 Mio. € (financed by the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology [BMK] – thematic focus energy transition) Call Module 5: 2.0 Mio. € (financed by the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology [BMK] – thematic focus mobility transition) Call Modules 4, 6, 7, 9: 5.0 Mio. € (financed by the Austrian Climate and Energy Fund)	
Anticipated number of projects to be funded	n.a.	
Maximum funding per awarded project/per part- ner	Maximum funding per project 1 Mio. € (exploratory projects for preparing further R&D&I projects in the form of an R&D projects in CM 8: 0.3 Mio. €)	
Eligible types of organisa- tions	In general, universities, research institutes, SMEs and large compa- nies, cities, municipalities and NGOs (legal entities) are eligible for funding. The complete eligibility criteria and definitions may be found in the <u>national guidelines.</u>	
Eligible Call Modules	All	
Eligible types of RDI and TRL	Industrial research & experimental development TRL 2-8	
Submission of proposal	National application via <u>eCall</u> is mandatory: Submission deadline pre-proposals: 26 November, 2024 at 12:00 (CET)	

the European Union

/documentation at na-	
tional/regional level	
	Submission deadline full proposals: 2 April, 2025 at 15:00 (CEST)
Additional eligibility crite- ria	At least one enterprise that receives funding is mandatory as a part- ner in any transnational consortium involving Austrian partners. It is not mandatory for this enterprise to be located in Austria. All Austrian partners in one project must select the same research type. For Call Module 4 applications: Thematic restriction for Austrian par- ticipants: With regard to potential implementations in Austria, the Austrian legal restrictions regarding the maximum volume of geologi- cal CO ₂ storage are to be kept. Only unavoidable residual emissions reduced to a technical minimum are to be offset by technical sinks in CCUS projects. For Call Module 5 applications: Thematic restriction for Austrian par- ticipants to climate-neutral hydrogen (as a fuel, produced by electrol- ysis or based on biogenic raw materials) or fuels produced by the use of green hydrogen as a reactant (e.g. Power-Liquid, Power-to-Gas, Power-to-Ammonia). The contribution of Austrian participants in submitted proposals must be focused on the development and use of hydrogen and fuel cells in mobile applications. According to the goals of Austria's National Hy- drogen Strategy, the proposals must focus on applications in the transport sector, where electrification is difficult to achieve (e.g. avia- tion, heavy-duty road and rail transport, shipping).
Eligible costs	Personnel costs, Overhead costs (flat rate), Use of R&D infrastructure, Costs of materials, Third-party costs, Travel costs. For detailed information see the <u>national cost guidelines</u> . Costs must be allocated directly to the project, incurred during the funding period in addition to normal operating expenses, correspond to the funding contract and can be proven.
Information available at	the CETP Call 2024 national website
Other	Applicants are strongly encouraged to contact FFG before submitting a pre-proposal. In parallel to the submission of the joint proposal by the coordinator, a simplified national application is to be submitted via the FFG elec- tronic submission system <u>eCall</u> by participants requesting funding by FFG (both in the pre-proposal and in the full proposal stage). For projects awarded funding scientific and financial reporting via <u>eCall</u> on an annual basis is mandatory.





	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	n.a.	55%	35%
Medium Enterprises	n.a.	70%	50%
Small Enterprises	n.a.	80%	60%
Universities, public re- search organisations	n.a.	85%	60%
Public authorities	n.a.	80%	60%
Associations without eco- nomic activities, NGOs	n.a.	80%	60%





BELGIUM/FLANDERS – FONDS INNOVATIE EN ONDERNEMEN (FIO/VLAIO)

Contact Point	Frank Verschraegen, frank.verschraegen@vlaio.be, +32 471 55 98 19	
Funding commitment	1.000.000 euro, excluding EC topup	
Anticipated number of pro- jects to be funded	2-3	
Maximum funding per awarded project/per partner	500.000 euro per awarded project	
Eligible types of organisa- tions	VLAIO is involving the Programmes for Development projects and Re- search projects. Therefore the involvement of at least one private com- pany (SME or large company) based in Flanders is mandatory (with the possibility to cooperate with research organisations).	
Eligible Call Modules	All Modules.	
Eligible types of RDI and TRL	Research projects and Development projects, up to TRL 7.	
Submission of proposal /documentation at na- tional/regional level	An annex is to be submitted together with the international project pro- posal to Flanders Innovation and Entrepreneurship. The annex(es) must be read together with the international project pro- posal. For this reason the focus of this annex should <u>only</u> be on the role of the (Flemish) company in the project, the nature of the activities to be carried out by the Flemish partners and the impact of the project results for the company in particular.	
Additional eligibility criteria	Applicants should motivate how the realization of the project will create added value for the company in Flanders. Subsidies range from: 35-60% for development projects 60-70% for research projects	
Eligible costs	Personnel costs and related direct and indirect costs according to VLAIO rules.	
Information available at	Application process for research project grant Agentschap Innoveren en Ondernemen (vlaio.be)The template annex for international and interregional projects can be found under the documents section. The template budget application can also be found here.Subsidies voor O&O&I in een internationaal consortium Agentschap Innoveren en Ondernemen (vlaio.be)	
Other	It is advised to contact VLAIO before submission (see contact point above), in order to avoid ineligible projects and consortia.	



Maximum funding percentages (in case the Flemish company cooperates with 1 or more Flemish research organisations):

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	N/A	65%	40%
Medium Enterprises	N/A	70%	50%
Small Enterprises	N/A	70%	60%
Universities, public research organisations	N/A	As research part- ner of the enter- prise, same fund- ing rates as above.	As research partner of the enterprise, same funding rates as above.
Public authorities	N/A	Not funded	Not funded
Associations without eco- nomic activities, NGOs	N/A	Not funded	Not funded

Maximum funding percentages (in case the Flemish company does not cooperate with 1 or more Flemish research organisations):

	Basic research	Industrial/Applied Research	Experimental develop- ment /innovation
Large Enterprises	N/A	60%	35%
Medium Enterprises	N/A	60%	45%
Small Enterprises	N/A	60%	50%
Universities, public research organisations	N/A	As research part- ner of the enter- prise, same fund- ing rates as above.	As research partner of the enterprise, same funding rates as above.
Public authorities	N/A	Not funded	Not funded
Associations without eco- nomic activities, NGOs	N/A	Not funded	Not funded





BELGIUM/WALLONIA – SERVICE PUBLIC DE WALLONIE (SPW)

) National/Regional information		
Contact Point	Suleau Marie <u>marie.suleau@spw.walonie.be</u> Gilles Tihon <u>gilles.tihon@spw.wallonie.be</u>	
Funding commitment	1 500 000	
Anticipated number of pro- jects to be funded	/	
Maximum funding per awarded project/per partner	/	
Eligible types of organisa- tions	Participation of a private company is mandatory (minimum 40% of total Walloon budget). According to the rules of SPW. - Industrial Researches (TRL 3 to 5) : Universities, Research Centers, SME, large companies, settled in Wal- lonia -Experimental Development (TRL 6 to 7 (8)) : only SMEs and large companies settled in Wallonia -other companies or NGOs for promotion activities	
Eligible Call Modules	All TRI 1 to 7	
Eligible types of RDI and TRL	RI & RIA All TRL, regarding the conditions on TRL per call module	
Submission of proposal /documentation at na- tional/regional level	The pre-proposal has also to be submitted on our own <u>portal</u> by our "re- gional partner". The pre-proposal can be in English. If selected for presenting a proposal, this proposal must be in French AND English	
Additional eligibility criteria	 The partners in Wallonia MUST give a pdf file from their 2021 balance published on Banque Nationale de Belgique The project cannot receive double funding; a specific form has to be filled in; The budget for the Walloon partners should follow the SPW-EER (DGO6) cost model; The funding rate will be the maximum allowed by the decree of the 3rd of July 2008, modified; The beneficiary must have a stable financial situation; A financial viability check has to be carried out before being recommended for full proposal. The beneficiary must have Operational offices in the Walloon Region; The project must add benefit to the regional economy; All information needed for evaluation should be available; 	
Eligible costs	Available : <u>https://recherche.wallonie.be/guide-depenses-eligibles</u>	
Information available at	Will be published on <u>https://recherche.wallonie.be/home.html</u> and <u>https://energie.wallonie.be/fr/index.html?IDC=6018</u>	
Other		





Maximum funding percentages:

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	65%	65%	40%
Medium Enterprises	75%	75%	50%
Small Enterprises	80%	80%	60%
Universities, HE	100%	100%	100%
Research Centers	75%	75%	75%

All the conditions are available on : <u>https://recherche.wallonie.be/home/nos-aides-1/minscrire-dans-une-demarche-internationale-international.html</u>





CANADA/ALBERTA – EMISSIONS REDUCTION ALBERTA (ERA)

n and eligibility criteria
Isabella Tarasco, Technology Investment Lead (Main Contact) Email: <u>itarasco@eralberta.ca</u> Christophe Owttrim (Executive Director, Technology and Innovation) Email: <u>cowttrim@eralberta.ca</u>
Total ERA funding envelope is \$3 million CAD (~€2 million at current ex- change rate). ERA in its sole discretion reserves the right to modify the total funding available under this Call.
Approximately 3-4 anticipated.
 \$1 million CAD (~€0.68 million at current exchange rate) per project. ERA in its sole discretion reserves the right to modify the maximum funding awarded per project. ERA will not award less than \$250,000 CAD (~€170,000 at current exchange rate) per project.
ERA funding is open to all categories of applicant, including technology developers, industry, industrial associations, small and medium-sized enterprises (SMEs), research and development (R&D) organizations, universities, municipalities, not-for-profit organizations, government research labs, and individuals.
 All focus areas mentioned in the CETP Joint Call 2024 guidelines for Modules 2, 3, 4, 6, 7 and 10 are eligible for Alberta/Canada. However, the following areas for CCUS are NOT eligible for Canada/Alberta re- gion: Acid gas injection Offshore storage For all focus areas, ERA funding will NOT be provided to projects whose primary focus is commercially proven technologies/processes, activities assessed to be business-as-usual, or to address only financial barriers.
ERA funding is targeted for projects at the technology scale-up, field pi- lot, commercial demonstration, or commercial implementation stages (TRL 5-9).
In addition to the CETP Joint Call 2024 proposal, ERA may require appli- cants, during the <u>full proposal stage</u> ONLY, to provide supplemental in- formation to support due diligence and portfolio reporting. This infor- mation may include detailed budget information, financial report(s), an extended Greenhouse Gas benefits analysis, and/or additional infor- mation on the specific alignment with the Alberta market. Supple- mental information relates to both the overall project and the compo- nent of the project based in Alberta. The final document for the Supple- mental Information must be no more than 20 pages in length excluding appendices. Financial reporting will be required for the Alberta-based partner(s) on the project and is mandatory for the project partner that will receive funding from ERA. The Supplemental Information docu- ment, budget sheet and





	appendices must be submitted via email to ERA Applications at <u>appli-</u>	
	<u>cations@eralberta.ca</u> .	
	Applicants are NOT required to be located in Alberta, but all applicants	
Additional eligibility criteria	must demonstrate a clear value proposition for the province. Applicants	
	must demonstrate how the proposed project has the potential to support emissions reductions in Alberta.	
	ERA will match applicant contributions toward eligible expenses on a one-to-one (1:1) basis. The maximum ERA contribution to a single pro-	
	ject will be no more than 50% of the project's eligible expenses.	
	jeet win be no more than 50% of the project's engine expenses.	
	ERA will not match other government funds provided directly for the	
	proposed project (federal, provincial, or international), or future reve-	
	nue associated with the outcomes of the project such as offset credits	
Eligible costs	or emissions performance credits associated with the project, tax incen-	
	tives associated with the project (e.g., Canadian SR&ED credits), reve-	
	nue from sales of the project's end-products (e.g., from offtake agree-	
	ment), or non-eligible contributions. Applicants must justify the amount	
	of funding requested.	
	For information about eligible expenses and costs, please refer to the	
	ERA Eligible Expenses and Cost Instructions document available HERE.	
Information available at	https://www.eralberta.ca/	
	Applicants are encouraged to partner with Alberta's post-secondary and	
	research institutions, Indigenous communities, and municipalities where appropriate. These partnerships can offer significant benefits, in-	
	cluding the attraction and training of highly skilled workers, increasing	
	Alberta's innovation capacity, engagement of local communities, and	
	leveraging complementary resources.	
	ERA is working in partnership with other funding organizations in Al-	
	berta and across Canada. In some cases, there may be an opportunity	
	for ERA to share applicants' proposals with trusted partners and other	
	funders in the system to explore possibilities to leverage funding availa-	
Other	ble from these organizationsPotential funding programs and opportu- nities that may align with the Call or be of interest to applicants include:	
	 Alberta Innovates 	
	Alberta Indigenous Opportunities Corporation	
	 Alberta Indian Investment Corporation 	
	ISED Strategic Innovation Fund	
	Natural Resources Canada Programming	
	Prairies Economic Development Canada	
	<u>Canadian Agri-food Automation and Intelligence Network</u>	
	<u>Results-Driven Agriculture Research</u>	
	A complete list of trusted funding partners can be found <u>on ERA's web-</u>	
	<u>site.</u>	



	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	Ineligible	50%	50%
Medium Enterprises	Ineligible	50%	50%
Small Enterprises	Ineligible	50%	50%
Universities, public research organisations	Ineligible	50%	50%
Public authorities	Ineligible	Ineligible	Ineligible
Associations without eco- nomic activities, NGOs	Ineligible	50%	50%





CZECH REPUBLIC – TECHNOLOGY AGENCY OF THE CZECH REPUBLIC (TA CR)

) National/Regional Information		
Contact Point	Name: Magdalena Pillasagua Ptakova E-mail: magdalena.pillasagua@tacr.cz	
	Tel: +420 775 871 321	
Funding commitment	800 000 EUR	
Anticipated number of pro- jects to be funded	4-5	
Maximum funding per	Maximum funding rate (intensity) per project (Czech part): 80 %	
awarded project/per part- ner	Maximum funding (amount) per project (Czech part): 200 000 EUR per project	
Eligible types of organisa- tions	 Enterprises (according to Annex 1 of the Regulation) Enterprises who act as natural persons according to Annex 1 of the Regulation engaged in an economic activity pursuant to Act no. 455/1991 coll. on Trades (Trade Act). Research organisations (according to Article 2 paragraph 83 of the Regulation) TA CR excludes the disbursement of individual aid to an enterprise: against which a recovery order has been issued which is unpaid meeting the definition of an "undertaking in difficulty" which has not met the obligation to publish the financial statements for the years 2021, 2022, 2023 in the respective register - the so-called "Veřejný rejstřík" which has not disclosed its ownership structure in the so-called "Evi- 	
Eligible Call Modules	 Which has not disclosed its ownership structure in the so cancer <u>twr</u> <u>dence skutečných majitelů</u>" * Czech Applicants are eligible to participate in Call Modules under TRI 1, TRI 3, TRI 5 and TRI 7. Eligible Call Modules: CM2024-01 Energy data spaces and interoperability CM2024-02 Energy system flexibility: renewables production, storage and system integration CM2024-04 Carbon capture, utilisation and storage (CCUS) CM2024-05 Hydrogen and renewable fuels CM2024-08 Integrated regional energy systems CM2024-10 Clean energy integration in the built environment 	
Eligible types of RDI and TRL	Applied research (industrial research and experimental development) TRL: 3-9	
Submission of proposal /documentation at na- tional/regional level	 <u>Mandatory forms to be submitted</u> The Czech applicants are requested to submit: A Sworn statement of the applicant 	



	 Completed "TACR Application Form" Excel file (submitted by the main Czech applicant only)* if the applicant plans to achieve "Nmet" type of result, the mandatory form for Nmet result needs to be attached* if the applicant plans to achieve the "Patent" type of result, patent search must be substantiated* Sworn statement of the composition of the consortium (only if Czech enterprise is part of the project consortium; submitted by the main Czech applicant only) All mandatory documents to be found on <u>TA CR website</u>. Deadline for submitting all documents is the same as the deadline for submitting pre-proposals. All documents proving the eligibility of the Czech partner stated above shall be submitted via the TACR data box (TACR data box ID: afth9xp).
	 *Applicants who will not submit this mandatory form (if relevant) via databox <u>before the deadline</u> will be considered as not eligible for TA CR funding. <u>Project start</u> Please note that following national legislation, Czech applicants shall start within 120 days from the funding decision being communicated by
	the Call Management (60-day period to enter into a contract + 60-day period to start the project).
Additional eligibility criteria	 Eligible projects for TA CR the project meets the definition of applied research the research results correspond to the national rules and are applicable / exploitable. (The project proposal has to include a clear description of the exploitation plan and results.) the aim of the project has to be relevant to the overall aim of the funding programme SIGMA the declared share of industrial research and experimental development corresponds to the activities of the Czech partner described in the project proposal the requested funding meets the national regulations for aid intensity Supported results Projects that achieve at least one of the following types of results can be supported in this Call. The type of the result has to be clearly described in the project proposal: P - patent G - technically realised results - prototype, functional sample Z - pilot plant, proven technology R - software
	 F - results with legal protection - utility model, industrial design N - Certified methodologies and practices, treatment, conservation methods, procedures and specialised maps with professional expert content O - Miscellaneous



	Results supported only in combination with at least one other result listed above:	
	 H - results reflected in non-legislative directives and regulations binding within the competence of the respective provider and results reflected in the approved strategic and conceptual documents of the state or public administration Intellectual Property Rights The applicants are required to enter into a contract with their foreign partners (sign the so-called Consortium Agreement) which will define the conditions of cooperation on the project where, among other things, they specify the method of allocating rights to the research results, as well as adjustment and management of the rights imported or created during the project's implementation, which are necessary to address the project. Submission of financial and scientific reports at the national/regional 	
	<u>level</u> Czech beneficiaries must follow the rules of TA CR for reporting on the project (i.e. submission of interim and final reports and reports on the implementation of the results).	
	Publicity obligations	
	While promoting the project and its results Czech beneficiaries must fol- low the publicity rules of TA CR.	
Eligible costs	 personnel costs (including scholarships) subcontracting costs (max. 20% of total eligible costs throughout the whole project period) other direct costs (write-offs, protection of intellectual property, operating expenses, travel costs, consumables) indirect costs (overheads) - full cost/flat rate 25% (indirect costs in the respective year are calculated as 25% of the sum of the personnel costs and other direct costs in the same year) Specific categories of eligible costs are defined under Article 18 of the General Terms & Conditions. 	
Information available at	ERA-NET Cofund Scheme on TA CR website (in Czech) ERA-NET Cofund Scheme on TA CR website (in English) National research programme SIGMA (in Czech) National research programme SIGMA (in English) "Guide for Czech applicants" and all mandatory forms will be available on TA CR website (in Czech).	





Maximum funding percentages:

The aid intensity for each Czech applicant in the project is determined based on the type of entity according to the <u>Regulation</u> and at the same time must not exceed the maximum permissible aid intensity for the Czech part of the project, which is **80**% of the total eligible costs.

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	Х	50-65* %	25-40* %
Medium Enterprises	х	60-75* %	35-50* %
Small Enterprises	х	70-80* %	45-60* %
Universities, public research organisations**	х	up to 100 %***	up to 100 %***

* If the "bonus for effective collaboration" is achieved

**Research organisations must satisfy the definition in the Act and the Framework

***While respecting the maximum permissible aid intensity of 80 % per project



DENMARK – ENERGY TECHNOLOGY DEVELOPMENT AND DEMONSTRATION PROGRAMME (EUDP)

National/Regional Information			
	Wickie Lassen Agdal		
Contact Point	wbl@ens.dk		
	+45 33 92 92 73		
Funding commitment	1.340.000 EUR		
Anticipated number of pro- jects to be funded	N/A		
Maximum funding per awarded project/per partner	1.340.000 EUR		
Eligibile types of organisations	Private business enterprises, knowledge institutions and public business enterprises are eligible for aid. However, for the <i>project</i> to be eligible at least one Danish private business enterprise should participate as an active partner (<i>more information under "Additional eligibility criteria"</i> <i>below</i>).		
Eligible Call Modules	All NB: EUDP does not support research activities under CETP. The appli- cant should choose "Innovation Fund Denmark" for research focused projects and "EUDP" for development and demonstration focused pro- jects. <i>Contact the relevant national contact point for guidance as early in the</i> <i>application process as possible.</i>		
Eligible types of RDI and TRL	EUDP supports projects focused on development and demonstration of new energy technology (TRL 4-8).		
Submission of proposal /documentation at na- tional/regional level	EUDP require submission of specific appendices for national eligibility check (national proposal). Appendices and more information are available at: https://eudp.dk/soeg-tilskud (Scroll and choose the page relevant to CETPartnership 2024).		
Additional eligibility criteria	It is required that a project is Industry driven , where at least one Danish private business enterprise (with a Danish CVR-nr.) participates as an active partner. An active partner should have a significant expected contribution and the potential to generate effects in a Danish context such as growth and/or employment and/or contribute to Danish climate policy objectives (e.g. CO ₂ -reductions and/or security of supply). The above-mentioned criteria must be clearly substantiated in the separately submitted national proposal to EUDP . EUDP's assessment criteria for national proposals under CETPartnership can be found in the		
Eligible costs	EUDP document package here: https://eudp.dk/soeg-tilskud (Scroll and choose the page relevant to CETPartnership 2024). Eligible costs include: • Personnel costs.		
	Instruments and equipment. Co-funded by		
	the European Union		



	Buildings.	
	 Other operating expenses, including materials. 	
	 External/sub-supplies. 	
	Overhead costs.	
	Other/travelling/dissemination.	
	Danish applicants must comply with the EUDP rules which can be found	
	here: <u>Danish version</u> / <u>English version.</u>	
	It is not possible to receive funding for activities, which aim to:	
	Conduct research.	
	 Develop business models, market analyses, direct sales promotion 	
	and other commercial market activities, including deploying existing	
	technology or commercial operation of plant and similar.	
	Expand infrastructure.	
	 Implement preproduction planning or to streamline production or control processes and similar. 	
	•	
	 Establish new institutions or continue existing institutions through executing grants ats 	
	operating grants etc.	
	 Fund operating expenses in connection with partnerships, as these are expected to be paid by the participating parties. 	
	 Purchase land and to fund related costs. 	
	 Complete case-processing by the authorities in connection with building projects, environmental approvals and similar. 	
	Obtain patents and similar rights.	
Information available at	https://eudp.dk/soeg-tilskud	
Other	It is highly recommended that you reach out to the national contact	
Other	point prior to submitting the application.	

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	N/A	N/A	40 %
Medium Enterprises	N/A	N/A	50 %
Small Enterprises	N/A	N/A	60 %
Universities, public research organisations	N/A	N/A	90 %
Public authorities	N/A	N/A	40 %
Associations without eco- nomic activities, NGOs	N/A	N/A	Depends on organisation size





DENMARK – INNOVATION FUND DENMARK (IFD)

Contact Point	Daniel G. Marques <u>daniel.g.marques@innofond.dk</u> , +45 6190 5006	
	General mailbox: internationale@innofond.dk	
Funding commitment	1.3 MEUR	
Anticipated number of projects to be funded	5-7 projects	
Maximum funding per awarded project/per part-	The maximum funding amount per Danish partner in international projects is 300.000 €. The maximum funding amount per project, if the project has two or more Danish partners, is 500.000 €.	
ner	Maximum funding rates apply according to IFD's <u>Guidelines for</u> <u>International Collaborations</u> .	
Eligible types of organisa- tions	All Danish organizations directly involved in activities in the projects are eligible as applicants to Innovation Fund Denmark.	
Eligible Call Modules	All call modules are eligible.	
	All TRL levels are eligible.	
Eligible types of RDI and TRL	For call modules where the Danish Energy Technology Develop- ment and Demonstration Programme (EUDP) also participates, the applicant must choose IFD for more research-focused pro- jects and EUDP for more development-focused projects (see EUDP's national annex for specific conditions).	





	After the deadline for pre-proposals, Innovation Fund Denmark will, via our national e-grant platform, invite applicants to upload		
	the project proposal with annexes. The invitation is sent approximately 2-4 weeks after the application deadline. Non-public organisations will be requested to upload a 'No un- dertaking in difficulty declaration' and a 'Financial and legal dec- laration'. In addition, SME's will be required to upload an 'SME declaration'. If requesting <i>de minimis</i> funding, then a ' <i>de</i> <i>minimis</i> aid compliance form is required.		
Submission of proposal /documentation at na- tional/regional level			
	You can find more in advance about these declarations as well as the templates on our <u>website</u> , under 'Documents'.		
Additional eligibility crite- ria	Please see documentation above.		
Eligible costs	 Salaries Travel Subcontracting Materials Communication and knowledge sharing Other expenses Any overhead, if applicable For more details see IFD's <u>Guidelines for International</u> <u>Collaborations</u>. 		
Information available at	For general information, FAQ, etc., please visit: <u>Innovation Fund Denmark - International Collaborations Website</u> For the full rules and conditions from Innovation Fund Denmark, please see: <u>Guidelines for International Collaborations</u>		
Other	N/A		

Maximum funding rates (incl. overhead) and overhead rates: please refer to the <u>Guidelines for</u> <u>International Collaborations</u> (pp. 11-14).





ESTONIA – ESTONIAN RESEARCH COUNCIL (ETAG)

	Maria Habicht
Contact Point	E-Mail: maria.habicht@etag.ee
	Phone: +372 51 74 058
	150 000
Funding commitment	300 000 for a coordinator
Anticipated number of pro-	
jects to be funded	1
Maximum funding per	150 000
awarded project/per partner	300 000 for a coordinator
	Large enterprises, medium enterprises, small enterprises, universities,
Eligible types of organisa-	public research organisations, public authorities, associations without
tions	economic activities, NGOs
Eligible Call Modules	All topics
Eligible types of RDI and TRL	Basic research, industrial/applied research, TRL 1-6
Submission of proposal	
/documentation at na-	No
tional/regional level	
Additional eligibility criteria	N/A
Eligible costs	 1 Research expenses consist of direct costs (personnel costs, travel costs and other direct costs) and subcontracting costs. The research expenses must be used to carry out the project and be separately identifiable. 2 Direct costs 2.1 Personnel costs are monthly salaries with social security charges and all the other statutory costs of the project participants, calculated according to their commitment and in proportion to their total workload at their Host Institution. 2.2 Travel costs may cover expenses for transport, accommodation, daily allowances and travel insurance. 3 Other direct costs are: consumables and minor equipment related to the project; publication and dissemination of project results; organising meetings, seminars or conferences (room rent, catering); fees for participating in scientific forums, conferences and other events related to the project; patent costs; all other costs that are identifiable as clearly required for carrying out
	the project (e.g. translation, copy editing, webpage hosting, etc.) and comply with the eligible costs. 4 Subcontracting costs should cover only the additional or complemen- tary research related tasks (e.g. analyses, conducting surveys, building a prototype, etc.) performed by third parties. Subcontracting costs should not be included in the overhead calculation. The activities and budget should be described in the proposal. Core project tasks should not be





	 subcontracted. Subcontracting costs may not exceed 15% of the total costs. 5 Indirect costs are overhead from the personnel costs only, which may not exceed 15% and should cover the general expenses of the Host Institution. Costs for equipment and services intended for public use (a copy machine or a printer that is publicly used, phone bills, copy service, etc.) should be covered from the overhead. 6. Double funding of activities is not acceptable.
Information available at	https://etag.ee/en/cooperation/horizon-europe/eu-partnerships/era- nets/
Other	 State Aid EU Regulations on State aid and de minimis aid must be taken into account when requesting funding from the Estonian Research Council (ETAg). Support is not considered to be State aid for research and development, if the project has ties to the non-economic activities of the Research (or Host) Institution, as long as the research and development activities and the related costs, funding and revenue can be clearly separated, thus avoiding the cross subsidization of economic activity. The criteria defined in Clauses 17-22 of Communication from the European Commission – Framework for State aid for research and development and innovation (2014/C 198/01) forms the basis for determining whether the activities carried out are economic activities and whether the Host Institution is an undertaking who is considered to be a State aid recipient when it receives support. When an entity applies for State aid or de minimis aid, it has to fill in the State aid form. No tax arrears are allowed on the proposal submission date. If State aid and de minimis aid are given, the documents related to giving the support must be kept for 10 years as of the date when the agreement was entered into. State aid pursuant to the Block Exemption Regulation If the support is considered to be State aid, then support is given on the basis of Article 25, 25a or 25c of Commission Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (OI L 187, 26.6.2014, p. 1–78) (hereinafter the Block Exemption Regulation, and the provisions of the Commission Regulation and Section 34² of the Estonian Competition Act apply. State aid is not given in cases specified under Articles 1(2) to (5) of the Block Exemption Regulation. If State aid is not given on the basis of Articles 25(a) and (6). For State aid given on the basis of Articles 25a or 25c, see rules laid down i



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If State aid is given, then the costs of the activities carried out before application submission will not be eligible for aid.

De minimis aid

If support is considered de minimis aid, then giving support is subject to Commission Regulation (EU) No 1407/2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid (OJ L 352, 24.12.2013, p. 1–8) (hereinafter the De Minimis Aid Regulation), and the provisions of the Regulation and Section 33 of the Estonian Competition Act apply.

De minimis aid is not given in cases specified under Article 1(1) of the De Minimis Aid Regulation.

In case of de minimis aid, the maximum aid intensity must comply with Article 3 of the De Minimis Aid Regulation.

De minimis aid given to the Host Institution together with de minimis aid applied for as support cannot exceed 200,000 euros during the current financial year and the two previous financial years.

Article 5 of the De Minimis Aid Regulation applies to cumulating de minimis aid.

A single undertaking is an undertaking specified in Article 2(1) of the De Minimis Aid Regulation.

Grant Agreement

If a positive funding decision is made, the Estonian Research Council enters into a grant agreement with the Host Institution. Information on the transnational project must be entered into ETIS once the agreement has been signed.

The Consortium Agreement should be signed at the latest six months after the grant agreement has been signed. If one year has elapsed and the CA has not been signed, the next instalment of funding will not be paid out.

Research Involving Human Subjects or Animal Testing

If human research or animal testing are intended in the project, a positive resolution by the Human Research Ethics Committee or the Authorisation Committee for Animal Experiments must be submitted to the Estonian Research Council by the start of the relevant activities.

Nagoya Protocol

By applying for funding by the Estonian Research Council, the applicants agree to consider the relevance of the Nagoya protocol for their research, and to submit the Due Diligence Declaration, if applicable.





	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	100%	100%	N/A
Medium Enterprises	100%	100%	N/A
Small Enterprises	100%	100%	N/A
Universities, public research organisations	100%	100%	N/A
Public authorities	100%	100%	N/A
Associations without eco- nomic activities, NGOs	100%	100%	N/A





FRANCE – AGENCE NATIONALE DE LA RECHERCHE (ANR)

a) National/Regional information			
	Name: Pascal Bain		
	Head of the SPICE Scientific Department		
	Pascal.bain@agencerecherche.fr		
	Name: Negar Naghavi-Fleury		
	Scientific Officer		
	Negar.NAGHAVI-FLEURY@agencerecherche.fr mailto:		
Contact Point			
	Name: Elisa Meriggio for TRI 2 and TRI 4		
	Scientific Project Manager		
	Elisa.meriggio@agencerecherche.fr		
	Name: Thamires Moreira for TRI 3 and TRI 7		
	Scientific Project Manager		
	Thamires.moreira@agencerecherche.fr		
Funding commitment	3 000 000 €		
Anticipated number of pro- jects to be funded	8 to 10		
	500 000 € per project as a maximum in exceptional and highly justified		
	cases.		
Maximum funding per	However, ANR expects typical funding requests per project to range be-		
awarded project/per partner	tween 200 000 and 350 000 €, depending on the number of ANR-funded		
	partners involved and whether the coordinator of the project is funded		
	by ANR or not.		
	Please consult the ANR Funding regulations and the Appendix for appli- cants to ANR on the ANR website for detailed information		
	https://anr.fr/CETP-2024		
Eligible types of organisa- tions	Within this framework, public research organisations (such as Universi-		
tions	ties, EPST or EPIC) as well as private entities (such as companies, NGOs		
	and foundations) and public authorities may be eligible (provided that at		
	least one French public research organisation requesting funding to ANR		
	is involved in the consortium).		
	Only the following Call Modules are eligible for ANR:		
	- TRI2 CM2024-03A Advanced renewable energy (RE) technologies for		
	power production (ROA)		
Eligible Call Modules	- TRI3 CM2024-04 Carbon capture, utilisation and storage (CCUS)		
	- TRI3 CM2024-05 Hydrogen & renewable fuels. Concerning hydrogen		
	production only green hydrogen production will be eligible for ANR.		
	- TRI4 CM2024-06 Heating and cooling technologies		
- TRI4 CM2024-07 Geothermal energy technologies			
- TRI7 CM2024-10 Clean energy integration in the built environmen			
Eligible types of RDI and TRL Basic Research, Industrial/ Applied Research/ Experimental developmental develop			



Submission of proposal /documentation at na-	No for the pre-proposal stage. For the full-proposal stage, partners requesting funding from ANR will be	
tional/regional level	asked to apply on the ANR submission platform.	
	A project proposal cannot be similar in whole or in part to another pro- posal submitted for a call currently being evaluated by ANR (all calls for proposals and evaluation stages considered) or already funded by ANR. The similarity between two projects is established when these projects (in their entirety or in part) describe identical main objectives or result from a simple adaptation.	
	The minimal funding per partner by ANR is 15 000 €.	
Additional eligibility criteria	Companies with economic difficulties are excluded from ANR subven- tions.	
	Partners from countries subject to sanctions applicable to the research field by the European Union authorities are excluded from this call for ANR. ANR will declare Partners requesting its support ineligible if they apply with Partners established in these countries. At the date of publi- cation, these exclusions concern Partners from the following countries: Russia, Belarus. This list may evolve in case of new sanctions decided by the European Union.	
Eligible costs	ANR funds basic, industrial research and experimental development ac- tivities. The eligibility of costs and rates of funding depend on types of partners, consortia composition and types of research activities. See ANR funding regulations for more details: https://anr.fr/fr/rf/	
Information available at	A specific web page on the ANR web site is published at the opening of the Call, with details for potential applicants to ANR. https://anr.fr/CETP-2024	
Other	It is highly recommended to contact the national contacts during the preparation of the project. Depending on the consortium composition, a Consortium Agreement may be mandatory for ANR at the funding stage for successful applications. Please refer to the ANR funding regulations for more details: https://anr.fr/fr/rf/	



	Basic research	Industrial/Applied Research	Experimental develop- ment /innovation
Large Enterprises	30 %	30 %	25 %
Medium Enterprises	45 %	35 – 45 %	35 – 45 %
Small Enterprises	45 %	35 – 45 %	35 – 45 %
Universities, public re- search organisations	see ANR funding regulations <u>https://anr.fr/fr/rf/</u>	see ANR funding regulations <u>https://anr.fr/fr/rf/</u>	see ANR funding regulations <u>https://anr.fr/fr/rf/</u>
Public authorities	see ANR funding regulations <u>https://anr.fr/fr/rf/</u>	see ANR funding regulations <u>https://anr.fr/fr/rf/</u>	see ANR funding regulations <u>https://anr.fr/fr/rf/</u>
Associations without eco- nomic activities, NGOs	see ANR funding regulations https://anr.fr/fr/rf/	see ANR funding regulations https://anr.fr/fr/rf/	see ANR funding regulations https://anr.fr/fr/rf/





FRANCE/PAYS DE LA LOIRE – PAYS DE LA LOIRE REGION COUNCIL (RPL)

i) National/Regional information			
Contact Point	Gaelle FROSTIN – <u>gaelle.frostin@paysdelaloire.fr</u> Charlotte NOBLOT – <u>charlotte.noblot@paysdelaloire.fr</u>		
Funding commitment	1,7 M€		
Anticipated number of pro- jects to be funded	-		
Maximum funding per awarded project/per partner	No maximum funding		
Eligible types of organisa- tions	Small, Medium and large companies established and carrying out R&D activities in Pays de la Loire. Other entities such as universities, public research institutions, technological centres, and other private non- profit institutions may also participate : they will be funded only if a company from Pays de la Loire is also partner of the consortium and is funded. Project activities in the proposed work plan funded by the Regional Council Pays de la Loire must be implemented in Pays de la Loire, or at least mobilise resources based in Pays de la Loire.		
Eligible Call Modules	TRI2 – Call Module 3B (Innovation Oriented Action) : Advanced Renewa- ble Energy (RE) technologies for power production		
Eligible types of RDI and TRL	Projects may comprise industrial/applied research or experimental activ- ities. Projects (IOA) are expected to make relevant progress towards the demonstration of technology to TRL 6 or above (target TRL).		
Submission of proposal /documentation at na- tional/regional level	No additional submission of proposal at regional level > <u>https://cetp-submission.mur.gov.it/</u>		
Additional eligibility criteria	Companies must have been created since more than one year and have generated sufficient revenues.		
Eligible costs	Personnel costs i.e. the cost of researchers, technicians and other sup- porting staff to the extent employed on the relevant project or activity (gross salary, without overheads). Indirect costs: 15% of personnel costs. Contractual research costs, technical knowledge and patents bought or licensed from outside sources at market prices, and costs for consulting and equivalent services intended exclusively for the research activity. Other operating expenses, including costs for material, supplies and sim- ilar products, which result directly from the research project. Instrument and equipment costs, to the extent and during the period in which they are used for the research project.		
Information available at	https://www.paysdelaloire.fr/clean-energy-transition-partnership-cetp		
Other			



Maximum funding percentages:

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	Ineligible	65%	40%
Medium Enterprises	Ineligible	75%	50%
Small Enterprises	Ineligible	80%	60%
Universities, public research organisations	Ineligible	75% of total eligi- ble costs or 100% of marginal costs	75% of total eligible costs or 100% of marginal costs
Public authorities	Ineligible	Ineligible	Ineligible
Associations without eco- nomic activities, NGOs	Ineligible	Ineligible	Ineligible

Support levels will be determined by the legal status of the applicant, the size of company and the proposed activity. The support level may vary from one work package to another. The final support level and its form will be definitively defined after the selection phase.





GERMANY/FEDERAL – PROJECT MANAGEMENT JÜLICH (PtJ (BMWK))

	Forschungszentrum Jülich GmbH Project Management Jülich Energy and Climate D-52425 Jülich
Contact Point	 D-52425 Jülich CM2024-01 Energy data spaces and interoperability Ralf Eickhoff: r.eickhoff@ptj.de, +49 2461 61-9419 Nelli Hambach: n.hambach@ptj.de, +49 2461 61-2615 CM2024-02 Energy system flexibility: renewables production, storage and system integration Ralf Eickhoff: r.eickhoff@ptj.de, +49 2461 61-9419 Nelli Hambach: n.hambach@ptj.de, +49 2461 61-9419 Nelli Hambach: n.hambach@ptj.de, +49 2461 61-9615 CM2024-03A/03B Advanced renewable energy (RE) technologies for power production (Research-oriented approach (ROA) and Innovation- oriented approach (IOA)) Renate Horbelt (PV): r.horbelt@ptj.de +49 2461 61-9874 Franciska Klein (Wind): f.klein@ptj.de +49 2461 61-9157 CM2024-05 Hydrogen and renewable fuels Margret Waschbüsch: m.waschbuesch@ptj.de +49 2461 61-9108 CM2024-06 Heating and cooling technologies Norbert Rohde: n.rohde@ptj.de, +49 30 20199 3232 CM2024-07 Geothermal energy technologies Stephan Schreiber: k.schreiber@ptj.de, +49 2461 61-9419 Nelli Hambach: n.hambach@ptj.de, +49 2461 61-2615 CM2024-09 Integrated industrial energy systems Dmitri Tabakajew: d.tabakajew@ptj.de, +49 2461 61-1665 CM2024-10 Clean energy integration in the built environment Eerke Bunte: e.bunte@ptj.de +49 2461 61-1646
Funding commitment	12.000.000 €





Anticipated number of projects to be funded	Not applicable	
Maximum funding per awarded project/per part- ner	Not applicable	
Eligible types of organisa- tions	 Potentially private and public applicants are funded, e.g. (non-exclusive) Private – SME Private – large companies Private – Non-profit research organisations Higher education institutions (e.g. universities) Public research organisations Public organisations and municipalities 	





	Please note, that not all Call Modules are supported. This refers to CM2024-04 "Carbon capture, utilisation and storage (CCUS)", which is not supported in the Joint Call 2024. All other Call Modules are supported.
	Please also note the additional national eligibility criteria for the individual Call Modules described below.
	CM2024-01 "Energy data spaces and interoperability": Priority will be given to research organisations (private or public) and non-profit organisations. Industrial relevance results from the call module itself.
	CM2024-02 "Energy system flexibility: renewables production, storage and system integration": The tasks of the German partners must be relevant to the electric- ity grid, electrical energy storage systems and/or their integration (including digitalisation). Self-funded partners or partners with re- gional funding are possible.
Eligible Call Modules	 CM2024-03A/B "Advanced renewable energy (RE) technologies for power production": Please note the exceptions: 1. Bioenergy for power generation (with carbon capture and storage (BECCS)) and for combined heat generation is not eligible for funding of the Federal Ministry for Economic Affairs and Climate Action (BMWK). German partners with own financing or funding are possible as "fully self-financed partners". 2. Bioenergy applications for fuel production are not in the scope of "CM2024-03A/03B Advanced renewable energy (RE) technologies for power production". 3. Ocean energy as well as hybrid-RES solutions with ocean energy for power generation (with negative CO₂ emissions) are not eligible for funding of BMWK. German partners with own financing or funding are possible as "fully self-financed partners". CM2024-05 "Hydrogen and renewable fuels": Renewable fuels are not in the focus of BMWK funding. German partners with own financing or funding are possible as "fully self-financed partners".





	CM2024-08 "Integrated regional energy systems": The tasks of the German partners must be relevant to the electric- ity grid, electrical energy storage systems and/or their integration (including digitalisation). Self-funded partners or partners with re- gional funding are possible.	
Eligible Call Modules	CM2024-09 "Integrated industrial energy systems": Bio-CCUS are not in the focus of BMWK funding. German partners with own financing or funding are possible as "fully self-financed partners".	
	CM2024-10 "Clean energy integration in the built environment": Please note that zero emission fuel and hydrogen for heating in buildings as well as mobility infrastructures and e-mobility con- cepts are not eligible for funding of BMWK. German partners with own financing or funding are possible as "fully self-financed part- ners".	
Eligible types of RDI and TRL	Focus on applied research (TRL 5 – 8, lower TRL down to 3 only in special and justified cases)	
Submission of proposal /documentation at na- tional/regional level	Full Proposal Phase We may request additional documents (e.g. German project de- scription, credit rating documents, cost breakdown, information about planned exploitation of results etc.) for successful pre-pro- posals in individual Call Modules. These documents must be sub- mitted at the same deadline as the Full Proposals and contain in- formation on the evaluation criteria of the 8th Energy Research Programme: <u>https://www.bmwk.de/Redaktion/DE/Publika- tionen/Energie/20240531-energieforschung-im-rahmen-des-8-en- ergieforschungsprogramms.html</u> . Detailed information will follow after a successful pre-proposal. Successful proposals Successfully selected full proposals must later submit formal na- tional applications ("Anträge") and additional, tangible exploita- tion plans via the national application system easy-Online. (Appli-	
Additional eligibility crite- ria	cants will be informed about the direct link for submission). The projects must fit thematically into the currently effective 8th Energy Research Programme of the Federal Ministry for Economic Affairs and Climate Action (BMWK). Industrial relevance and in- dustrial participation are further requirements and eligibility crite- ria. Proposals must provide sound cost calculations breakdowns and clear exploitation plans. Proposals must show significant pro- gress on state of the art and compared to nationally funded pro- jects.	





Eligible costs	All project related costs (e.g., personnel, equipment [deprecia- tions], consumables, travel expenses, etc.). Funding rates will be granted based on the targeted TRL, type of organisation, expected impact of results and financial situation of applicants. An appropriate self-financial engagement of the indus- try is mandatory. Applicants are strongly advised to consult the BMWK guidelines on eligible costs (Richtlinien für Zuwendungsanträge (AZA/AZK)): <u>https://foerderportal.bund.de/easy/easy_index.php?auswahl=for- mularschrank_foerderportal&formularschrank=bmwk</u> .
Information available at	8th Energy Research Programme of the Federal Ministry for Eco- nomic Affairs and Climate Action (BMWK) <u>https://www.bmwk.de/Redaktion/DE/Publikationen/Ener-</u> gie/20240531-energieforschung-im-rahmen-des-8-ener- gieforschungsprogramms.html
Other	We strongly recommend to contact the above named contact per- sons for detailed information in advance.

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	n.a.	50%	40%
Medium Enterprises	n.a.	60%	50%
Small Enterprises	n.a.	70%	60%
Universities, public re- search organisations	n.a.	100%	90%
Public authorities	n.a.	100%	100%
Associations without eco- nomic activities, NGOs	n.a.	100%	50%



GERMANY/NRW – FORSCHUNGSZENTRUM JÜLICH – PROJEKTTRÄGER JÜLICH ON BEHALF OF MWIKE (PtJ-MWIKE)

Contact Point	Forschungszentrum Jülich GmbH Projektträger Jülich Geschäftsbereich ETN Melanie Dürr: <u>me.duerr@fz-juelich.de</u> , +49 2461 61-84026 Timur Galiullin: <u>t.galliulin@fz-juelich.de</u> , +49 2461 61-84090		
Funding commitment	200 000€		
Anticipated number of pro- jects to be funded	Depends strongly on the single project volumes.		
Maximum funding per awarded project/per partner	No limitation (Maximum funding per partner may of course not exceed the total funding commitment mentioned above.)		
Eligible types of organisa- tions	 The Agency potentially supports all private and public applicants, namely: Private – SME Private – large companies Private – Non-profit research organisation Higher education institution Public research organisation Public organisation Applicants must be located in NRW. 		
Eligible Call Modules	 We participate in the following call modules: CM2024-01 Data spaces and Interoperability CM2024-02 Energy system flexibility: renewables production, storage and system integration CM2024-03 (A/B) Advanced renewable energy technologies for power production CM2024-04 Carbon capture, utilisation, and storage (CCUS) CM2024-05 Hydrogen and renewable fuels CM2024-09 Integrated regional energy systems For further information have a look at the funding guidelines of the state of North Rhine-Westphalia progres. NRW-Innovation (see link below at "Information available at"). Applicants from NRW should also compare the conditions for the funding owner Federal Republic of Germany, where all call modules can be supported.		
Eligible types of RDI and TRL	 The Agency potentially supports the following types of RTD, namely: Industrial / applied research Experimental Development 		



	TRL level: 3-8		
Submission of proposal /documentation at na- tional/regional level	Winners of the joint call that are funded by the federal state of NRW have to fill out the regional application form. Please contact one of the responsible persons mentioned above.		
Additional eligibility criteria	 Only applicants located in North Rhine-Westphalia are eligible for funding A significant industrial relevance or industrial application must be apparent. good credit standing depreciation for investments has to be considered overhead costs are funded according directive progres.NRW-Inno- vation (see link below) 		
Eligible costs	Personnel costs, travel costs, Consumables / Equipment, Subcontracts, indirect costs		
Information available at	Equipment, Subcontracts, indirect costs Applicants from North Rhine-Westphalia have the opportunity to re- ceive funding from the Federal State of NRW or by the Federal Republic of Germany. The Federal State of NRW supports TRI1, TRI2, TRI3 and TRI6, while the Federal Republic of Germany supports all TRI. To maximise funding opportunities please contact Projektträger Jülich, Forschungszentrum Jülich GmbH as soon as possible. Projects funded by the federal state of NRW are bound by the funding guideline progress.NRW-Innovation: https://www.ptj.de/projektfoerderung/progres-nrw/progres-nrw-inno- vation Contacts: Melanie Dürr: me.duerr@fz-juelich.de, +49 2461 61-84026 Timur Galiullin: t.galliulin@fz-juelich.de, +49 2461 61-84090		
Other			
	1		

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	0	65%	40%
Medium Enterprises	0	75%	50%
Small Enterprises	0	80%	60%
Universities, public research organisations	0	100%	100%
Public authorities	0	N.N.	N.N.
Associations without eco- nomic activities, NGOs	0	N.N.	N.N.





GERMANY/SAXONY – SAXON STATE MINISTRY FOR SCIENCE, CULTURE AND TOURISM (SMWK)

	Gabriele Süptitz		
Contact Point	E-Mail: gabriele.sueptitz@smwk.sachsen.de		
	Phone: +49351 564-64210		
Funding commitment	Approx. 2 Mio. EUR		
Anticipated number of projects to be funded	No limitations		
Maximum funding per awarded project/per part- ner	No limitations		
Eligible types of organisa- tions	For Saxon Enterprises, also in collaboration with Research Organisations and Universities: <u>see RL EFRE/JTF Technologie-</u> förderung 2021 bis 2027. Important note:		
	Projects funded by the guideline EFRE/JTF-Technologieförderung 2021bis 2027 may have a maximum duration until July 2028.		
Eligible Call Modules	All Call Modules are eligible for funding.		
Eligible types of RDI and TRL	Projects related to applied research or experimental development are eligible for funding (TRL 2-7)		
	No regional schedules, cut-off dates or deadlines		
Submission of proposal /documentation at na- tional/regional level	No additional submissions of regional applications during the evaluation processes (pre- and fullproposal stage) Only in the case of a positive funding recommendation of the full pro- posal, Saxon applicants will be asked to submit a regional application according to the related Saxon guidelines		





Additional eligibility crite- ria	No thematic restrictions; Saxony will support projects within the entire scientific scope outlined in the Call Announcement, Other eligible criteria: <u>see RL EFRE/JTF –Technologieförderung 2021 bis</u> 2027	
Eligible costs	see <u>RL EFRE/JTF –Technologieförderung 2021 bis 2027</u>	
Information available at	https://www.revosax.sachsen.de/vorschrift/19834-FRL-EFRE-JTF-Tech- nologiefoerderung-2021-bis-2027	
Other	In case of further questions please contact SMWK/Gabriele Süptitz ga- briele.sueptitz@smwk.sachsen.de	





Maximum funding percentages:

see RL EFRE/JTF – Technologieförderung 2021 bis 2027

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	-	<u>see RL EFRE/JTF –</u> <u>Technologieförderung</u> <u>2021 bis 2027</u>	<u>see RL EFRE/JTF –</u> <u>Technologieförderung</u> <u>2021 bis 2027</u>
Medium Enterprises	-	up to 75% <u>see RL EFRE/JTF –</u> <u>Technologieförderung</u> <u>2021 bis 2027</u>	up to 50% see RL EFRE/JTF – Technologieförderung 2021 bis 2027
Small Enterprises	-	up to 80% see RL EFRE/JTF – Technologieförderung 2021 bis 2027	up to 60% <u>see RL EFRE/JTF –</u> <u>Technologieförderung</u> <u>2021 bis 2027</u>
Universities, public re- search organisations		up to 90% involvement of SME is required (at least 50% of the total costs of the Saxon partners) <u>see RL EFRE/JTF –</u> <u>Technologieförderung</u> 2021 bis 2027	•
Public authorities			
Associations without eco- nomic activities, NGOs			





GREECE – General Secretariat for Research and Innovation (GSRI)

GREECE – General Secretariat for Research and Innovation (GSRI)

Contact Point	-Dr Anna Rosenberg International S&T Cooperation Directorate Bilateral and Multilateral Cooperation Department 14-18, Mesogeion Ave., GR-115 27 Athens, Greece Tel.: +30 213 13 00 095 Fax: +30 210 7714153 E-mail: <u>a.rosenberg@gsrt.gr</u> - <u>Ms. Aliki – Maria Argyri</u> International S&T Cooperation Directorate European Union and International Organizations Department 14-18, Mesogeion Ave., GR-115 27 Athens, Greece Tel: +30 213 1300101 E-mail: <u>a.argyri@gsrt.gr</u>
Funding commitment	1.000.000,00€
Anticipated number of projects to be funded	
Maximum funding per awarded project/per partner	Upper limit of the total public funding will be 180.000 € per project (includ- ing indirect costs). Please note that this amount can be increased to 230.000 € per project if Greek partner assumes the project coordination. The maximum state aid intensity will be calculated according to the provi- sions of the European state aid rules and regulations in force (type of re- search activity, size of the participating enterprise, collaborative research etc).



Eligible types of organi- sations	 GSRI potentially supports private and public legal entities namely: private enterprises (such as SMEs, large-companies etc), research organizations, higher education institutions, and other public organizations with R&D activities, associations without economic activities, NGOs. Individuals as well as individual enterprises are not eligible under this scheme. Besides natural persons, the following categories of undertakings are also not eligible: An "undertaking in difficulty" (according to art.2 of Reg. (EU) 651/2014*). whose affairs are being administered by the court, who have entered into an arrangement with creditors, who have suspended business activities or who are in any analogous situation An undertaking which is subject to an outstanding recovery order following a previous Commission decision declaring an aid illegal and incompatible with the internal market. Large enterprises are eligible to receive funding under the condition that a Greek SME participates in the consortium. Applicants may submit, if they are enterprises, up to two (2) proposals from the same enterprise in the current call, and for Public research Institutes and Universities up to two (2) proposals at the level of the same Laboratory or School or Institute or Department.
Eligible Call Modules	Call Modules 1, 2, 4, 5
Eligible types of RDI and TRL	TRL3-(8) in compliance with the (COMMISSION REGULATION (EU) 2021/1237 of 23 July 2021 amending Regulation (EU) No 651/2014 declaring certain catego- ries of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, page 3, article 13)
Submission of proposal /documentation at na- tional/regional level	At national level, only eligibility check is conducted and not a full peer review at pre-proposal and full proposal stages. We rely on the evaluation made by the Call Evaluation Committee and external reviewers. Submission at the national level is required at a later stage. A national pro- cedure will follow for the approved for funding, at the transnational level, proposals only. For more information please contact the NCP.

^{*} Reg, (EU)651/2014 as amended by Reg.(EU) 2021/1237 & Reg.(EU) 2023/1315.



Aid intensity
Public research Institutes and Universities: the aid intensity can reach 100% for
performing non-economic activities in accordance with point 19, article 2.1.1 of
the «Framework for State aid for research and development and innovation»
(2014/C 198/01).
Private Sector: (a) 50% of the eligible costs for industrial research; (b) 25% of the
eligible costs for experimental development; (c) 50% of the eligible costs for fea-
sibility studies The aid intensities for industrial research and experimental de-
velopment may be increased up to a maximum aid intensity of 80% of the eligible
costs as follows:
(a) by 10 percentage points for medium-sized enterprises and by 20 percentage
points for small enterprises;
(b) by 15 percentage points if one of the following conditions is fulfilled:
(i) the project involves effective collaboration:
 between undertakings among which at least one is an SME, or is carried out in
at least two Member States, or in a Member State and in a Contracting Party of
the EEA Agreement, and no single undertaking bears more than 70 % of the eligi-
ble costs, or
 between an undertaking and one or more research and knowledge-dissemina-
tion organisations, where the latter hear at least 10 % of the eligible costs and

ion organisations, where the latter bear at least 10 % of the eligible costs and have the right to publish their own research results; (ii) the results of the project are widely disseminated through conferences, pub-

lication, open access repositories, or free or open source software.

The aid intensity for feasibility studies may be increased by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises.

• Foreseen cost categories:

(a) personnel costs: researchers, technicians and other supporting staff to the extent employed on the project.

(b) **costs of instruments and equipment** to the extent and for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible

(c) costs of contractual research, knowledge and patents bought or licensed from outside sources at arm's length conditions, as well as costs of consultancy and equivalent services used exclusively for the project

(d) additional general costs and other operating expenses, including costs of materials, supplies, travel expenses, organization of meetings, dissemination/publicity costs, audit costs, incurred directly as a result of the project implementation (e) indirect costs = flat rate of 25% of direct costs (except subcontracting costs). Indirect costs are eligible for all legal entities and include costs that do not incur directly as a result of the project implementation (e.g. administrative and man-

agement costs, utility costs)

In compliance with the (COMMISSION REGULATION (EU) 2021/1237 of 23 July 2021 amending Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty.



Eligible costs



Information available at	 <u>General Secretariat for Research and Innovation</u> <u>COMMISSION REGULATION (EU) No 651/2014</u> <u>COMMISSION REGULATION (EU) 2021/1237</u> 	
Other		

b) Funding rates

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	-	50-65%	25-40%
Medium Enterprises	-	60-75%	35-50%
Small Enterprises	-	70-80%	45-60%
Universities, public re- search organisations	100%	-	-
Public authorities with R&D activities	100%	-	-
Associations without eco- nomic activities, NGOs	-	Large 50-65% Medium 60-75% Small 70-80%	Large 25-40% Medium 35-50% Small 45-60%





HUNGARY – NATIONAL RESEARCH, DEVELOPMENT AND INNOVATION OFFICE (NKFI)

Contact Point	Dr. Mónika Józon <u>monika.jozon@nkfih.gov.hu</u> Tel: +36 (1) 7953489		
Funding commitment	1 165 000 EUR		
Anticipated number of pro- jects to be funded	5 projects		
Maximum funding per awarded project/per part- ner	Max. 300 000 EUR per awarded project Max. 150 000 EUR/partner (if the Hungarian partner is the main appli- cant/coordinator - 200 000 EUR)		
Eligible types of organisa- tions	Institution of higher education, other budgetary research institution, enterprise based research organisation, enterprise (non-research type), non-profit research organisation, urban/local authorities, municipal companies (as partners of research-oriented applicant)		
Eligible Call Modules	All		
Eligible types of RDI and TRL	All type of research: strategic (basic) research, applied research, experimental development. TRL: 1-9		
Submission of proposal /documentation at na- tional/regional level	Proposals must be submitted to NKFIH through the dedicated call for Partnerships (call will be published at 2024 Q3) <u>https://www.horizonteuropa.nkfih.gov.hu/partnersegek/futo- europai- partnersegek https://nkfih.gov.hu/palyazoknak/palyazatok/aktualis- felhivasok?save=1&cimke=NKFI</u>		
Additional eligibility criteria	n. a.		
Eligible costs	Max. 300 000 € per project Personnel (temporary, permanent), subcontracting and services, includ- ing travel, consumables, equipment, coordination, travel, communica- tion and dissemination, overhead (20%), overhead for travel related ac- tivities (5%)		
Information available at	https://www.horizonteuropa.nkfih.gov.hu/partnersegek/futo-europai- partnersegek https://nkfih.gov.hu/palyazoknak/palyazatok/aktualis- felhivasok?save=1&cimke=NKFI		
Other	Information for Partners: All Hungarian entities are eligible to participate and receive funding in the Call. The top-up funding for universities affected by Council Implementing Decision 2022/2506 will be covered by the Hungarian Government's Guarantee Fund.		



b) Funding rates

Organisation type	Basic research	Industrial/Applied Research	Experimental development /Innovation
Large Enterprises	100%	65%	40%
Medium Enterprises	100%	75%	50%
Small Enterprises	100%	80%	60%
Universities, public research organisations	100%	100%	100%
Public authorities	100%	65%	40%
Associations without eco- nomic activities, NGOs	100%	100%	100%





ICELAND – THE ICELANDIC CENTRE FOR RESEARCH (RANNIS)

a) National/Regional information and eligibility criteria

Contact Point	Katrin Jonsdottir <u>katrin.jonsdottir@rannis.is</u> Tel.: +354 515 5800 <u>https://www.rannis.is/</u>		
Funding commitment	€600 000		
Anticipated number of pro- jects to be funded	3-4		
Maximum funding per awarded project/per part- ner	€300 000		
Eligible types of organisa- tions	Applicants have to follow the general guidelines of the Technology De- velopment Fund, were own contribution can vary – further information on <u>https://www.rannis.is/sjodir/rannsoknir/taeknithrounarsjodur/</u>		
Eligible Call Modules	Call modules no. 4, 5, 6 and 7 (TRI3 and TRI4)		
Eligible types of RDI and TRL	Industrial/Applied research and Experimental development/innova- tion TRL 4+		
Submission of proposal /documentation at na- tional/regional level	Not required but registration at Rannis of Icelandic applicants in a proposal is requested		
Additional eligibility crite- ria	Applicants have to follow the general guidelines of the Technology De- velopment Fund, were own contribution can vary – further information on https://www.rannis.is/sjodir/rannsoknir/taeknithrounarsjodur/		
Eligible costs	Applicants have to follow the general guidelines of the Technology De- velopment Fund, were own contribution can vary – further information on <u>https://www.rannis.is/sjodir/rannsoknir/taeknithrounarsjodur/</u>		
Information available at	https://www.rannis.is/		
Other	Applicants have to follow the general guidelines of the Technology De- velopment Fund, were own contribution can vary – further information on <u>https://www.rannis.is/sjodir/rannsoknir/taeknithrounarsjodur/</u>		

b) Funding rates





	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	N/A	50 - 65	25 - 40
Medium Enterprises	N/A	60 - 75	35 - 50
Small Enterprises	N/A	70 - 80	45 - 60
Universities, public research organisations	N/A	80	80
Public authorities	N/A	N/A	N/A
Associations without eco- nomic activities, NGOs	N/A	N/A	N/A





INDIA/NEW DELHI – DEPARTMENT OF SCIENCE AND TECHNOLOGY, MINISTRY OF SCIENCE & TECHNOLOGY, GOVERNMENT OF INDIA (DST)

n) National/Regional information and eligibility criteria				
Contact Point	Primary Contact 1:Dr Neelima Alam,Email: neelima.alam@nic.in,Phone No.: +91-11- 26590467Primary Contact 2:Dr Sanjai KumarEmail: sanjai.k@gov.in,Phone No.: +91-11-26590270Secondary Contact:Dr Anita Gupta,Email: anigupta@nic.in,Phone No.: +91-11-26590213			
Funding Commitment	TRI 3: Call Module 2024-04 CCUS: 0.75 Million Euro (Equivalent Indian Rupees: Approx. Rs 6.70 Crore) TRI 6: Call Module 2024-09 Challenge 1: 0.75 Million Euro (Equivalent In- dian Rupees: Approx. Rs 6.70 Crore)			
Anticipated number of pro- jects to be funded	Max. 2 projects for TRI3 CM2024-04 CCUS and Max. 2 projects for TRI6 CM2024-09 Challenge 1 (The numbers can be modified for the suitable project within the funding limit). Funding will be divided into approx. equal weightage to carbon capture, carbon utilization/conversion and storage/sequestration.			
Maximum funding per awarded project/per In- dian partner	Maximum funding for Indian partners for awarded project will be re- stricted to maximum 0.37 Million Euro (Equivalent Indian Rupees: Ap- prox. Rs 3.35 Crore).			
Eligible types of organisa- tions	 For TRI3 Call Module 2024-04 CCUS proposals The proposals are to be led by faculties/scientists working in regular position in recognized Academic Organizations/Public funded R&D Institutions/Laboratories, Central and State Government autonomous organizations in partnership with other academic/R&D organisation, DSIR recognized SIRO organizations, Central and state autonomous organisations, industry association, industries etc. For TRI6 Call Module 2024-09 Challenge 1 proposals The proposals have to be submitted in the consortium mode only (Academia/Researcher and Industry). The consortium is expected to be led by faculties/ scientists working in regular position in recognized academic institutions, public funded R&D Institution/ Laboratories, etc. Participation of relevant industries/ PSUs/ start-ups is mandatory. The consortium should essentially include at least a technology designer and a technology provider. Installation, Testing and Validation to be done in collaborating site with participating Industry. 			





	 The proposals submitted with well-defined and synergistic institute - user industry pathographic are encouraged
	 user - industry partnership are encouraged. All Indian partners in a single project must be separate legal entities.
	However, there can be more than one investigator from the same
	entity.
	Participating Indian companies must:
	1) Be incorporated in India under the Companies Act 1956/2013.
	2) Have at least 51% stake of the Company be owned by Indian citi-
	zens and Headquartered in India.
	3) Have been in operation for at least 3 financial years before the
	closing date for application.
	 Be registered under relevant provisions of Good & Services Taxa- tion (GST) Act.
	5) Have required expertise and capacity to technically contribute to
	the proposed project.
	6) The maximum funding for Industry will not be more than their
	MSME definition based on Investment in plant and machinery for
	manufacturing Sector and Investment in equipment for Service
	Sector (MSMED Act 2006 or their consecutive amendments).
	DST funding for Industry will be inline with the rates mentioned in the table at Annexure -I enclosed.
	8) Industry contribution should only be in cash.
	9) The man-hours of existing workforce, utilization of facilities etc.
	will not be counted as industry contribution.
	10) Indian industry/association may receive their part of the eligible
	costs on a "Reimbursement Basis", for costs already incurred on
	a proportionate basis.
	• Companies need to provide the following with the First Stage ap-
	plication:
	 Evidence they have the resources and finances to undertake the
	project.
	 An audited copy of their submitted annual accounts for the last
	three fiscal years.
	Please note:
	Sole proprietors and partnership firms are not eligible for support
	under this programme.
	Companies headquartered and owned outside India and their sub-
	sidiaries in India, or vice versa, are not eligible to receive funding di-
	rectly or indirectly.
	TRI 3: CM (Call Module) 2024-04 CCUS: 0.75 Million Euro (Equivalent In- dian Rupees: Approx. Rs 6.70 Crore) Carbon Capture, Utilisation, and
	Storage (CCUS)
Eligible Call Modules	TRI 6: CM 2024-09 Challenge 1: 0.75 Million Euro (Equivalent Indian Ru-
-	pees: Approx. Rs 6.70 Crore) To develop or deploy GHG Mitigation Tech-
	nologies in industrial sectors such as Oil and Natural Gas, Coal Mining,
	Cement, Steel, etc.
Eligible types of RDI and TRL	TRL 1-5





Submission of proposal /documentation at na- tional/regional level	The applicant is required to submit a full copy of the proposal to the De- partment of Science and Technology at https://onlinedst.gov.in/ This proposal must be identical to what has been submitted to CETP and needs to be submitted to DST immediately after submission to CETP secretariat. The dates for submission and requirement for addi- tional documentation for Indian applicants.		
Additional eligibility crite- ria	YES. The evaluation and selection of project proposals to fund will be as per the steps described in the CETP Programme managers handbook.		
Eligible costs	 All project-related costs (e.g. Equipment, Personnel, Consumables, Contingencies, Travels, Other Costs, Overheads etc.) will be covered. Capital/Non-recurring costs are to be capped at max. 30% of the total project cost. Indian applicants must comply with the Department of Science & Technology (DST), India Rules and Regulations regarding all eligible costs. Unless agreed otherwise: Subcontracting is to be capped at a maximum of 20% of the Indian budget. All India eligible costs, including sub-contracts, should be incurred within India. Project management costs cannot be sub-contracted. 		
Information available at	https://onlinedst.gov.in/		
Other	All the funded projects would be bound by guidelines stipulated by the Department of Science and Technology from time to time. The detailed guidelines for this call will appear on DST website, which will supercede anything stated here. The applicants may approach the national contact for specific queries at any stage of the project.		





b) Funding rates

Maximum funding percentages:

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	75%	75%	75%
Medium Enterprises	75%	75%	75%
Small Enterprises	75%	75%	75%
Start-ups	90%	90%	90%
Universities, public research organisations	100%	100%	100
Public authorities	75%	75%	75%
Associations without eco- nomic activities, NGOs	-	-	-

Note:

(1) Indian Enterprises may receive their part of the eligible costs on a "**Reimbursement Basis**", for costs already incurred on a proportionate basis through the lead organization.

(2) Rates mentioned above will be the maximum cap on funding lines subject to DST funding guidelines.





IRELAND – GEOLOGICAL SURVEY IRELAND (GSI)

Contact Point	Aoife Braiden, Geological Survey Ireland (Department of the Environ- ment, Climate and Communications) research@gsi.ie		
Funding commitment	€200,000		
Anticipated number of pro- jects to be funded	1-2		
Maximum funding per awarded project/per part- ner	€200,000		
Eligible types of organisa- tions	SMEs and research organisations are eligible to apply. All funding must be in line with State Aid (it is the responsibility of the beneficiary to ensure compliance)		
Eligible Call Modules	Geothermal Call Module, TRI4		
Eligible types of RDI and TRL	 Geothermal heating and cooling. For example: resource estimation, resource management, subsurface management, geoscience data, social acceptance of geothermal energy, geology and geotechnical engineering related to subsurface thermal storage. Applicants must check in advance with GSI if the proposed topic is eligible TRL 1-7 eligible 		
Submission of proposal /documentation at na- tional/regional level	 Applicants must be eligible under GSI rules to apply – all applicants must contact GSI in advance of submission. The proposal will not be reviewed for quality of scientific content at national level, but will be assessed to ensure the topic is within the remit of the GSI and adhering to budget and eligibility rules. 		
Additional eligibility crite- ria	Eligibility check will be conducted regarding (a) topic, (b) eligibility of the host organisation and (c) budget.		
Eligible costs	Direct costs (staff, fieldwork, travel, consumables etc) + indirect costs, max 15% (of total direct costs excluding subcontracting). Durable equip- ment of <€15,000 is eligible but must be clearly justified and deprecia- tion rules applied. Applicants must have pre-approval from GSI for any equipment > €15,000 with depreciation and standard accounting rules applied.		
	tion rules applied. Applicants must have pre-approval from GSI for any equipment > €15,000 with depreciation and standard accounting rules		
Information available at	tion rules applied. Applicants must have pre-approval from GSI for any equipment > €15,000 with depreciation and standard accounting rules		



b) Funding rates

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises			
Medium Enterprises	100	75	75
Small Enterprises	100	75	75
Universities, public research organisations	100	100	100
Public authorities			
Associations without eco- nomic activities, NGOs	100	100	100





IRELAND- SUSTAINABLE ENERGY AUTHORITY OF IRELAND (SEAI)

Contact Point	Joanne Fitzgerald ener- gyresearch@seai.ie	
Funding commitment	€500,000	
Anticipated number of pro- jects to be funded		
Maximum funding per awarded project/per partner	€250,000 maximum per partner €250,000 maximum per project	
Eligible types of organisations	SEAI research funding programmes are open to public and private sector organisations based in the Republic of Ireland (including Irish subsidiar- ies of overseas companies) who wish to carry out projects in Ireland. Ap- plications will be accepted from companies, 3rd level educational bod- ies, public sector bodies and semi-state bodies who are based in the Re- public of Ireland. It is strongly recommended that interested applicants contact the SEAI national contact point in the early stages of project pro- posal preparation.	
Eligible Call Modules	All Call Modules, where proposals align with SEAI's remit and the over- arching objectives of the SEAI National Energy Research, Development and Demonstration (RD&D) Funding Programme are eligible to apply. Applicants should refer to the SEAI website and the following link for an overview of the RD&D programme objectives: <u>https://www.seai.ie/grants/research-funding/research- develop- ment-and-demonstration-fund/</u>	
Eligible types of RDI and TRL	Applicants should refer to the SEAI RD&D Budget Policy and to the SEAI website for further details of SEAI's remit and SEAI research funding pro- gramme objectives and eligibility guidelines SEAI RD&D Budget Policy: <u>SEAI-RDD-Budget-Policy.pdf</u>	
Submission of proposal /documentation at na- tional/regional level	Separate national application required. Please contact the SEAI na- tional contact point for further details on the national application process.	





Additional eligibility	Applicants should refer to the SEAI RD&D Budget Policy and to the SEAI website for further details of SEAI's remit and SEAI research funding pro- gramme objectives and eligibility guidelines.
Eligible costs	Eligible costs are those actual, necessary and economic costs that are incurred during the grant duration. Only costs directly associated with delivery of a project are considered eligible costs. Please review the SEAI RD&D Budget Policy for further guidance on budgetary poli- cies and financial requirements associated with the SEAI National En- ergy RD&D Funding Programme, including further guidance in rela- tion to eligible costs and funding rates.
Information available at	SEAI CETPartnership Joint Call 2024 Information Document <u>SEAI-CETPartnership-Joint-Call-2024-Information-Document.pdf</u> SEAI National Energy Research Development and Demonstration (RD&D) Funding Programme: <u>SEAI-RDD-Budget-Policy.pdf</u>
Other	

b) Funding rates

Maximum funding percentages:

Applicants should refer to the SEAI RD&D Budget Policy for guidance on eligible research categories and funding rates. <u>SEAI-RDD-Budget-Policy.pdf</u>





IRELAND – TAIGHDE ÉIREANN - RESEARCH IRELAND (earlier SCIENCE FOUNDATION IRELAND) (TE-RI)

*As of 1st August 2024, Taighde Éireann – Research Ireland. Research Ireland is the new national competitive research and innovation funding agency, established through the amalgamation of the activities and functions of Science Foundation Ireland and the Irish Research Council.

Contact Point	Dr. Emma McGrath, EU Programmes Officer <u>emma.mcgrath@researchireland.ie</u> General mailbox enquiries <u>eu-cofund@researchireland.ie</u>
Funding commitment	~400,000
Anticipated number of projects to be funded	1-2
Maximum funding per awarded project/per part- ner	Up to €330,000 direct costs for Irish-based researchers applying as a project partner Up to €405,000 direct costs for Irish-based researchers applying as a project coordinator
Eligible types of organisa- tions	Irish Host Research bodies eligible for Research Ireland funding. Please refer to Research Ireland's Policies and Guidance for the list of el- igible Research Performing Organisations: <u>Eligibility Information</u>





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CETPartnership Joint Call 2024

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Eligible Call Modules	 TRI1 CM2024-01: Energy data spaces and interoperability CM2024-02: Energy system flexibility: renewables production, storage and system integration TRI3 CM2024-04: Carbon capture, utilisation and storage (CCUS) CM2024-05: Hydrogen and renewable fuels TRI4 CM2024-06: Heating and cooling technologies CM2024-07: Geothermal energy technologies TRI7 CM2024-010: Clean energy integration in the built environment
Eligible types of RDI and TRL	Oriented basic and proof-of-concept activities/projects (TRL 1,2 or 3) Applied research and development activities/projects (TRL 4, 5) Projects moving to a TRL higher than 5 at project completion may be considered eligible if the activities and contributions of the Irish part- ner over the duration of the project remain within the allowable TRLs.
Submission of proposal /documentation at na- tional/regional level	Please refer to the Research Ireland call webpage for details of sub- mission requirements



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	The Irish-based applicant must:
	 hold a PhD or equivalent qualification* for at least 3 years by the pre- proposal deadline. The official date is defined as the day, month and year that the degree was conferred i.e., the month and year printed on the official PhD certificate.
	*Please visit the <u>Research Ireland website</u> for further details on equiva- lence
	AND
	 be a member of the academic staff of an eligible Research Body (perma- nent or with an active contract that covers the period of the grant)
	OR
Additional eligibility crite- ria	 be a contract researcher with a contract that covers the period of the grant, who is recognised by the eligible Research Body as an independent investigator and will have an independent office and research space for which he/she will be fully responsible for at least the duration of the Re- search Ireland grant
	OR
	 be an individual who will be recognised by the eligible Research Body upon receipt of the grant as an academic staff or as a contract researcher as defined above. The applicant does not necessarily need to be em- ployed by the Research Body at the time of the application submission.
	AND
	 be an author on at least three international peer-reviewed articles. Only original research publications, and not review articles or other secondary research literature, are acceptable.
	Please refer to the Research Ireland CETP call webpage for more in- formation on eligibility criteria. Please note that Research Ireland may contact applicants directly to confirm eligibility post submis- sion.
	Funding is provided for up to 100% of eligible costs. The following indicates the maximum levels of funding that may be requested:
Eligible costs	Up to €330,000 direct costs for Irish-based researchers applying as a project partner
	Up to €405,000 direct costs for Irish-based researchers applying as a project coordinator
	<u>Eligible costs</u> Salary-related costs for research personnel. Please use current Research Ireland Team Member Salary Scales. The Irish partner cannot request a sal- ary.
	Small equipment costs up to a maximum value of €50K





	Travel costs with consideration for Research Ireland's Guidance for Sustainable Travel Policy		
	Direct running costs (materials and consumables)		
	Dissemination and knowledge exchange costs		
	Subcontracting costs are considered an eligible budget category however strong justification for subcontracting must be provided and pre-approved directly with Research Ireland in advance of proposal submission.		
	 Overheads should calculated as 30% of the direct costs, but excluding therefrom the cost of all equipment identified in the application 		
	Unless otherwise stated, all rules regarding listed eligible costs ap- ply as defined within <u>Research Ireland's grant budget policy</u>		
	Ineligible costs Research Ireland will not provide a contribution towards the salary of the applicant, international co-applicants or collaborators.		
	All additional ineligible costs apply as described in <u>Research</u> <u>Ireland's grant budget policy.</u>		
	Please refer to the FAQs on the Research Ireland CETP call webpage for more information on eligible costs.		
Information available at	https://www.sfi.ie/funding/funding-calls/		
Other	State Aid: Applicants are advised that funding awarded by Research Ireland under the Clean Energy Transition Partnership Programme will be subject to, and must comply with, State aid rules and the conditions of the EU Commission General Block Exemption Regulation (GBER). Funding will be awarded to successful applicants under Article 25, in respect of aid for research and development projects. For further details please consult: Taighde Éireann-Research Ireland Research and Innovation Scheme 2021-2026		

b) Funding rates





	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises			
Medium Enterprises			
Small Enterprises			
Universities, public re- search organisations	X	x	
Public authorities			
Associations without eco- nomic activities, NGOs			





ISRAEL – MINISTRY OF ENERGY (MOE)

a)	National inf	ormation ar	nd eligibility	criteria
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) National information and eligibility criteria			
Contact Point	Michael Danon- <u>michaeld@energy.gov.il</u> Olga Zlatkin- <u>OlgaZ@energy.gov.il</u> Yael Barash Harman- <u>yaelh@energy.gov.il</u>		
Funding commitment	800 000€		
Anticipated number of projects to be funded	3-5		
Maximum funding per awarded project/per part- ner	 Pilot and Demonstration Support Program: 50% up to 3M ILS Start-ups Support Program: 62.5% up to 1.2M ILS Academic Support Program: 100% up to 0.75M ILS 		
Eligible types of organisa- tions	Academic Institutions, Companies, Municipalities, citizens from Israel		
Eligible Call Modules	All. It is advised to check the <u>MoE research policy</u> for the eligible topics for proposals and see the current issues defined as of high priority (marked: ***).		
Eligible types of RDI and TRL	All . MoE would assess the project contribution advancing TRL of the developed technology.		
Submission of proposal /documentation at na- tional/regional level	The Israeli partner is required to submit a full proposal to the chief scientist in the Ministry of Energy of Israel. This must include a de- tailed work plan, project Gantt chart and budget as in the terms and conditions in previous calls for proposals. MoE publish the call for proposals in two public tenders: Academia tender and Pilot& start-ups tender. To receive updated on the national level calls, one should sign to the mailing list in this link: <u>sign to CSO mailing list NOW</u>		





	 Pilot and Demonstration Support Program Startups Support Program Academic Support Program <u>About MoE grants</u>
Additional eligibility crite- ria for the funding agency	Full proposal submitted on stage 2 would be subjected to eligibility check on a national level assessing the project contribution to the local energy sector and innovation level as fundamental criteria.
Eligible costs	All costs directly related to the project, excluding overhead costs (e.g. office lease, insurance, office supplies), which are limited to fixed costs. Salaries may not exceed 16,666 ILS per month per full time job.
Information available at	About MoE grants and MoE research policy
Other	sign to CSO mailing list NOW

b) Funding rates





	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises		Х	Х
Medium Enterprises		Х	Х
Small Enterprises		Х	Х
Universities, public re- search organisations	Х	x	Х
Public authorities			Х
Associations without eco- nomic activities, NGOs			Х





ITALY – MINISTERO DELL'UNIVERSITA' E DELLA RICERCA (MUR)

a) National/Regional information and eligibility criteria [as of 18/10/2024]

Contact Point	Rachele Nocera (<u>Rachele.nocera@mur.gov.it</u>) Silvia Reale (<u>silvia.reale@est.mur.gov.it</u>)		
Funding commitment	€ 1.000.000,00 National Funds [MUR-FIRST] € 1.000.000,00 Structural Funds/ERDF [MUR-ERDF]		
Anticipated number of pro- jects to be funded	#		
	 MINIMUM funding request: € 100.000,00 per project MUR-FIRST 		
Maximum funding per awarded project/per part- ner	 MAXIMUM funding request: € 200.000,00 per project MAXIMUM funding request: € 300.000,00 per project in case the applicant is the Coordinator (See: Joint Call 2024 Section 1. 'Definitions') 		
	 MUR-ERDF MAXIMUM funding request: € 300.000,00 per project MAXIMUM funding request: € 400.000,00 per project in case the applicant is the Coordinator (See: Joint Call 2024 Section 1. 'Definitions') 		
Eligible types of organisa- tions			







	MUR-ERDF		
	Eligible partners are the following legal entities carrying out research ac-		
	tivities in the regions Basilicata, Calabria, Campania, Molise, Puglia, Sar-		
	degna, Sicilia:		
	 Enterprises (legally registered in the Register of Companies): large companies, medium companies and SMEs, spin offs etc., including municipal/local governments' investee/in-house companies. Large companies only jointly with an SME Higher education institutions (State universities and legally recognized universities as defined in L. 29 July 1991, n. 243) and their consortia (jointly with a private company/enterprise) Public research institutions (as listed in D.Lgs. n. 218/2016 Art 1) (jointly with a private company/enterprise). Public and private research organisations ('organismo di ricerca') including research foundations in accordance with EU Reg. n. 651/2014 of the European Commission - June 17, 2014 (jointly with a private company/enterprise). 		
	a private company/enterprise)		
	 IMPORTANT NOTICE 1: Public and private legal entities carrying out research activities in a local unit (laboratory, research centre, workshop, plant, branch, agency etc.) located in in the regions of: Basilicata, Calabria, Campania, Molise, Puglia, Sardegna, Sicilia, are supported primarily through the Structural Funds (ERDF) component and shall therefore select the appropriate option in the application form (transnational and national). IMPORTANT NOTICE 2: For applicants eligible for MUR-ERDF (Structural Funds component) the joint participation with at least a private company in the consortium is mandatory. IMPORTANT NOTICE 3: Other specific eligibility requirements or restrictions may apply to applicants supported by Structural Funds component. Further details will be included in the "Avviso integrativo nazionale", published at a 		
	later stage.		
	CM2024-01 Energy data spaces and interoperabilityCM2024-02 Energy system flexibility: renewables production, storage and system integration		
Eligible Call Modules	CM2024-03A (ROA) Advanced renewable energy (RE) technologies for power production		
	CM2024-04 Carbon capture, utilisation and storage (CCUS)		
	Civizo24-04 Carbon capture, utilisation and storage (CCOS)		



Eligible types of RDI and TRL	MUR-FIRST:Basic research, Industrial/Applied research and Experimental development are eligible for funding.However, Basic Research and Industrial/Applied research activitiesmust be predominant with respect to Experimental development activities (in terms of budget share).TRL: 3 - 6 indicativelyMUR-ERDF:Industrial/Applied Research and Experimental development	
	TRL: 4 - 7 indicatively	
Submission of proposal /documentation at na- tional/regional level	TRL: 4 - 7 indicativelyAdditional National application:In addition to the project proposal which shall be submitted at European level, Italian participants are requested to submit a national additional application to MUR, through the national web platform at the following link:https://banditransnazionali.mur.gov.it/ [NEW PLATFORM – ACCES WITH 'SPID' REQUIRED]The national additional application must be submitted by the sam deadline established in the international joint call. Participant wh does not submit national documentation by the deadline are considered not eligible for funding.More information on the national documentation to be submitted to the CETPartnershi Joint Call 2024:http://www.ricercainternazionale.mur.gov.it/era/european-partnership-2021-27/cetp.aspxIt is recommended to contact the National Contact Persons alread in early stage of project preparation.The admission to funding is subject to the adoption of the necessar accounting and administrative measures for the allocation of the recommended to contact the submitted to the recommended to contact the submitted to the recessar accounting and administrative measures for the allocation of the recessar accounting and administrative measures for the allocation of the recessar accounting and administrative measures for the allocation of the recessar accounting and administrative measures for the allocation of the recessar accounting and administrative measures for the adoption of the recessar accounting and administrative measures for the allocation of the recessar accounting and administrative measures for the allocation of the recessar accounting and administrative measures for the adoption of the recessar accounting and administrative measures for the allocation of the recessar accounting and administrative measures for the allocation of the recessare accounting and administrative measures f	
Additional eligibility criteria	 Applicants shall: not be defaulting with regard to other funding received by the Ministry of University and Research not have requested/got any other funding for the same project be compliant to the Italian law "D.Lgs. n 159 del 6/09/2011 e successive modificazioni ed integrazioni" not be subject to bankruptcy proceedings as of art. 5, comma 4, letter b) of DM 1314/2021 or must not be a company in difficulty according to the definition under number 18) of article 2 "Definitions" of Regulation (EU) no. 651/2014 be in compliance with the obligations laid down in the contributory and social security regulations (DURC) Applicants shall demonstrate their viability and financial soundness 	





	regarding their own contribution to the project.
	 For any private entity, if the following financial criteria listed under a) and b), calculated using the data reported in the last approved balance sheet, are not fulfilled, the applicant can be funded only if a bank guarantee is provided: a) CN > (CP - I)/2 Where: CN = net assets (Capitale netto) CP = sum of the costs of all the projects for which public funding has
	 been requested by the participant during the year I = sum of the contributions received, approved or requested for the same projects b) OF/F < 8%
	 Where: OF = financial charges (Oneri finanziari) F = turnover (Fatturato)
	IMPORTANT NOTICE: Other specific eligibility requirements or restrictions may apply to ap- plicants supported by Structural Funds component. Further details will be included in the "Avviso integrativo nazionale.
Eligible costs	 All costs incurred during the lifetime of the project under the following categories are eligible: A) Personnel, B) Consulting and equivalent services (subcontracting) C.1) Travel and subsistence C.2) Equipment C.3) Other goods and Services E) Indirect Costs/Overheads ("Spese generali") calculated at 25% flat rate of all direct costs excluding cost category B) Consulting and equivalent services [E) = 25% of (A) + C.1) + C.2) + C.3)]
Information available at	http://www.ricercainternazionale.mur.gov.it/era/european- partnership-2021-27/cetp.aspx





	National Reporting Funded participants will be requested to submit financial and scientific reports to MUR.
	Applicable laws and rules:
Other	(http://www.ricercainternazionale.miur.it/evidenza/normativa-prog- internazionali.aspx):
	Decreto legge n. 83/2012
	Decreto Ministeriale n. 1314 del 14 dicembre 2021
	Decreto Ministeriale n. 1368 del 24 dicembre 2021
	Decreto Ministeriale n. 1573 del 9 settembre 2024

b) Funding rates

MUR-FIRST			
	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Companies (large companies, small and medium, start-ups, etc.)			
Universities, public and private research organi- sations, including research foundations ('organismo di ricerca')	70%	70%	25%
Foundations/Associations registered as legal en- tities			

MUR-ERDF (STRUCTURAL FUNDS)			
	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Companies (large companies, small and medium, start-ups, etc.)			
Universities, public and private research organi- sations, including research foundations ('organ- ismo di ricerca')	NOT FUNDED	100%	25%





LATVIA – LATVIJAS ZINĀTNES PADOME (LZP)

Contact Point	Maija Bundule, <u>Maija.bundule@lzp.gov.lv</u> ; +371 26514481	
Funding commitment	600 000 EUR	
Anticipated number of pro- jects to be funded by the funding partner	2-3	
Maximum funding per awarded project/per part- ner	100 000 EUR per project year/ per partner	
Eligibility of a partner as a beneficiary institution	 R&D institutions (research institutes, universities, higher education establishments, research centres etc.) Private entities, companies, SMEs, large enterprises 	
Eligible topics	All topics	
Eligible type of research and TRL	TRL 1-8	
Submission of the proposal at national/regional level	N/A	
Additional eligibility crite- ria for the funding agency	R&D institution must be listed in the Registry of Research Institutions operated by the Ministry of Education and Science of the Republic of Latvia. Private entity must be registered in the Registry of Enterprises of the Republic of Latvia and must perform its core business and implement the project in the territory of the Republic of Latvia	
Eligible costs	 Direct costs: Personnel costs incl. taxes; Travels; Subcontracts (up to 25% of direct costs), needs detailed justification, includes all external services, project core activities cannot be subcontracted; Equipment (only depreciation costs); Consumables, replaceable and fully consumable during project elements of equipment (electrodes), reagents and materials; Other costs. Indirect costs (up to 25% of direct costs excluding subcontracting). 	
Information available at	https://lzp.gov.lv/starptautiskas-sadarbibas-programmas/eiropas-part- neribas/	
Other	Maximum 100 000 € per project year can be requested by each project partner. No more than two partners from Latvia may participate in the project. The funding of RTD activities is provided pursuant in accordance with the Regulation of the Council of Ministers of the Republic of Latvia No	





259 on the procedure for providing support for participation in interna- tional cooperation programs for research and technology (adopted on 26 June 2015) and provisions of Commission Regulation (EC) No651/2014 of 17 June 2014 declaring certain categories of aid compat- ible with the common market in application Articles 107 and 108 of the Treaty.
Further information on the conditions for receiving funding can be
found on the LZP website: <u>https://lzp.gov.lv/starptautiskas-sadarbi-</u>
bas-programmas/atbalsts-projektiem/

b) Funding rates

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	100	65	40
Medium Enterprises	100	75	50
Small Enterprises	100	80	60
Universities, public research organisations	100	100	100
Public authorities	N/A	N/A	N/A
Associations without eco- nomic activities, NGOs	N/A	N/A	N/A





LITHUANIA – LIETUVOS MOKSLO TARYBA (LMT)

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Contact Point	Asta Aleksandraviciene Programme Coordinator Lietuvos mokslo taryba Research Council of Lithuania Tel. +370 676 18 297 E.p. asta.aleksandraviciene@Imt.It	
Funding commitment	300 000 Eur	
Anticipated number of pro- jects to be funded	1-2	
Maximum funding per awarded project/per part- ner	150 000 Eur or 200 000 Eur or 250 000 Eur.	
Eligible types of organisa- tions	Eligible for funding institutions are Lithuanian research and higher edu- cation institutions that are included in the Register of Education and Re- search institutions. A legal entity of Lithuania can be a partner of the main applicant from Lithuania – eligible Lithuanian research and higher education institu- tion.	
Eligible Call Modules	All Call Modules within all Transition Initiatives	
Eligible types of RDI and TRL	From TRL 1 up to TRL 9	
Submission of proposal /documentation at na- tional/regional level	No National official paperwork at application stage is required.	
	Within a single project proposal, the maximum funding can be: up to EUR 150 000 – for a consortium partner (main applicant or main appli- cant and legal entity (or entities) of Lithuania); up to EUR 200 000 – for a coordinator or 2 consortium partners; up to EUR 250 000 – for a coor- dinator and 1 consortium partner.	
Additional eligibility crite- ria	The applicant who intends to act as a principal investigator for Lithua- nian institution has to be a scientist (researcher holding at least a Ph.D. degree). A person may only submit one proposal for the same Call as PI (principal investigator) or PPI (primary project implementer). Work scope of each PPI (including PI) within the project must be at least 20 hours of project time multiplied by the duration of the project in months. For more information about Lithuanian conditions for funding, please	
	consult the call text in Lithuanian.	
Eligible costs	Only costs generated during the lifetime of the project, related to pro-	





	ject are eligible: personnel, travel, consumables, subcontracting, equip- ment, overheads (up to 20 % from direct costs).
Information available at	https://lmt.lrv.lt/lt/veiklos-sritys/mokslo-finansavimas/tarptautinio- bendradarbiavimo-priemones/europos-partnerystes-era-net-ir-kitos- koordinavimo-veiklos/cetp/
Other	n/a

b) Funding rates

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	*	*	*
Medium Enterprises	*	*	*
Small Enterprises	*	*	*
Universities, public research organisations	100	100	100
Public authorities	*	*	*
Associations without eco- nomic activities, NGOs	*	*	*

* Eligible to fund only as a partner of the main applicant according to mutual agreement





MALTA – MALTA COUNCIL FOR SCIENCE AND TECHNOLOGY (MCST) / SCIENCE MALTA (SM)

) National/Regional information and eligibility criteria		
Contact Point	Christy Baldacchino <u>christy.baldacchino.2@gov.mt</u> +356 2360 2158	
Funding commitment	Grant	
Anticipated number of projects to be funded	Circa 1-3 per year (up to a maximum of 500,000 euros)	
Maximum funding per awarded project/per part- ner	500,000 Euros	
	Public, private and academia (Limited Liability Companies, Partnerships, Non-profit making Organisations, Voluntary Organisations, Professional Bodies, Cooperatives, Public entities, Research & Knowledge - Dissemina- tion Organisations).	
Eligible Call Modules	Malta-based applicants are eligible to submit under all the call mod- ules.	
Eligible types of RDI and TRL	TRL 3 - 7	
Submission of proposal /documentation at na- tional/regional level	Yes, national applicants are required to submit a national application form as well as it's require annexes, as applicable.	
Additional eligibility crite- ria	For assistance provided under <u>Regulation A</u> (de minimis) of the National Rules for Participation, all sectors are eligible unless excluded by Commis- sion Regulation (EU) No. 1407/2013 of 18 December 2013 on the applica- tion of Articles 107 and 108 of the Treaty on the Functioning of the Euro- pean Union to de minimis aid (the de minimis Regulation) as amended, and as may be subsequently amended.	
	For assistance provided under <u>Regulation B</u> (GBER) of the National Rules for Participation all sectors are eligible unless excluded by Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, as amended. Furthermore, undertakings in diffi- culty are excluded from benefiting under Regulation B.	





Eligible costs	Personnel, Equipment & Consumables, Subcontracting, Costs of IP and Knowledge Transfer activities, Travel & Subsistence, Overheads & Other Operating Expenses. Although some restrictions apply.
Information available at	https://xjenzamalta.mt/services/the-internationalisation-unit/
Other	

b) Funding rates

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	75% (DeMinimis) 50% (GBER)	75% (DeMinimis) 50% (GBER)	75% (DeMinimis) 50% (GBER)
Medium Enterprises	75% (DeMinimis) 60% (GBER)	75% (DeMinimis) 60% (GBER)	75% (DeMinimis) 60% (GBER)
Small Enterprises	75% (DeMinimis) 70% (GBER)	75% (DeMinimis) 70% (GBER)	75% (DeMinimis) 70% (GBER)
Universities, public re- search organisations	100%	100%	100%
Public authorities	100%	100%	100%
Associations without eco- nomic activities, NGOs	100%	100%	100%





NETHERLANDS – DUTCH RESEARCH COUNCIL (NWO)

Contact Point	Leon Leu, Dutch Research Council, +31 6 1395 2854 Tom van Rens, Dutch Research Council, +31 6 2307 6121 Email: <u>cetpartnership@nwo.nl</u>
Funding commitment	€2,000,000
Anticipated number of projects to be funded	A minimum of 5
Maximum funding per awarded project/per part- ner	€400,000 per application





Eligible types of organisa- tions	 Full, associate and assistant professors, lectors employed by an university of applied sciences (HBO) and other researchers with a comparable position* may submit an application (i.e. participate in a consortium and request NWO funding) if they have a tenured position (and therefore a paid position for an indefinite period) or a tenure track agreement at one of the following organisations: Universities located in the Kingdom of the Netherlands; University medical centres; Institutes affiliated to the Royal Netherlands Academy of Arts and Sciences (KNAW) or NWO; Universities of applied sciences as referred to in Article 1.8 of the Higher Education and Scientific Research Act (WHW); The Netherlands Cancer Institute; The Max Planck Institute for Psycholinguistics in Nijmegen; Advanced Research Centre for NanoLithography (ARCNL); Princess Máxima Center. * A comparable position refers to a researcher that has a demonstrable and comparable number of years of experience in carrying out scientific research and supervising other researchers as a full, associate or assistant professor. Persons with a zero-hour employment agreement or with a contract for a limited period of time (other than a tenure track appointment) may not submit a proposal. It could be the case that a tenure track agreement ends before the intended completion date of the project for which funding is applied for, or that before that date, the tenured contract ends due to a researcher reaching retirement age. In that case, the researcher needs to include a statement from their employer in which the organisation concerned guarantees that the project and all project members for whom funding has been requested will receive adequate supervision of the full duration of the project. Applicants with a part-time contract should guarantee adequate supervision of the project and all project members for whom funding is requested.
Eligible Call Modules	CM2024-02 Energy system flexibility: renewables production, storage and system integration CM2024-10 Clean energy integration in the built environment





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CETPartnership Joint Call 2024

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Eligible types of RDI and TRL	TRL level as specified per eligible Call Module (see module description in call for proposals).
Submission of proposal /documentation at na- tional/regional level	In the Full Proposal stage, please return your NWO budget form to <u>cetpartnership@NWO.nl</u> . More information under "Eligible costs". At the Full Proposal phase, it is required to submit a NWO budget form for financial details separately to <u>cetpartnership@NWO.nl</u> . This form is available on: <u>www.nwo.nl/cetp</u>
Additional eligibility crite- ria	 An application for NWO funding has a single main applicant responsible for scientific and financial management. An applicant may only request NWO funding for one project (part of a European consortium) in this call. Applicants may not apply for a post-doc position for themselves.



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	The NWO budget modules (including the maximum amount) available
	for this Call for proposals are listed in the table below. Apply only for funding that is vital to realise the project.
	Proposals are required to have at least one personnel position of 12 full- time months.
Eligible costs	Available budget modules: - Postdoc – at least 12 full-time months and at most 36 full-time months, according to UNL or NFU rates - Research leave – max. 5 months, 1 fte, according to UNL or NFU rates - Material costs – max. €15,000 per year per full-time scientific position (postdoc) - Personnel at universities of applied sciences and TO2 institutes – Rates according to the Hourly rate productive hours, excl. Dutch VAT' from the Handleiding Overheidstarieven [HOT- Manual Dutch Government rates]**. Personnel TO2 institutes only in combination with an applica- tion for a postdoc position. - Non-scientific staff (NSS) at universities - Knowledge utilisation - €25,000 - Internationalisation - max. €25,000
	Please note the following: - For the budget module "Postdoc", a one-off individual bench fee of €5,000 is added on top of the salary costs to encourage the scientific ca- reer of the project employee funded by NWO. - PhD positions cannot be applied for in this call, due to the maximum project duration of 3 years. - Overhead costs are not eligible for NWO funding.
	A more detailed explanation of the budget modules and eligible costs can be found at <u>www.nwo.nl/cetp</u> . Do not hesitate to contact the Na- tional Contact Point in case of questions.
	For Full Proposals, it is mandatory to submit the NWO budget template for the funding requested at NWO at the time of the deadline. Please send this form to <u>cetpartnership@nwo.nl</u> . It is recommended to use the NWO budget form already in the pre-proposal stage to confirm eli- gibility of budget items.
Information available at	www.nwo.nl/cetp





	The NWO Grant Rules 2017 and the Approval of funding for scientific re- search 2008 are applicable to the part of the project's budget covered by the grant from NWO. Any arrangements made regarding the part of the project's budget covered by the grant from NWO, for instance in a Consortium Agreement, must comply with the NWO Grant Rules 2017 and the European legislation on state aid.
Other	Under the Dutch General Administrative Law Act, any interested party has the right to lodge an objection to the decision taken by NWO within six weeks of the date of the decision letter. Contrary to paragraph 6.3 of the CETPartnership Joint Call 2024, objections to decisions taken by NWO must be submitted directly to NWO. Further information about the objections procedure, including instructions on how to submit an objection, can be found on the NWO website: <u>https://www.nwo.nl/en/lodging-an-objection</u>

b) Funding rates

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises			
Medium Enterprises			
Small Enterprises			
Universities, public re- search organisations	100%	100%	100%
Public authorities			
Associations without eco- nomic activities, NGOs			





NETHERLANDS – RIJKSDIENST VOOR ONDERNEMEND NEDERLAND (RVO)

Contact Point	Gerdi Breembroek Gerdi.breembroek@rvo.nl +31 6 5256 4480 Jirka Berka <u>Jirka.berka@rvo.nl</u> José van Koppen <u>jose.vankoppen@rvo.nl</u>		
Funding commitment	8 million euros total commitment, from Regeling nationale EZK- en LNV- subsidies (RNES) § 4.2.10 'Demonstratie energie en klimaatinnovatie' (DEI+) and § 4.2.18 'Horizon Europe Partnerships' (HEP). 7 million euros reservation for HEP, and 2 million of that amount is earmarked for topic 4, CCUS. Actual funding will be adapted to volume of eligible projects.		
Anticipated number of pro- jects to be funded by the funding partner	5-10 projects		
Maximum funding per awarded project/per part- ner	For DEI+ : limitation as in funding instrument. For HEP: Maximum € 1.000.000 funding per project		
Eligibility of a partner as a beneficiary institution	All instruments: at least one Dutch company should be collaborating in the consortium. The company should take a sufficient financial risk and participate actively in the research and development activities. Munici- palities and provinces are not eligible. For DEI+, companies should realise the majority of the project cost as per the DEI+ requirements.		
Eligible topics	 2. Energy system flexibility: renewables production, storage and system integration: HEP, DEI+ 3B. Advanced renewable energy technologies for power production: HEP, DEI+ 4. Carbon capture, utilisation, and storage (CCUS): HEP (2 million earmarked), DEI+ 5. Hydrogen and renewable fuels: HEP for advanced fuels from sustainable biomass only, DEI+ 6. Heating and cooling technologies: HEP, DEI+ 7. Geothermal energy technologies: HEP, DEI+ 8. Integrated regional energy systems: DEI+ 9. Integrated industrial energy systems: DEI+ 10. Clean energy integration in the built environment: HEP 		
Eligible type of research and TRL	For DEI+: Pilots (experimental development) and demonstration, indica- tive TRL 6-9. For HEP: Industrial research, experimental development, indicative TRL 4-5. All pilots and demos should be proposed in DEI+. It is not possible to use both schemes for the same CETPartnership pro- ject (pre-)proposal.		





	Always consult your national contacts!			
	 <u>HEP</u> Pre-proposal: Submission 'Projectidee' to RVO Deadline 25 November 2024 '<u>Projectidee'</u>: highlight the chances for a successful implementation of the innovation in the Netherlands, and the role and activities of the Dutch partners in the project Submit through RVOs 'Projectidee' tool, and by E-mail to the national contacts mentioned above as well. 			
Submission of the proposal	 Full proposal: Submission HEP proposal to RVO Deadline 2 April 2025 17:00 uur. Submission though RVO's electronic submission system National proposal, specifying the Dutch funding request, roles and activities, with a national project Annex to explain the Dutch activities. Please note that "E-herkenning niveau 3" is required. 			
at national/regional level	 <u>DEI+</u> Pre-proposal: Submission 'Projectidee' to RVO Deadline 25 November 2024 '<u>Projectidee'</u>: highlight how the international project objectives contribute to the aim of DEI+, and the role and activities of the Dutch partners in the project Submit through RVOs 'Projectidee' tool, and by E-mail to the national contacts mentioned above as well. 			
	 Full proposal: Submission DEI+ proposal to RVO Deadline 2 April 2025, unless instructed otherwise by the national contacts. Submission though RVO's electronic submission system Full national proposal, specifying the Dutch funding request roles and activities, with a full national project plan. The DEI+ proposal should be readable on its own, without the need to refer to the international proposal. Please note that "E-herkenning niveau 3" is required. 			
	The DEI+ has its own requirements and conditions. In order to be eligi- ble for this scheme, you have to positively meet these requirements. Please consult the relevant information, see links below.			
Additional eligibility crite- ria for the funding agency	 For HEP, you need to meet the following criteria: At least one Dutch company should be part of the consortium. The company should take a sufficient financial risk and participate actively in the research and development activities The innovation should have a substantiated chance for successful 			





	 implementation into the Dutch market and society. Sufficient CO2 emissions reduction in 10 years after project start should be substantiated 		
Eligible costs	Definitions according to the guidelines laid down in the General Block Exemption Regulation (GBER – In Dutch AGVV), Article 25 covers Re- search and development, other articles cover investment aid in specific categories. HEP: GBER Article 25 DEI+: GBER Articles 25, 36, 38, 38a, 41, 46, 47, 56, see <u>Internet pages</u> and manual (Dutch).		
Information available at	www.rvo.nl/tse - select the relevant funding scheme. Please read the "Handleiding" (=manual) carefully for HEP https://www.rvo.nl/subsidies-financiering/hep for DEI+ https://www.rvo.nl/subsidies-financiering/dei Handleiding: Go through DEI pages for the up-to-date version		
Other	 The national evaluation process will be the customary process for DEI+, please consult the respective manual. International evaluation leading in case of HEP. For obvious reasons, the results of the national evaluation process shall be communicated after the trans-national funding recommendations have been made, irrespective of your date of submission. Without the international partners, the project cannot be implemented as proposed and will not be funded. Customary national progress reporting will be required for all funded projects. The information contained in this annex is not complete about the national regulations. For specific details and conditions you should always consult the original regulation texts, manuals and websites. It is strongly recommended to contact the national contact points to discuss the pre-proposal as well as full-proposal before submission. 		





b) Funding rates

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	Not applicable	See <u>www.rvo.nl/tse</u>	See <u>www.rvo.nl/tse</u>
Medium Enterprises	Not applicable	See <u>www.rvo.nl/tse</u>	See <u>www.rvo.nl/tse</u>
Small Enterprises	Not applicable	See <u>www.rvo.nl/tse</u>	See <u>www.rvo.nl/tse</u>
Universities, public research organisations	Not applicable	See <u>www.rvo.nl/tse</u>	See <u>www.rvo.nl/tse</u>
Public authorities	Not applicable	Not applicable	Not applicable
Associations without eco- nomic activities, NGOs	Not applicable	See <u>www.rvo.nl/tse</u>	See <u>www.rvo.nl/tse</u>





NORWAY – THE RESEARCH COUNCIL OF NORWAY (RCN)

a) National/Regional information			
Contact Point	 Main contact point: Aage Stangeland, <u>ast@rcn.no</u> Call Module contact points: Marianne Haavardsholm Aandahl, <u>mhaa@rcn.no;</u> Call Module 3A and 3B: Advanced renewable energy (RE) technologies for power production Aage Stangeland, <u>ast@rcn.no;</u> Call Module 4: Carbon capture, utilization, and storage (CCUS) Call Module 5: Hydrogen & renewable fuels Per Arne Karlsen, <u>pak@rcn.no;</u> Call Module 6: Heating and cooling technologies Call Module 7: Geothermal energy technologies 		
Funding commitment	 NOK 40 M (approximately € 3.48 M) for Call Module 4: CCUS NOK 30 M (approximately € 2.61 M) all together for: Call Module 3A and 3B: Advanced renewable energy (RE) technologies for power production Call Module 5: Hydrogen & renewable fuels Call Module 6: Heating and cooling technologies Call Module 7: Geothermal energy technologies 		
Anticipated number of pro- jects to be funded	From 7 to 12		
Maximum funding per awarded project	 Maximum NOK 10 M for Call Module 4 projects Maximum NOK 6 M for projects under Call Modules 3A and 3B, 5, 6 and 7 		
Eligible types of organisa- tions	The call is open to approved Norwegian research organisations, actors from public sector entities, non-governmental organisations, and com- panies from the business sector. The main Norwegian partner must be either an approved Norwegian re- search organisation or a Norwegian company that has been issued an enterprise number under the Norwegian Register of Business Enter- prises (Brønnøysundregistrene) and carry out economic activity in Nor- way.		
Eligible Call Modules	 Call Module 3A and 3B: Advanced renewable energy (RE) technologies for power production Call Module 4: Carbon capture, utilization, and storage (CCUS): Call Module 5: Hydrogen & renewable fuels Call Module 6: Heating and cooling technologies Call Module 7: Geothermal energy technologies 		
Eligible types of RDI and TRL	 For Call Module 4: The Norwegian activities must comply with topics listed in the <u>CLIMIT</u> <u>Program Plan</u> Norwegian activities must lead to long-term CO₂ storage. Hence, CCU activities without long-term CO₂ storage are 		





	in-eligible			
	 TRL: max. 6 at the end of the project 			
	For Call Modules 3A and 3B:			
	The Norwegian activities must comply with priorities listed in the			
	Portfolio Plan for Energy, transport and low emissions and the priori-			
	ties in the Energy 21 strategy.			
	• The projects shall address one of the following target topics:			
	 Wind Energy (onshore/offshore) 			
	• Solar PV			
	 Offshore renewables (cabling, mooring, foundations, O&M, etc.) The may 6 at the and of the project. For international projects 			
	• TRL: max. 6 at the end of the project. For international projects			
	reaching a higher TRL level (Innovation-Oriented Approach, IOA),			
	Norwegian partners can participate in work-packages ending on max TRL 6.			
	For Call Modules 5, 6, and 7:			
	 The Norwegian activities must comply with priorities listed in the 			
	Portfolio Plan for Energy, transport and low emissions and the priori-			
	ties in the Energy 21 strategy			
	• TRL: max 6 at the end of the project			
	A detailed budget for Norwegian partners must be sent on e-mail to the			
	relevant RCN contact persons within 21 st November 2024, end of busi-			
Submission of proposal	ness.			
/documentation at na-	The budget must include details listed at the <u>RCN web site</u> ;			
tional/regional level	Please specify all cost items per partner per year.			
	A template will be provided from your RCN contact person upon re-			
	quest – please send us an e-mail.			
	The Norwegian team of participants must fulfil the criteria of one of			
	these two alternative project types:			
	1. Knowledge building project			
	 Projects aimed at developing new knowledge and generating re- 			
	search competence needed by society or the business sector to ad-			
	dress important societal challenges.			
	- Collaboration between research group(s) and relevant actors from			
	outside the research sector is required.			
Additional eligibility crite-	The Norwegian team must include <u>at least one</u> approved Norwegian			
ria	research organisation and <u>at least two</u> relevant Norwegian compa-			
	nies.			
	- Companies are not eligible for financial support.			
	- The Norwegian applicants must document (in their budget) that at			
	least 10 % of the Norwegian total costs will be used by the Norwe- gian industrial or end-user partners.			
	 The Norwegian industrial or end-user partners may contribute 			
	with financial support (cash) in addition to the required in-kind ef-			
	forts.			
	 Companies must be registered as self-financed partners in the 			





	 CETP submission portal Letters of Intent from all Norwegian companies are required in stage 1 (pre-proposal), and Letters of Commitment in stage 2 (full proposal). The letters must be uploaded in the CETP submission portal Note: Applications without required industrial participation at stage 1 will be in-eligible and not evaluated for potential proceedings to stage 2 Innovation project for the industrial sector Open for projects in which companies are engaged in business-led innovation and where research and development (R&D) is a critical part of the innovation process. The main Norwegian applicant must be a Norwegian company. Norwegian research organisation(s) may be partner(s). The cost for research organisation(s) must be covered by the companie(s) Letters of Intent from all Norwegian companies are required in stage 1 (pre-proposal), and Letters of Commitment in stage 2 (full proposal). The letters must be uploaded in the CETP submission portal The maximum funding rate for the Norwegian companie(s) is 50%
Eligible costs	Eligible costs for Norwegian applicants are specified at the <u>RCN website</u> .
Information available at	Relevant links are provided above
Other	Applied funding rates for all Norwegian applicants must comply with European state aid guidelines. Details are available at the <u>RCN website</u> . Please use exchange rates between NOK and Euro close to the due date for submission of your pre-proposal. Specify the exchange rate applied in your application. The applied exchange rate will be binding for all proposals invited further to full proposal and will not be subject to any change.





b) Funding rates

Maximum funding percentages:

	Basic research	Industrial/Applied Research	Experimental develop- ment/innovation
Large Enterprises	NA	0 / 50 *	0 / 25 **
Medium Enterprises	NA	0 / 50 *	0 / 35 **
Small Enterprises	NA	0 / 50 *	0 / 45 **
Universities, public research organisations	100	100	NA
Public authorities	100	100	NA
Associations without eco- nomic activities, NGOs	100	100	NA

* 0 % funding rate for Knowledge building projects and maximum 50 % funding rate for Innovation projects for the industrial sector.

** For large enterprises: 0 % funding rate for Knowledge building projects and maximum 25 % funding rate for Innovation projects for the industrial sector.

For medium enterprises: 0 % funding rate for Knowledge building projects and maximum 35 % funding rate for Innovation projects for the industrial sector.

For small enterprises: 0 % funding rate for Knowledge building projects and maximum 45 % funding rate for Innovation projects for the industrial sector.





POLAND – THE NATIONAL CENTRE FOR RESEARCH AND DEVELOPMENT (NCBR)

a) National/Regional information and eligibility criteria

	Name: Jolanta Drożdż		
Contact Point	E-mail: jolanta.drozdz@ncbr.gov.pl		
	Tel: +48 22 39 07 106, +48 509 216 759		
Funding commitment	3 000 000 EUR		
Anticipated number of pro- jects to be funded	6 or more (all within available funding commitment)		
Maximum funding per awarded project/per part- ner	700 000 EUR per project or all Polish partners in one project		
Eligible types of organisa- tions	 Enterprises ¹⁰² - SME and Large, Groups of enterprises composed of at least two enterprises, Groups of entities composed of at least one research organisation ¹⁰³ and at least one enterprise. Entities must be established as a legal person ¹⁰⁴ and must conduct its business, R&D or any other activity on the territory of the Republic of Poland, confirmed by an entry into the relevant register ¹⁰⁵. A condition for the participation of a group of entities as the Applicant in the call is its formal existence on the date of submission of the pre-proposal, confirmed by its members concluding, at least conditionally, an agreement on the creation of a group of entities. 		
Eligible Call Modules	 CM2024-01 Energy data spaces and interoperability CM2024-02 Energy system flexibility: renewables production, storage and system integration CM2024-03A Advanced renewable energy (RE) technologies for power production (ROA) CM2024-03B Advanced renewable energy (RE) technologies for power production (IOA) CM2024-04 Carbon capture, utilisation and storage (CCUS) CM2024-05 Hydrogen and renewable fuels CM2024-06 Heating and cooling technologies CM2024-07 Geothermal energy technologies CM2024-08 Integrated regional energy systems 		

¹⁰² defined in Annex I to Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (hereinafter referred to as "Commission Regulation (EU) No 651/2014");

¹⁰⁴ Legal person (juridical person) - an entity that is capable of having and amend legal rights and obligations within a certain legal system, such as to enter into contracts, sue, and be sued, excluding natural persons;
 ¹⁰⁵ if applicable.



¹⁰³ Defined in Commission Regulation (EU) No 651/2014;



	CM2024-09 Integrated industrial energy systems			
	 CM2024-05 integrated industrial energy systems CM2024-10 Clean energy integration in the built environment 			
	Type of research: Industrial/Applied research 			
	Experimental development			
Eligible types of RDI and				
TRL	TRL: 4-8			
	Polish applicants shall declare the TRL of their research in the			
	pre-proposals and full proposals.			
	Polish Participants will be informed and invited to submit Polish full pro-			
	posal once the international evaluation and the ranking list will be estab-			
	lished.			
	Only projects recommended for funding will be asked to submit a na-			
Submission of proposal /documentation at na-	tional application form (NAF). All eligible entities, invited to submit Polish full proposal are obliged to			
tional/regional level	use the rate of exchange of The European Central Bank dated on the day			
	of opening the call.			
	If more than one Polish entity participates in the project, the national			
	application is submitted by a consortium (group of entities) of all Polish			
	entities.			
Additional eligibility crite-	n/a			
ria				
	The eligible costs shall be the following:			
	1. personnel costs (researchers, technicians and other supporting staff			
	to the extent employed on the research project);			
	2. costs of subcontracting, costs of consultancy and equivalent services			
	used exclusively for the research activity; this cost type cannot account for more than 70% of all eligible costs of a project; the subcontracting can			
	be obtained from consortium partner only in justified case, this need will			
	be verified by a national experts panel			
	3. operating costs including (depending on the type of eligible institu-			
	tion) :			
	Research Organizations:			
Eligible costs	• costs of instruments and equipment, technical knowledge and patents			
	to the extent and for the period used for the research project; if such			
	instruments and equipment are not used for their full life for the research			
	project, only the depreciation costs corresponding to the life of the re- search project, as calculated on the basis of good accounting practice,			
	shall be considered eligible;			
	• costs for buildings and land, to the extent and for the duration used for			
	the research project; with regard to buildings, only the depreciation costs			
	corresponding to the life of the research project, as calculated on the ba-			
	sis of good accounting practice shall be considered eligible; for land, costs			
	of commercial transfer or actually incurred capital costs shall be eligible;			
	• other operating costs including: costs of materials, supplies and similar			





	products incurred directly as a result of the research activity; training costs; travel costs including conference fees; cost of required external audit, costs of project promotion (e.g. articles, project webpage); Enterprises: • costs of instruments and equipment, technical knowledge and patents to the extent and for the period used for the research project; if such instruments and equipment are not used for their full life for the research project, only the depreciation costs corresponding to the life of the research project, as calculated on the basis of good accounting practice, shall be considered eligible; • costs for buildings and land, to the extent and for the duration used for the research project; with regard to buildings, only the depreciation costs corresponding to the life of the research project, as calculated on the basis of good accounting practice shall be considered eligible; for land, costs of commercial transfer or actually incurred capital costs shall be eligible. 4. additional overheads incurred indirectly as a result of the research project (depending on the type of eligible institution); Research Organizations: additional overheads for research organizations should account 25% of all eligible direct costs; That costs (4) are counted as a multiplication by percentage given above (called x%) and the rest of direct costs for research organizations, excluding subcontracting (2); It means 4=(1+3)*25%. Enterprises: additional overheads for enterprises include also other operating costs, eg. costs of materials, supplies and similar products incurred directly as a result of the research as a result of the research activity, training costs; travel costs including conference fees; cost of required external audit, costs of project promotion (e.g. articles, project webpage). That costs should account 20% of all eligible direct project costs; Additional overheads (4) are counted as a multiplication by percentage given above (called x%) and the rest of direct costs for enterprises; It means 4=(1+2+3)
	Projects requesting more than PLN 3 million funding are entitled to claim the cost of the audit. For more details on eligible costs, please check the guidelines in the call announcement on NCBR webpage.
Information available at	www.ncbr.gov.pl
Other	 All proposals must be aligned with national regulations, inter alia: The Act of 20 July 2018 - Law on Higher Education and Science; The Act of 30 April 2010 on the National Centre for Research and Development; The Regulation of the Minister of Science and Higher Education of 19 August 2020 on granting state aid by the National Centre for Research and Development, which is in line with the Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the





Treaty (General Block Exemption Regulation);
• The Regulation of the Minister of Science and Higher Education of
17 September 2010 on the detailed mode of performance of tasks of the
National Centre for Research and Development.

b) Funding rates

Maximum funding percentages:

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	not eligible	Up to 50+5/15/25 (max 75 %)	Up to 25+5/15/25 (max 50 %)
Medium Enterprises	not eligible	Up to 50+10+5/15/25 (max 80 %)	Up to 25+10+5/15/25 (max 60 %)
Small Enterprises	not eligible	Up to 50+20+5/15/25 (max 80 %)	Up to 25+20+5/15/25 (max 70 %)
Universities, public research organisations	not eligible	Up to 100%	Up to 100%
Public authorities	not eligible	not eligible	not eligible
Associations without eco- nomic activities, NGOs	not eligible	not eligible	not eligible

Funding quota for Polish participants may be up to 100% for universities and research organisations. In case of enterprises, funding quota will be decided on a case-by-case basis depending on the size of the company and type of research/development under Section 2 of the Regulation of the Minister of Science and Higher Education of 19 August 2020 on granting state aid by the National Centre for Research and Development, published in Journal of Laws item 1456, 2020.

In any case only Industrial Research and Experimental Development will be funded. Other type of activities (e.g. coordination, dissemination, management) cannot be included into separate task.

For entrepreneurs independently undertaking projects at the national level (meaning there is no Polish group of entities or Polish group of enterprises), there is no possibility of increasing the intensity of state aid for industrial research and experimental development based on the condition of effective cooperation between entrepreneurs or between entrepreneurs and research organisations.





PORTUGAL – FUNDAÇÃO PARA A CIÊNCIA E A TECNOLOGIA I.P. (FCT)

Applications requesting funding from FCT under this call will be subject to <u>FCT Regulation on projects</u> <u>funded solely by national funds</u>, as amended by the Regulation no. 5/2024, of 3 January, hereinafter referred to as FCT Regulation, which amends and republishes Regulation no. 999/2016, of 31 October, and to other applicable national and EU legislation.

	Joana Pinheiro
	T: [+351] 213 911 567
	joana.pinheiro@fct.pt
Contact Point	
	Alexandre Maurício
	T: [+351] 213 917 648
	alexandre.mauricio@fct.pt
Funding commitment	FCT budget allocation for this call is 500 000,00 €.
Anticipated number of pro-	4 to 5 (four to five)
jects to be funded	
	The maximum amount of funding to be requested to FCT by a consortium
	with a Portuguese Main Applicant is 200 000,00 € .
	The maximum amount of funding to be requested to FCT by a consortium
	with a Portuguese Project Applicant is 125 000,00 €.
	If more than one Portuguese applicant participating in the same interna-
	tional consortium applies for funding by FCT, the combined funding de-
Maximum funding per	manded by all the Portuguese applicants may not exceed the maximum
awarded project/per part-	financial threshold for proposals with a Portuguese Main Applicant
ner	(200 000,00 €) or with a Project Applicant (125 000,00 €). Portuguese
	Main Applicants and/or Project Applicants in the same international con-
	sortium will therefore have to share the funding that will be granted by
	FCT.
	For information on funding rates, see no. 2 of article 7 of FCT Regula-
	tion.
Eligible types of organisa-	For information on the type of beneficiaries eligible for FCT funding un-
tions	der this call, see article 3 of FCT Regulation.
	FCT WILL FUND:
	• CM2024-02
	 CM2021-02 CM2024-03A
	 CM2024-03A CM2024-04
Eligible Call Modules	 CM2024-04 CM2024-05
Eligible Call Modules	
	 CM2024-06 CM2024-07
	• CM2024-08
	• CM2024-10
Eligible types of RDI and	Type of research: strategic (basic) research, applied research.
TRL	TRL : 1 to 8





Submission of proposal /documentation at na- tional/regional level	 Statement of Commitment: Within 10 working days after the deadline for submitting the pre-proposal, a Statement of Commitment duly signed by the Researcher in Charge (partner and/or coordinators) and by the legal representant of the Portuguese Proposing Institution must be sent to joana.pin-heiro@fct.pt. The stamp or white seal of the Portuguese Proposing Institution will not be required on a digitally signed Statement of Commitment, as long as it is signed, in the Authenticação.gov application, with professional attributes that identify the functions performed by the signatory. Portuguese applicants of transnational consortia that <u>do not apply for funding from FCT do not need</u> to submit the Statement of Commitment.
Additional eligibility crite- ria	For information on the criteria of beneficiaries' eligibility, see article 5 of <u>FCT Regulation</u> . For information on the criteria of projects' eligibility, see article 6 of <u>FCT</u>
Eligible costs	Regulation.For the purposes of defining the budget, the terms defined in article 8 ofFCT regulation apply to eligible expenses and in article 9 to non-eligibleexpenses.Excluded from the range of eligible expenses are the salaries and otherremuneration supplements of teachers, researchers and other staff witha previously established indefinite contract with the Public Administra-tion.Expenditure on adapting buildings and facilities is limited to a maximumof 10% of the project's total eligible expenses.The project's indirect costs are based on the application of a flat rate of25% of the direct eligible costs.Applicable forms of payment: in accordance with no. 1 of article 7 of theFCT Regulation, the funding to be granted to proposals requesting fund-ing from FCT under this call is non-reimbursable and is based on realcosts. As such it must be justified through invoices paid or other ac-counting documents of similar probationary value, under the terms ofno. 5 of article 8 of FCT Regulation.
Information available at	https://www.fct.pt/concursos/concurso-2024-da-parceria-clean- energy-transition-cetp-
Other	For additional information please check FCT Regulation on projects funded solely by national funds. The percentage of time dedicated to transnational projects will <u>not</u> be added to the percentage of time dedicated to existing national projects.





b) Funding rates

Maximum funding percentages:

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises*	50%**	50%**	Non-fundable
Medium Enterprises*	50%**	50%**	Non-fundable
Small Enterprises*	50%**	50%**	Non-fundable
Universities, public research organisations*	100%	100%	Non-fundable
Public authorities*	100%	100%	Non-fundable
Associations without eco- nomic activities, NGOs*	100%	100%	Non-fundable

* Please check Article 3 of FCT Regulation on projects funded solely by national funds for confirming beneficiary eligibility.

** Please check Article 7 of FCT Regulation on projects funded solely by national funds for form of support and funding rate.





ROMANIA – EXECUTIVE AGENCY FOR HIGHER EDUCATION, RESEARCH, DEVELOPMENT AND INNOVATION FUNDING (UEFISCDI)

a) National/Regional Information			
Contact Point	Elena Simion E-mail: elena.simion@uefiscdi.ro Tel: +4021 307 19 93 Nicoleta Dumitrache E-mail: nicoleta.dumitrache@uefiscdi.ro Tel: +4021 302 38 86 Domnica Cotet E-mail: domnica.cotet@uefiscdi.ro		
	Tel: +4021 302 38 80		
Funding commitment	1.000.000 EUR		
Anticipated number of pro- jects to be funded	4-5		
Maximum funding per awarded project/per part- ner	 250 000 euro in case a Romanian institution is the coordinator (together with other Romanian partner(s) – if it is the case); 200 000 for one/all Romanian partner(s) participating in a proposal. 		
Eligible types of organisa- tions	Eligibility of project duration: up to 36 months Eligible entities for funding are universities, public institutions, R&D na- tional institutions, joint-stock companies, SME's and Large companies, NGOs (associations, foundations, etc.), others. Funding rates vary in ac- cordance with state aid legislation.		
Eligible Call Modules	All TRIs		
Eligible types of RDI and TRL	UEFISCDI will fund strategic (basic) research, applied/industrial research, experimental development implemented by research organisations and/or SMEs, according to the national rules and to the State Aid legislation.		
Submission of proposal /documentation at na- tional/regional level	Not required during the submission phase		
Additional eligibility crite- ria	N/A		
Eligible costs	For more information: <u>https://uefiscdi.gov.ro/parteneriate-si-misiuni-</u> <u>europene</u> Cost eligibility: a. Staff costs; b. Logistics expenses - Capital expenditure 30% of the funding from the public budget; - Expenditure on stocks - supplies and inventory items; - Expenditure on services performed by third parties cannot exceed 25		





	 % of the funding from the public budget. The subcontracted parts should not be core/substantial parts of the project work; c. Travel expenses; d. Overheads (indirect costs) are calculated as a percentage of direct costs: staff costs, logistics costs (excluding capital costs and cost for subcontracting) and travel expenses. Indirect costs will not exceed 20 % of direct costs. 	
Information available at	https://uefiscdi.gov.ro/parteneriate-si-misiuni-europene	
Other	It is strongly advised to contact UEFISCDI before submission, in order to verify the eligibility of the researchers and avoid ineligible projects/research consortia.	

b) Funding rates

Maximum funding percentages:

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	100%	Up to 65%	Up to 40%
Medium Enterprises	100%	Up to 75%	Up to 50%
Small Enterprises	100%	Up to 80%	Up to 60%
Universities, public research organisations	100%	100%	100%
Public authorities	Up to 100%		
Associations without eco- nomic activities, NGOs*			

* Please check the national rules to confirm beneficiary eligibility for the requested form of support and funding rate.





SOUTH KOREA – KOREA AGENCY FOR INFRASTRUCTURE TECHNOLOGYADVANCEMENT (KAIA)

Contact Point	Yoo Choi <u>yoochoi@kaia.re.kr</u> +82-31-389-6540 Kayoung Kim <u>global@kaia.re.kr</u> +82-31-389-6496 Heewon Lee <u>global@kaia.re.kr</u> +82-31-389-6585		
Funding commitment	EUR 600,000 (900,000,000 Korean Won) * Funding for 2024 (KRW 300 million for Korean Government's Fiscal Year (FY) 2025) is confirmed, 2025 (FY2026) and 2026 (FY2027) may vary depending on the results of Korean government and National Assembly's budget deliberation every year		
Anticipated number of projects to be funded	1-2		
Maximum funding per awarded project/per part- ner	N/A		
Eligible types of organisa- tions	In general, universities, research institutes, SME's and large compa- nies, non-profit organisations founded according to the civil law are eligible for funding. The complete eligibility criteria and definitions may be found in the National Research and Development Innovation Act and the relevant enforcement decree in the following website: <u>https://www.law.go.kr/LSW/eng/engMain.do?eventGubun=060124</u>		
Eligible Call Modules	Module 10 - Clean energy integration in the built environment		
Eligible types of RDI and TRL	Project start: TRL 3 or higher Project end: TRL 5 or higher		





	Official Submission to CETP :		
Submission of proposal /documentation at na- tional/regional level	 Submission deadline pre-proposals: November 21st, 2024 at 14:00 (CEST) / 21:00 (Korea Standard Time) 		
	 Submission deadline full proposals: April 2nd, 2025 at 14:00 (CEST) / 21:00 (Korea Standard Time) 		
	Korean applicants will be invited to upload the International Appli- cation along with the standard required documents and evidences to the Korean national R&D management system (IRIS): (<u>https://pms.iris.go.kr</u>)		
	Submission deadline full proposals to Korean R&D system (IRIS): April 2nd, 2025 at 21:00 (Korea Standard Time) - only for full pro- posal applicants		
	Please check the Korean National R&D Innovation Act and the relevant		
Additional eligibility crite-	manual found at the following website:		
ria	http://www.kaia.re.kr/portal/bbs/list/B0000050.do?option1=2&menu No=200131		
	- Personnel costs		
	- Operational costs (Research activities)		
	 Indirect costs (according to the defined rate) 		
	- Others		
Eligible costs	Cost items shall be allocated in compliance with the Korean Na-		
	tional R&D Innovation Act and the relevant manual found at the fol-		
	lowing website:		
	http://www.kaia.re.kr/portal/bbs/list/B0000050.do?option1=2&me		
	nuNo=200131		
Information available at	KAIA website: <u>https://www.kaia.re.kr</u>		
	E-mail contact: <u>global@kaia.re.kr</u>		
OtherKorean applicants should begin their projects by September gardless of the start date of their consortium			





b) Funding rates

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	Up to 50%	Up to 50%	Up to 50%
Medium Enterprises	Up to 70%	Up to 70%	Up to 70%
Small Enterprises	Up to 75%	Up to 75%	Up to 75%
Universities, public re- search organisations	Up to 100%	Up to 100%	Up to 100%
Public authorities	Up to 100%	Up to 100%	Up to 100%
Associations without eco- nomic activities, NGOs	N/A	N/A	N/A





SPAIN – CENTRE FOR THE DEVELOPMENT OF TECHNOLOGY AND INNOVATION (CDTI)

National/Regional information and eligibility criteria				
Contact Point	Marina Sopeña partenariadoshe@cdti.es (+34) 91 581 56 07 (+34) 91 581 55 00			
Funding commitment	750.000 €			
Anticipated number of projects to be funded	3-4			
Maximum funding per awarded project/per part- ner	N.A.			
Eligible types of organisa- tions	Companies (large and SME) with tax residence or permanent establish- ment in Spain			
Eligible Call Modules	All			
Eligible types of RDI and TRL	Industrial research and/or experimental development activities, in ac- cordance with the definitions of the <u>COMMISSION REGULATION (EU) No</u> 651/2014 of 17 June 2014			
	TRL 4-7			
Submission of proposal /documentation at na- tional/regional level	 Each Spanish company participating in a project and requesting funding from CDTI, must apply via <u>CDTI's electronic submission system</u>. CDTI's application process consists of completing an online application form which is accompanied by a short technical report written in Spanish. The report must focus on the activities (and associated budget) that the company will assume in the project (please check Type of research funded and Eligible costs sections in this table). Deadline to complete CDTI's application process: 21/11/2024 Please note that failing to comply with the national application process by the deadline, will deem the company ineligible to participate in the call. Applicants are strongly advised to check the detailed information available on CDTI website and to contact the NCP for advice about 			





	national funding rules, before submitting a proposal.		
Additional eligibility crite- ria	 Projects should support transnational collaboration; therefore, no single participant or country can exceed 70% of the total project costs. The Spanish applicant's activities must be carried out in Spain and represent a high scientific-technical quality and a relevant innovative nature. Projects can have a duration of between 12 and 36 months. 		
Eligible costs	 Costs of the personnel performing R&D tasks, including up to 58 hours per month for project management. Overheads (up to 25% of all direct cost, excluding subcontracting). Instruments, equipment, materials, supplies and similar products incurred directly as a result of the project (to the extent that they are used and for the duration of the project). Contractual research, knowledge and patents. Subcontracting a consultancy firm (up to 8.000€). Subcontracting costs cannot exceed 50% of the participant eligible costs. Travel expenses (up to 8.000€). Audit reports (up to 2.000€ per financial year). Other operating expenses are not eligible for funding. The activities and tasks related to communication, dissemination, preparation for entry into the market, commercialisation, industrial-scale trials and registration of industrial property are not eligible for funding. Only the costs incurred during the project duration (since the project start date to the project end date) are eligible for funding. 		
Information available at	Partenariados cofinanciados Pilar 2 CDTI		





Other	It is recommended a minimum budget of 200.000€ The funding will be implemented in the modality of grants. CDTI´s funding is subject to final availability.
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b) Funding rates

Maximum funding percentages*:

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises		Up to 40%	Up to 40%
Medium Enterprises		Up to 50%	Up to 50%
Small Enterprises		Up to 60%	Up to 60%
Universities, public re- search organisations			
Public authorities			
Associations without eco- nomic activities, NGOs			

*If there is national budget available, the grant could be increased to up to 70% for all companies.





SPAIN/ASTURIAS – FUNDACIÓN PARA EL FOMENTO EN ASTURIAS DE LA INVESTIGACIÓN CIENTÍFICA APLICADA Y LA TECNOLOGÍA (FICYT) – AGENCIA DE CIENCIA, COMPETITIVIDAD EMPRESARIAL E INNOVACIÓN ASTURIANA (SEKUENS)

Regional information and eligibility criteria				
Contact Points	Ana Elena Fernández – <u>anae@sekuens.es</u> Raquel Ochoa – <u>raquel.ochoa@ficyt.es</u>			
Funding commitment	€250.000			
Anticipated number of pro- jects to be funded	Expected: 2-3 projects.			
Maximum funding per awarded project/per part- ner	Maximum: €150.000 per partner and per project.* Expected: 100.000€.*			
Eligible types of organisa- tions	Micro, small, medium and large enterprises University of Oviedo Research organisations Technology centers Private non-profit research centers			
Eligible Call Modules	All topics of CETP are eligible			
Eligible types of RDI and TRL	Basic/Industrial Research and Experimental Development. TRL 3 – 8.			
Submission of proposal /documentation at re- gional level	Yes. The applicants will have to submit a proposal at regional level, meet- ing all the requirements of the regional call.			
Additional eligibility crite- ria	 The eligible budget must be at least of €100.000.* The contribution of the regional partner to the proposal must be an R&D project. The project will not start before the submission of the application ar regional level. Only actions to be carried out by applicants located in the Principality of Asturias will be eligible for funding. For companies only: Eligible budgets submitted by applicants to any R&D call launched by SEK UENS in the same year must be less than, or equal, to 50% of the turnover 			
Eligible costs	 of the last financial year (except for companies less than 2 years old). The following costs are eligible if related to the project:* Personnel costs: new researchers and/or technicians hired for the project. Only staff under Group 1,2 or 3 will be eligible. Only for companies: own staff hired under Group 1, 2 or 3 (excluding so- 			







	 cial security costs). Supporting staff will be eligible only in case of coordination of the proposal. Indirect costs (15% of eligible personnel costs). Costs of materials and supplies. Equipment costs. Costs of contractual research, knowledge, patents and consultancy services. Travel, accommodation and subsistence costs. Other direct costs, like audit fees. Subcontracting costs (up to the maximum limit of 50% of the budget).
Information available at	Yearly calls. Actual funding programme under revision.
Other	-

* Subject to changes according to the publication of the regional regulations and call.

b) Funding rates

Maximum funding percentages*:

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises /Technology centers		65%	40%
Medium Enterprises /Technology centers		75%	50%
Small Enterprises /Technology centers		80%	60%
Universities, research organ- isations	100%	100%	100%

* The percentages shown in this table are subject to changes according to the publication of the regional regulations and call.





SPAIN/BASQUE COUNTRY – DEPARTAMENTO DE DESARROLLO ECONÓMICO, SOSTENIBILIDAD Y MEDIO AMBIENTE. EUSKO JAURLARITZA-GOBIERNO VASCO (EUSKADI)

Contact Point	Cristina Ugarte. Innovation technician. SPRI cugartev@spri.eus		
Funding commitment	1M€		
Anticipated number of projects to be funded			
Maximum funding per awarded project/per part- ner	Up to 500 k€/year		
Eligible types of organisa- tions	Large, medium and small enterprises		
Eligible Call Modules	All Call modules		
Eligible types of RDI and TRL	Industrial/Applied Research and Experimental Development (TRL3-7)		
Submission of proposal /documentation at na- tional/regional level	Yes. Hazitek programme		





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Additional eligibility crite- ria	 Have a production facility in the Basque Country from where develop its economic activity and where it will have its own staff involved in the R&D project. Develop directly from its facilities in the Basque Country the eligible activities. Minimum annual budget/project/year 100.000 €. Minimum annual budget per Basque company in the consortium 50.000 €.
Eligible costs	 Personnel expenses in the project (direct and indirect). External advisory services and equivalent expenses. Outsourcing highly specialized parts of the project. Subcontracting expenses to Basque Science, Technology and Innovation Network agents. Operating expenses (such as materials costs, supplies) in- curred directly as a result of the research activity. Intellectual property rights expenses. Amortization expenses for infrastructure and equipment used in the project.
Information available at	Hazitek 2024. Apoyo a la I+D Empresarial - Ayudas SPRI
Other	

b) Funding rates

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises		Up to 70%	Up to 70%
Medium Enterprises		Up to 70%	Up to 70%
Small Enterprises		Up to 70%	Up to 70%
Universities, public re- search organisations			
Public authorities			
Associations without eco- nomic activities, NGOs			





SPAIN/CANTABRIA – REGIONAL DEVELOPMENT AGENCY – CANTABRIA REGION (SODERCAN)

Contact Point	Ignacio Abaitua Fernández (iabaitua@gruposodercan.es)
Funding commitment	150.000€
Anticipated number of pro- jects to be funded	
Maximum funding per awarded project/per part- ner	70%
Eligible types of organisa- tions	Companies with any legal form, legally existent and with an economic activity in the Region of Cantabria. In addition, Foundations are also eligible only if they carry out a business activity.
Eligible Call Modules	All
Eligible types of RDI and TRL	All
Submission of proposal /documentation at na- tional/regional level	
Additional eligibility crite- ria	
Eligible costs	 Staff costs Equipment (depreciation) Fungible assets and supplies Subcontracting: Technical assistance and contractual research. Travel expenses, associated to the project and staff assigned to the project.
Information available at	
Other	





b) Funding rates

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises		50%	25%
Medium Enterprises		60%	35%
Small Enterprises		70%	45%
Universities, public research organisations			
Public authorities			
Associations without eco- nomic activities, NGOs			





SWEDEN – SWEDISH ENERGY AGENCY (SWEA)

i) National/Regional informat			
	CETPartnership@energimyndigheten.se		
Contact Point	+46 (0)16 544 20 00		
	More information: <u>Utlysningar och stöd (energimyndigheten.se)</u>		
Funding commitment	7 MEUR available funding for Swedish partners		
Anticipated number of projects to be funded	10-15 projects		
Maximum funding per awarded project/per part- ner	No specific limitation		
Eligible types of organisa- tions	All actors operating in Sweden are eligible for funding. Some examples include universities, research institutes, SME's and large companies, public authorities, NGOs, civil sector. Specifications: The ap- plicant must be a Swedish legal entity. Decisions on funding research, development, and innovation in the en- ergy area are taken according to the <u>ordinance SFS 2008:761 in the Swe- dish Code of Statues.</u> Decisions on funding research, development, and innovation in the in- dustry's climate transition area are taken according to the <u>ordinance SFS 2017:1319 in the Swedish Code of Statues.</u> Decisions on funding research, development and innovation for aca- demia and research institutes are taken according to regulation 2024 for The Swedish Energy Agency: <u>Regleringsbrev 2024 Myndighet Statens en- ergimyndighet (esv.se)</u>		
Eligible Call Modules	All		
Eligible types of RDI and TRL	Industrial research and experimental development can be supported if overall project scope is relevant to the call text.		
Submission of proposal /documentation at na- tional/regional level	Only consortia selected for funding after final evaluation of full proposal will be invited to write a full proposal at the national level.		





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Additional eligibility crite- ria	Swedish sub-consortia need to include at least one non-research organi- zation. Please note that the Swedish Energy Agency will examine the ability of the applicant organisation and individual to carry out the proposed ac- tivities in the project proposed with regards to available time and com-
	mitment considering their participation in applications and on-going projects funded by the Swedish Energy Agency.
	Personnel costs, travel costs, consultancy, material costs, laboratory costs, equipment costs, patent, indirect costs (only academia and research institutes).
Eligible costs	For more information regarding eligible costs and SWEA's legislation see the Swedish national information on the call information on CETPartner- ship call information at the Swedish Energy Agency web site: <u>Utlysningar</u> <u>och stöd (energimyndigheten.se)</u>
	Follow the links below Så söker du stöd och redovisar (energimyndigheten.se).
Information available at	Manual för forskningsansökningar via Mina sidor.
	The Swedish Energy Agency (SWEA) funds research and innovation pro- jects that support energy system transformation into a modern and sus- tainable, fossil-free society.
Other	Submission of the proposal at the national level: Following the full pro- posal stage of the international Expert Panel evaluation, the Swedish Principal Investigators in the projects recommended for funding will be invited to submit a national application to SWEA (via <u>mina sidor</u>).
	Information about the submission will be provided in the invitation and by the contact person. Submission of financial and progress reports at the national level: Fol- lowing the national project decision: the funded projects will be re- quired to submit one financial and one progress report annually to SWEA (via <u>mina sidor)</u>





b) Funding rates

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	n.a	50 %	25 %
Medium Enterprises	n.a	60 %	35 %
Small Enterprises	n.a	70 %	45 %
Universities, public re- search organisations	n.a	100 %	100 %
Public authorities	n.a	100 %	100 %
Associations without eco- nomic activities, NGOs	n.a	100 %	100 %





TUNISIA –MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH (MHESR)

Contact Point	Mrs. Hayet Souai E-mail: Hayet.Souai@mes.rnu.tn / souaihayet@gmail.com Mrs. Saida Rafrafi Email: saida.rafrafi@mesrs.tn/ coopint2@gmail.com +216 93 658 976
Funding commitment	400.000 €
Anticipated number of pro- jects to be funded	04
Maximum funding per awarded project/per part- ner	100.000 €
Eligible types of organisa- tions	The Ministry of Higher Education and Scientific Research (MHESR) will fund activities, which will be carried out by research teams belonging to one or more MHESR research structures. This call is open to Tunisian public research entities: - institutes or centres and universities - laboratory / units of research - SMEs, NGO, are encouraged to participate in the project but they are not eligible to receive funding from MHESR)
Eligible Call Modules	all
Eligible types of RDI and TRL	Research and development project TRL 2-8
Submission of proposal /documentation at na- tional/regional level	Νο
Additional eligibility crite- ria	The Tunisian principal investigator of the project should be: - Professor; - Associate Professor.
Eligible costs	 Eligible costs are those spent directly by the project partner during the duration of the project and used exclusively for achieving the objectives of the project. All expenses must be incurred between the start date and the end date of the project and must be limited to the allocated budget the following expenses would be eligible: Travel and daily allowances, Small equipment, logistics and consumables, Service contracts and research contracts (non-permanent staff), Organization and participation in the scientific events and meetings.







	 Publication and filing fees required (scientific publications, filing of patents), Expenses for carrying out analyzes and processing samples.
Information available at	www.mes.tn
Other	 The conditions of execution and financing of the projects upon the completion of the selection process shall be defined in the national grant award agreements, where the PI of the selected project for financing will sign an agreement with the MHESR/General Directorate of Scientific Research. If several Tunisian partners are in the same project, the budget will be shared between them. The acquisition of computer and office equipment is an ineligible expense

b) Funding rates

	Basic research	Industrial/Applied Research	Experimental development /innovation
Large Enterprises	х	х	Х
Medium Enterprises	х	х	х
Small Enterprises	х	х	Х
Universities, public research organisations	x	100%	100%
Public authorities	х	x	х
Associations without eco- nomic activities, NGOs	x	х	х





TÜRKİYE – THE SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TÜRKIYE (TÜBİTAK)

Contact Point	Hanife TUZCUOĞLU e-mail: <u>ncpenergy@tubitak.gov.tr</u> and <u>cetp@tubitak.gov.tr</u>		
Funding commitment	1.000.000€		
Anticipated number of projects to be funded	n.a		
	 Funding amount per project excluding project incentive payment and overhead costs: 300.000 EUR Per organization: 		
	 For higher education institutions, training and research hospitals and public institutions and organisations (includ- ing city, metropolitan and district municipalities): 		
Maximum funding per awarded project/per part-	 In case of being a "coordinator" in an international consortium: 125.000 EUR 		
ner	 In case of being a "beneficiary partner" in an inter- national consortium: 100.000 EUR 		
	- For Private entities: 300.000 EUR		
	Detailed information can be found in the " <u>CETPartnership 2024 YILI</u> <u>ORTAK ÇAĞRISI ULUSAL BAŞVURU KURALLARI</u> (in Turkish)" docu- ment.		
Eligible types of organisa- tions	 Higher education institutions, Training and research hospitals, Public institutions and organisations (including city, metropolitan and district municipalities) SMEs and large companies established in Türkiye 		
Eligible Call Modules	All call modules		
Eligible types of RDI and TRL	Type of research: strategic (basic) research, applied research, experi- mental development TRL: 1-8		
Submission of proposal /documentation at na- tional/regional level	Electronic application is required via: https://uidb- pbs.tubitak.gov.tr/		
Additional eligibility crite- ria	National "1071 Programme - Support Programme for Increasing Ca- pacity to Benefit from International Research Funds and Participation in International R&D Cooperation" Programme will be implemented.		
	Further information will be announced on <u>https://ufukavrupa.org.tr/</u>		





	and https://tubitak.gov.tr/tr
Eligible costs	Personnel, travel, equipment/tool/software, consultancy and service procurement, consumables are eligible for funding.
Information available at	Further information will be announced on <u>https://ufukavrupa.org.tr/</u> and <u>https://tubitak.gov.tr/tr</u>
Other	

b) Funding rates

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	60%	60%	60%
Medium Enterprises	75%	75%	75%
Small Enterprises	75%	75%	75%
Universities, public re- search organisations	100%	100%	100%
Public authorities	100%	100%	100%
Associations without eco- nomic activities, NGOs	N/A	N/A	N/A





UNITED KINGDOM/SCOTLAND – SCOTTISH ENTERPRISE (SE)

i) National/Regional informati			
Contact Point	Richard Buxbaum <u>richard.buxbaum@scotent.co.uk</u>		
Funding commitment	€5M		
Anticipated number of projects to be funded	6-10 projects		
Maximum funding per awarded project/per part- ner	No maximum		
	 Companies that are legal entities operating and carrying out research and development activities within Scotland or companies intending to establish a presence within the area to carry out research and development activities. This includes subsidiaries of overseas companies. Universities or other research organisations (ROs) that are legal entities registered and operating in Scotland, subject to the following conditions: ROs will only be eligible if there are at least two companies involved in the collaborative project, one of which must be located in Scotland and be eligible for and requesting SE funding The work being carried out by the research organisation should be of direct relevance to at least one of the participating Scottish companies; The total budget of the research organisation should be no greater than the combined total budgets of the Scottish companies involved in the collaborative project and seeking funding from SE. 		
Eligible Call Modules	We will consider applications under all Call Modules. However, as part of our eligibility process, projects will be expected to demon- strate relevance to Scottish Government energy strategies and ex- pected contribution to economic development in Scotland.		







Eligible types of RDI and TRL	No specific rules on TRLs; please refer to CETP call modules. Projects should include the development of new products, processes or services for Scottish companies.
Submission of proposal /documentation at na- tional/regional level	Yes, at Full Proposal stage. Further information will be provided to applicants invited to Stage 2.
Additional eligibility crite- ria	Project-specific costs including salaries, overheads, equipment, subcon- tracting, consultancy, training, materials, trials, IP management (SMEs only), travel and subsistence, and audit certificates for financial claims (SMEs only). Detailed guidance available on request.
Eligible costs	 Yes, at Full Proposal stage. Further information will be provided to applicants invited to Stage 2. The project / activity must be strategically important to the Scottish company(ies) and in line with its business plan. The project must involve research and development activity in Scotland. However, testing in a demonstration site outside Scotland is also eligible. Projects must have the potential to deliver benefits to Scotland's economy and the new product, process or service must, in the case of non-SMEs, be able to compete in a global marketplace.
Information available at	From contacts above
Other	Please speak to Scottish Enterprise contact prior to submitting a pro- posal to discuss the project scope.





b) Funding rates

	Basic research	Industrial/Applied Re- search	Experimental develop- ment/innovation
Large Enterprises	Up to 40%	Up to 40%	Up to 40%
Medium Enterprises	Up to 50%	Up to 50%	Up to 50%
Small Enterprises	Up to 50%	Up to 50%	Up to 50%
Universities, public re- search organisations	Up to 100% (equivalent to 80% FEC)	Up to 100% (equivalent to 80% FEC)	Up to 100% (equivalent to 80% FEC)
Public authorities	n/a	n/a	n/a
Associations without economic activities, NGOs	n/a	n/a	n/a





UNITED STATES OF AMERICA – DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY AND CARBON MANAGEMENT (DOE-FECM)

a) National/Regional information and	l eligibility criteria							
	Sarah Leung, <u>sarah.leung@hq.doe.gov</u> , (Contact point for Carbon Storag and Transport)							
	Robert Schrecengost, <u>Robert.schrecengost@hq.doe.gov</u> , (Contact point Blue Hydrogen)							
Contact Point	Dr. Aaron Fuller, <u>aaron.fuller@hq.doe.gov</u> , (Contact point for Carbon Uti tion/Conversion)							
	Andrew HLasko, <u>Andrew.hlasko@hq.doe.gov</u> , (Contact point for Carbo Capture)							
	Rory Jacobson, <u>rory.jacobson@hq.doe.gov</u> , (Contact point for Carbon Dio ide Removal (CDR))							
	\$1,000,000 DOE-FECM: Hydrogen with Carbon Management							
Planned Contribution	\$2,000,000 DOE-FECM: Carbon Transport and Storage							
	\$1,000,000 DOE-FECM: CO ₂ Removal (CDR)							
	\$2,000,000 DOE-FECM: Carbon Conversion							
	\$2,000,000 DOE-FECM: Point Source Carbon Capture							
Anticipated number of projects to be funded	Between 8-12							
	MINIMUM funding request: none							
	Hydrogen with Carbon Management							
	 MAXIMUM funding request: \$1,000,000 per project 							
	 Maximum funding available for all Hydrogen with Carbon Manage- ment projects: \$1,000,000 							
Maximum funding per awarded	Carbon Transport and Storage							
project/per partner	 MAXIMUM funding request: \$1,000,000 per project 							
	 Maximum funding available for all Carbon Transport and Storage projects: \$2,000,000 							
	CO ₂ Removal (CDR)							
	 MAXIMUM funding request: \$1,000,000 per project 							
	 Maximum funding available for all CO₂ Removal projects: \$1,000,000 							







	Carbon Conversion
	 MAXIMUM funding request: \$1,000,000 per project Maximum funding available for all Carbon conversion projects:
	\$1,000,000
	Point Source Carbon Capture
	 MAXIMUM funding request: \$1,000,000 per project
	 Maximum funding available for all Point Source Carbon Capture projects: \$2,000,000
	For all of DOE FECM's participating program offices, funding is avai able to eligible entities as follows:
Eligible types of organizations	 The call is open to U.S. National Laboratories and their public or private research partners. The main U.S. partner must be one of the designated DOE national laboratories. National laboratories can subcontract to any entity using their standard procedures and terms and conditions followed.
	CM2024-04 Carbon capture, utilization and storage (CCUS)
Eligible Call Modules	CM2024-05 Hydrogen & renewable fuels
Eligible types of RDI and TRL	 Information on the R&D areas of interest to the United States may be found in the <u>DOE FECM Strate-gic Vision</u>. The U.S. team must meet all requirements related to the DOE strategies defined in the <u>DOE FECM Strategic Vision</u> ranging from TRL 3-6 as defined in the <u>U.S. DOE Technology Readiness Assessment Guide</u>. In addition, the <u>Pathways to Commercial Liftoff:</u> <u>Carbon Management</u> report (at the bottom of the page) provides other goals across the full technology value chain. Note: Activities that do not strongly align with those areas noted above will be deemed ineligible. For the DOE-FECM program area Hydrogen with Carbon Management: Geologic H₂ storage is not a priority under this call and will be deemed ineligible.
Submission of proposal	
/documentation at	No
national/regional level	





Additional eligibility criteria	Yes. The United States applicants must meet all eligibility criteria related to application types listed under "Eligibility type of re- search and TRL." United States applicants <u>are encouraged</u> (not re- quired) to include scope and budget for making project data avail- able to the international research community through the CO ₂ DataShare portal (<u>https://co2datashare.org/</u>).
Eligible costs	Eligible costs for United States applicants are defined in the <u>DOE</u> <u>Guide to Financial Assistance</u> .
Information available at	The DOE FECM web site; <u>https://www.energy.gov/fecm/office-fossil-</u> energy-and-carbon-management
Other	N/A

b) Funding rates

	Basic research	Industrial/Applied R search	Experimental develor ment/innovation				
National Laboratories	100	100	100				





Annex D. Funding Organisations' participation per Call Module (this information is indicative)

Country/ region	Organisation	Acronym	Funding (€)	CM2024-01 Energy data spaces and interoperability	CM2024-02 Energy system flexibility: renewables production, storage and system integration	CM2024-03A Advanced renewable energy (RE) technologies for power production (ROA)	CM2024-03B Advanced renewable energy (RE) technologies for power production (IOA)	storage (CCUS)	CM2024-05 Hydrogen and renewable fuels	CM2024-06 Heating and cooling technologies	CM2024-07 Geothermal energy technologies	CM2024-08 Integrated regional energy systems	CM2024-09 Integrated industrial energy systems	CM2024-10 Clean energy integration in the built environment
Austria	Austrian Research Promotion Agency	FFG	10 500 000	x	x	x	x	x	x	x	x	x	x	x
Belgium-Flanders	Fonds Innoveren en Ondernemen	FIO	1 000 000	x	x	x	x	x	x	x	x	x	x	x
Belgium-Wallonia	Service public de Wallonie	SPW	1 500 000	x	x	x	x	x	x	x	x	x	x	x
Canada-Alberta	Emissions Reduction Alberta tbc	ERA	2 000 000		x	x	x	x		x	x			x
Czech Republic	Technology Agency of the Czech Republic	TA CR	800 000	x	x			x	x			x		x
Denmark	Energy Technology Development and Demonstration Programme	EUDP	1 340 000	x	x	x	x	x	x	x	x	x	x	x
Denmark	Innovation Fund Denmark	IFD	1 300 000	x	x	x	x	x	x	x	x	x	x	x
Estonia	Estonian Research Council	ETAG	300 000	x	x	x	x	x	x	x	x	x	x	x
France	Agence Nationale de la Recherche	ANR	3 000 000			x		x	x	x	x			x
France-Pays de la Loire	Pays de la Loire Region Council	RPL	1 700 000				x							
Germany	Projektträger Jülich/Forschungszentrum Jülich GmbH (on behalf of BMWK)	PtJ (BMWK)	12 000 000	x	x	x	x		x	x	x	x	x	x
Germany-NRW	Projektträger Jülich/Forschungszentrum Jülich GmbH(on behalf of MWIKE)	PtJ (MWIKE)	200 000	x	x	x	x	x	x				x	
Germany-Saxony	Saxon State Ministry for Science, Culture and Tourism	SMWK	2 000 000	x	x	x	x	x	x	x	x	x	x	x
Greece	General Secretariat for Research and Innovation	GSRI	1 000 000											
Hungary	National Research, Development and Innovation Office	NKFIH	1 165 000	x	x	x	x	x	x	x	x	x	x	x
Iceland	The Icelandic Centre for Research	RANNIS	600 000					x	x	x	x			
India	Department of Science & Technology, Ministry of Science & Technology, Goverment of India	DST	1 500 000					750 000 €					750 000 €	
Ireland	Geological Survey Ireland	GSI	200 000								x			
Ireland	Taighde Éireann - Research Ireland, (earlier Science Foundation Ireland)	TA-RI (SFI)	400 000	x	x			x	x	x	x			x
Ireland	Sustainable Energy Authority of Ireland	SEAI	500 000	x	x	x	x	x	x	x	x	x	x	x
Israel	Ministry of National Infrastructure, Energy and Water Resources	MoE	800 000	x	x	x	x	x	x	x	x	x	x	x
Italy	Ministero dell'Università e della Ricerca	MUR-FIRST	1 000 000	x	x	x		x						x
Italy	Ministero dell'Università e della Ricerca	MUR-ERDF	1 000 000	x	x	x		x						x
Latvia	Latvian Council of Science	LZP	600 000	x	x	x	x	х	x	x	x	х	x	x
Lithuania	Research Council of Lithuania	LMT	300 000	x	x	x	x	x	x	x	x	x	x	x



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Country/ region	Organisation	Acronym	Funding (€)	CM2024-01 Energy data spaces and interoperability	Energy system flexibility: renewables production, storage and system integration	Advanced renewable energy (RE) technologies for power production (ROA)	CW2U24-U3B Advanced renewable energy (RE) technologies for power production (IOA)	storage (CCUS)		CM2024-06 Heating and cooling technologies	CM2024-07 Geothermal energy technologies	CM2024-08 Integrated regional energy systems	CM2024-09 Integrated industrial energy systems	CM2024-10 Clean energy integration in the built environment
Malta	Malta Council for Science and Technology	MCST	500 000	×	×	×	×	×	×	×	x	×	×	x
The Netherlands	Dutch Research Council	NWO	2 000 000		x									x
The Netherlands	Netherlands Enterprise Agency	RVO	8 000 000		x		x	x	x	x	x	x	x	x
Norway	The Research Council of Norway	RCN	6 090 000			x	x	3 480 000 €	×	x	x			
Poland	National Centre for Research and Development	NCBR	3 000 000	x	x	×	x	x	×	x	x	x	×	x
Portugal	Fundação para a Ciência e a Tecnologia	FCT	500 000		x	x		x	x	x	x	x		x
	Executive Agency for Higher Education, Research,													
Romania	Development and Innovation Funding	UEFISCDI	1 000 000	×	×	×	x	x	×	×	x	×	×	x
South Korea	Korea Agency for Infrastructure Technology Advancement	KAIA	600 000											x
	Centre for the Development of Technology and													
Spain	Innovation	CDTI	750 000	×	x	×	×	×	×	×	×	×	×	x
Spain-Asturias	Fundación para el Fomento en Asturias de la Investigación Científica Aplicada y la Tecnología - Agencia de Ciencia, Competitividad Empresarial e Innovación Asturiana	FICYT - SEKUENS	250 000	x	x	x	x	x	x	x	x	x	x	x
	Departamento de Desarrollo Económico, Sostenibilidad y Medio Ambiente. Eusko Jaurlaritza-		1 000 000											
Spain-Basque	Gobierno Vasco	EUSKADI		x	x	x	x	x	x	x	x	x	x	x
Spain-Cantabria	Regional Development Agency of Cantabria	SODERCAN	150 000	×	x	x	x	x	x	x	x	×	×	x
Sweden	Swedish Energy Agency	SWEA	7 000 000	x	x	x	х	x	x	x	x	х	x	x
Tunisia	Ministry of Higher Education and scientific Research	MHESR	400 000	х	x	x	х	х	x	x	х	х	х	х
Türkiye	The Scientific and Technological Research Council of Türkiye	TUBITAK	1 000 000	×	x	x	×	x	×	x	x	x	×	x
UK-Scotland	Scottish Enterprise	SE	5 000 000	x	x	x	x	x	×	x	x	x	x	x
USA	Department of Energy	DoE - Hydrogen with Carbon Management	875 000					x	×					
USA	Department of Energy	DoE - Carbon Transport and Storage	1 750 000					x	x					
USA	Department of Energy	DoE - CO2 Removal	875 000					x	×					
USA	Department of Energy	DoE - Carbon Conversion	1 750 000					x	×					
		DoE - Point	4 750 000											
USA	Department of Energy	Source Carbon Capture	1 750 000					×	×					

This document was created as part of the Clean Energy Transition Partnership, funded from the European Union's Horizon Europe research and innovation programme under grant agreement no. GA 101069750.

