

ADDITIONAL JOINT CALL 2023 DIGITAL TRANSFORMATION FOR GREEN ENERGY TRANSITION

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¹ RULES OF PROCEDURE FOR THE EUROPEAN FORUM FOR MEMBER STATES (EFMS) ON PUBLIC POLICIES FOR SECURITY AND RESILIENCE IN THE CONTEXT OF CRITICAL INFORMATION INFRASTRUCTURE PROTECTION, Version 3.0 FINAL – May 2011 "Traffic Light System"



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Facts of the EnerDigit additional Joint Call 2023

Information	Link to Chapter			
Call Objectives	Projects answering to this call are expected to address key challenges and opportunities relating to one or more of the objectives of the call, which include aspects related to social sustainability, Energy- and ICT infrastructure or Energy marketplaces, business models and communication. For more detailed information see: Aim, scope & challenges of the joint Call 2023			
Participating countries	Consortia must include at least two independent legal entities applying for funding from two different countries of the funding agencies participating in the joint call. <u>Participating countries and regions</u>			
Project requirements	Beside the requirement of transnationality, the project consortia are especially asked to elaborate on identification of challenges for digitalisation of energy systems and networks and their need-owner(s) and on scaling up and replication. For more information see: <u>Proposal set-up and project requirements</u> A summary of national or regional eligibility requirements is provided under <u>Annex B</u> .			
Timeline for call	The full proposal submission deadline is 12 September 2023 14:00 CET. The funded projects are expected to start in the period of December 2023 to March 2024. Timeline of the joint Call 2023			
Call Submission	Project proposals must be submitted electronically. More information about the call and the online Electronic Submission System can be found at the ERA-Net SES website: Joint Call 2023.			



1 TIMELINE OF THE JOINT CALL 2023

This document is an invitation to respond to the Joint Call 2023 on digitalisation of energy systems and networks projects. The total available budget is 6 750 000 €

Call opening	14. June 2023		
Launch event	Launch event 13. June Find the latest update on events and		
Recommended advisory period	<i>webinars on the <u>webpage</u></i> 14. June 2023 – 12. September 2023		
Proposal submission deadline	12. September 2023, 14:00 CET		
National or regional eligibility checks and expert evaluation period	September-October 2023		
Selection period	End October 2023		
Deadline funding decision feedback	November 2023		
Expected project start	December 2023 – March 2024		

Project proposals must be submitted electronically. More information about the call and the online Electronic Submission System can be found at the ERA-Net SES website: <u>link</u>

The submission portal is called INSIGHTS and is administrated by NordForsk and Nordic Energy Research.

2 BACKGROUND

Transforming the global landscape of energy supply and solutions towards a decarbonised, secure, and resilient energy system will need holistic system solutions incorporating technologies that can be replicated and scaled. The goals of the Paris Agreement may still be achievable but will require more ambitious and faster emission reductions on a global scale. The European Union is working to accelerate global clean energy innovation to make clean energy available for all. As part of this global effort, the European Union has the ambition to become the world's first climate-neutral continent, as presented in the European Green Deal by President Ursula von der Leyen of the European Commission. This is not only motivated by the climate change, but also by an economical ambition of being in the lead in circular economy and clean technologies. Achieving climate neutrality by 2050 is not the only aim. The Fit for 55 package aims at reducing net greenhouse gas emissions by at least 55% by 2030. Moreover, security of supply has moved to the front of the arguments for renewables based energy production, in combination with robust power and gas grids and transparent energy market designs.

The global race against climate change is also a race to secure financial stability in the new energy economy. Digital technologies, as deployed in a broad range of business and media



applications on a global basis, are tools that may enable energy systems around the world to be more connected, intelligent, efficient, and reliable, and by including increasingly higher levels of electricity from renewable energy sources. The digital transformation is therefore expected to have wide effects on the future design of energy systems with a very low dependency on fossil fuels. At the same time, as a lot of the required ICT-technology for this transformation has already been developed and come far in transforming other sectors of society, it's important that the development in the energy sector efficiently harness the existing knowledge and technologies while developing the new solutions for the energy system.

3 PARTICIPATING COUNTRIES AND REGIONS

The countries and regions participating in the Joint Call 2023 consists of a subset of national and regional funding partners from the ERA-Net Smart Energy Systems (ERA-Net SES) EnerDigit initiative. An overview of participating countries and regions is shown below (Fig. 1).



Fig. 1: Additional Joint Call 2023 on digitalisation of energy systems and networks

4 AIM, SCOPE & CHALLENGES OF THE JOINT CALL 2023

The overall aim of the Joint Call 2023 is to support impactful transnational research and innovation projects, with early delivery of impactful outputs as the project progresses, to accelerate and unleash the potential of digital transformation for a sustainable energy society. By accelerating the implementation, adaption, and knowledge creation of digital solutions also in energy systems and networks, this call supports the following objectives:

- Advance the green energy transition in all sectors of the energy system while ensuring security of supply
- Shaping new transnational business and investment opportunities by sector coupling and development of new value chains in innovative and cost-effective energy solutions, thereby creating new employment opportunities and contributing to the development of an environmentally sustainable financial growth
- Ensuring social sustainability and coherence with digitalisation in other sectors in the progression of the green energy transition



This EnerDigit additional joint call is designed to encourage short and impactful projects, focussing on creating value based on how well that new product or service will allow consumers and businesses to participate in supporting the EU clean energy goals.

This call is an opportunity for developers of products and services to get their results out of laboratory settings and demonstrate viable solutions in monitored living lab set-ups. This is possible on a limited budget when it builds on already established or newly enlarged cooperations.

If your project has a technology or service development concept at its core, for this call the emphasis should be on demonstration of the next step towards implementation – such as a mock-up demo, a demo in a living lab or similar real-life setting. Look for end-user involvement and seek clarification of end-user interest and engagement in your technology or service.

If the project is focussing on clearing the path towards greater flexibility of the grid system, greater storage or improved demand side management options, development of business models or design of regulatory and non-technological measures for greater use of green energy sources, then the proposal should include actions to engage the next stages of stakeholders in the value chain towards implementation of the work results.

Projects answering to this call are expected to address **key challenges and opportunities** relating to one or more of the abovementioned objectives. This may include aspects related to (however not limited to):

- Social sustainability
 - gender and diversity aspects of digitalization in the energy system such as artificial intelligence (AI)/machine learning and the effect of gender and diversity biased data and socio-economic sustainability on digitalization from a gender and diversity perspective
 - o privacy, ownership, and integrity
 - solutions to overcome energy poverty and foster inclusion of all societal groups into the energy transition
- Energy and ICT infrastructure
 - Data platforms/APIs, interoperability, and standardisation
 - o Resilience, cyber security (vulnerabilities, failures, risks) and data security
 - Internet of things (IoT), 5G, smart buildings, smart metering, sensors, and automation, including adaptation of consumer behaviour and automated consumption planning
 - inclusion of energy system relevant sectors such as transport and mobility or farming
 - Resource efficiency (including energy), also of ICT itself
 - Artificial intelligence/machine learning
- Energy marketplaces, business models and communication
 - Sector coupling of traditional energy actors to stakeholders and partners in other domains such as agriculture, mobility or production enterprises
 - Energy management and services
 - Big data and management of big data from different sources (planning tools, management tools, market platforms, smart meters, social medias, etc.)



5 PROPOSAL SET-UP AND PROJECT REQUIREMENTS

Each project answering to the Joint Call 2023 should identify and address critical challenges in the digitalisation process towards a green energy society. Projects are strongly encouraged to involve "need-owners" ² and relevant stakeholders in all project phases to maximise market acceptance and uptake within the development of technologies and solutions.

The project consortia applying for the Joint Call 2023 are asked to elaborate on:

- 1. Identification of challenges for digitalisation of energy systems and networks and their "need-owner(s)"
 - Description of processes and methodologies for identifying critical needs, in collaboration with the most significant "need-owner(s)" and other stakeholders. Such "need-owners" may include infrastructure operators, local industries or communities and end-users in value chains from the local and regional, up to the European and global levels. Projects are encouraged to engage with all relevant parts of the value chain for the developed solution.
- 2. Description of RDD activities and co-creation of solutions
 - Description of activities in the fields of research, development, and demonstration and/or real environment testing.
 - Description of chosen processes and methods for collaboration between project partners, "need-owner(s)" and other stakeholders.
 - Description of how "need-owner(s)" and relevant stakeholders (such as technology and service providers, innovators, start-ups, end-users and communities) should participate in the planned solutions development, demonstration and transfer activities to ensure that the viewpoints, knowledge and expertise of the "needowner(s)" and relevant stakeholders are involved in all solution development stages. Project teams are expected to include partners from different parts of society with a "digital" and close to market mindset in transnational collaboration, to develop scalable, customizable, and replicable solutions. Coordinating and linking research activities with <u>living labs</u>³, may facilitate the development and field-testing of prototypes. Projects are also encouraged to engage with <u>digital platform providers</u> (DPPs)⁴ to enhance access to existing data, software, service, and business platforms, and increase the market readiness level of the project solutions.

² By "**need-owner**" this call 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.

³ Living labs are user-centred, open-innovation ecosystems often operating in a territorial context (e.g., city, agglomeration, region). Here, new energy solutions can be tested in real life operating conditions, including failures, behaviour, and misuse of solutions to detect full impact as well as weaknesses, learnings and opportunities for improvement. Living labs will allow start-ups and innovative companies to test their solutions in different frameworks. It will also promote the development of interoperable solutions, enabling wider impact and use of applications, systems and services and providing open, independent development and test environment.

⁴ DPPs as enablers of software solutions will be asked to develop a portfolio of offers to RDD projects from DPPs with free and/or limited access to platform solutions, e.g., cloud available services or results from previous projects and describe available platform solutions for project applicants and innovation stakeholders. DPPs can be included into the development phase of RDD projects project development phase by giving input into what (IT) requirements projects need to meet when developing their solutions. They may support project in product and services development and after the project support bringing the solutions into practice.



3. Scaling up, replication and dissemination strategy

- Description of the potential for subsequent scaling up, replication and transferability
 of solutions, including description on how to achieve market-readiness (TRL 8-9)
 for the solutions developed during the project. While solutions may be developed
 for the concrete needs in a specific region, projects should also keep larger scale
 markets of solutions and technologies in mind. High flexibility and adaptability of
 developed solutions will increase the applicability on the global markets.
- Description of IPR, knowledge sharing, exploitable results and publication of results, including open data strategies, identifying solution synergies and plans for developing next steps.
- To support these ambitious objectives, applicants should include a suitable level of activity and the necessary budget to join in annual conferences and workshops, to interact with the other ongoing projects funded under this call and to deliver input for the preparedness to implement change at all stakeholder levels (also see Annex F).
- Projects supported by ERA-Net SES consortium partners are expected to actively
 participate in knowledge sharing and learning as organised by the ERA-Net SES
 Knowledge Community as well as the Clean Energy Transition Partnership
 (CETPartnership) Knowledge Community The two Knowledge Communities are
 expected to merge activities. The activities will encourage collaboration with other
 projects resulting from this call, previous calls, additional experts, and associated
 partners (see section 5.2).

Proposals that intend to develop digital services should, as far as feasible, use existing digital platforms⁵, such as the <u>digital platform providers (DPP)</u>, rather than expend project resources to develop their own.

The proposal must demonstrate added value from the international cooperation, in comparison to national projects, which should be evident in the layout and execution of the work packages. The work plan must show real cooperation and project outputs are expected to provide benefits to all partner countries. Synergies with other relevant national or international projects, current and concluded, should be described in the project proposals.

5.1 **Project requirements**

The following criteria apply for project proposals in the Joint Call 2023:

• Transnationality:

Consortia must include at least two independent legal entities applying for funding from two different countries of the funding agencies participating in the <u>Joint Call 2023</u>.

The number of partners per consortium is not limited, but the manageability of the consortium must be demonstrated (efficient consortia of 5-8 partners for medium-sized projects with total budget in a range of 0.5-1 Mio \in are typical, but this does not exclude smaller or larger projects). The involvement of more than two countries will be encouraged. Consortia also need to be balanced between countries both in terms of number of partners and distribution of budget; such that all project partners contribute to and benefit from an equitable and balanced cooperation. Requested funding for one partner may not exceed 70% of the total requested funding budget.

If partners in the consortium are found ineligible for funding by the involved funding agencies, the minimum number of participating countries must be met, regardless of the provided "fallback" strategy.

• "Fallback strategy":

⁵ E.g. data platforms, software platforms, ledger technologies, etc.

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Consortia with three or more participating countries involved required to offer "fallback strategies" for cases in which one of the involved funding agencies considers the project as ineligible. The "fallback strategies" must be part of the risk assessment of the proposal and should be structured as follows:

- Scenario A: Project partners from country A are not eligible: The project can still be implemented, because...
- Scenario B: Project partners from country B are not eligible: The project cannot be implemented anymore because...
- o etc.

The "fallback strategy" should clearly explain how the project could be executed without the ineligible partner(s) in question and without the sought funds of the partner(s).

If the project proposal does not pass the national/regional eligibility check in one country/region and there is no "fallback strategy" provided for this case, the project will not be considered for funding and will not be forwarded to the evaluation phase. Furthermore, please consider that the project proposal needs to pass the national/regional eligibility check in at least two participating countries.

If, however, the consortia cannot foresee how the project can be executed without all partners in the proposal, then a "fallback strategy" may be omitted.

The "fallback strategy" will be evaluated by the independent expert panel in cases where a partner is found ineligible during the evaluation phase. The "fallback strategy" is not applicable during the selection phase and in cases where national or regional funding have been exhausted.

• TRL level:

Projects should develop digital energy system solutions, including demonstration of solution(s) or a timely roadmap for the latter. Projects should address solutions within Technology Readiness Level 4 - 8 (TRL - see definitions in <u>Annex E</u>). Activities with lower TRL levels may be included if they contribute to the higher project goal. Projects are encouraged to expand on results from and connect to ongoing or recently finished demonstration projects (utilise test infrastructure, utilise knowledge, cooperation of key demos, transfer of results, establishment of new business activity, etc.). They however must show complementary and added value, avoiding duplication. Projects should develop new solutions with the potential to become best practice within a few years after the end of the project.

• Three-Layer Research Model:

The *Three-Layer Research Model* encompassing *Stakeholder/Adoption, Goods and Services* and *Technology* (see <u>Annex A</u>) should be implemented in the project proposal. This normally includes considering business models, market strategies and consumer needs and engage private and public stakeholders in co-creation ecosystems. Projects are encouraged to incorporate all three layers of the model in their project application.

• Equality and diversity perspectives:

Equality and diversity perspectives related not only to gender, but also ethnicity, age, socio-economic status, physical abilities, political beliefs, geography etc. throughout the project should be considered and included in all proposals. Proposals should therefore be gender balanced, especially among the personnel named in the proposal primarily responsible for carrying out the research and/or innovation activities. In addition to equality amongst the project participants, diversity perspectives should also be included as an integrated part of the project research. Adoption and success of new energy solutions in local communities, and in society in general, requires careful consideration of the prosumer and end user's needs. To be able to evaluate the highly variable consumer needs and to inspire the most creative and effective solutions, the



composition of a successful project consortium ideally should reflect the diversity in society.

• Climate impact of project implementation:

Projects should describe how the execution of the project will be performed with minimal climate impact while still maintaining high impact and efficiency in transnational collaboration.

Project proposals should refer to existing reference architecture models and common standards⁶ as they exist.

Please consider that the Joint Call 2023 Call Management may discard applications given the following conditions:

- Incomplete proposals where substantial parts of the application are missing
- Submissions submitted after the deadline or without using the <u>Electronic Submission</u> <u>System</u>
- If the proposal does not fulfil the transnationality requirement

Discarded applications will not be forwarded to eligibility checks or expert evaluation.

National/regional eligibility criteria must be respected in addition to the Joint Call 2023 project requirements.

A summary of national/regional eligibility requirements is provided under <u>Annex B</u>. It is essential that applicants familiarise themselves with their respective funding agency's rules. It is mandatory that they contact their respective national/regional contact points during the advisory period for clarifications prior to submitting a full project proposal.

5.2 Knowledge Community – background and requirements

All applicants in this call should participate in the ERA-Net SES Knowledge Community (see Standard Work Package, <u>Annex F</u>). Cooperation and facilitation in the below-mentioned activities are mandatory for all projects funded in the Joint Call 2023. The final organisation and execution of these activities will be the result of an iterative process between the Knowledge Community Management and each funded project, as applicable. The project proposal should include the mandatory work package that implements these activities (described in section 5.2 and <u>Annex F</u>). In the design of their own dissemination and exploitation strategies, projects should consider potential synergies with and contributions to the ERA-Net SES Knowledge Community.

Participation of non-ERA-Net SES project partners in the Knowledge Community is not mandatory, as various meetings take place in Europe, but highly recommended as the participation may contribute to the dissemination and global integration of project results. This will become easier as the Knowledge Community Management plans to implement even more virtual meetings. Collaboration between the selected projects in the Joint Call 2023 and previously selected projects may also aid the discovery of synergies between projects and greatly enhance the development of the projects. Inclusion of participation in the Knowledge Community should be as per the prevailing guidelines of the relevant funding agency.

⁶Including Smart Grid Architecture Model developed under standardisation mandate M/490 and follow-up activities, regulatory environment for privacy, data protection, data management and alignment of data formats (e.g. the work of the ad-hoc group on "My Energy Data" and its respective follow-up), cyber security, smart grid deployment, infrastructure and industrial policy (<u>http://ec.europa.eu/energy/en/topics/markets-and-consumers/smart-grids-and-meters/smart-grids-task-force</u>).



Be aware that the ERA-Net SES Knowledge Community is in the process of merging activities with the Clean Energy Transition Partnership (CETPartnership) Knowledge Community.

5.2.1 Background

The Joint Call 2023 Coordination Team implements advanced and innovative follow-up, monitoring and transfer activities within the ERA-Net SES Knowledge Community. It is organised by the ERA-Net SES Knowledge Community Management⁷.

The goal of the Knowledge Community is to enable knowledge exchange between past and ongoing projects and with national and international experts to leverage synergies of efforts. The Knowledge Community aims to develop and present state-of-the-art knowledge and discussions in the field of Smart Energy Systems and to be a hub and voice for all information related to national/regional Smart Energy RDI (Research, Development, and Innovation). To this end, the Knowledge Community will link experts from the funded projects⁸ and actors of other national, transnational and international smart energy activities. It will also provide connections to policy makers, stakeholder organisations, programme owners, SMEs and academia from outside the Knowledge Community to offer knowledge and to aid them in making strategic decisions. To involve key stakeholder groups and exploit specific potentials, the Knowledge, tools or means of approaching stakeholders. In addition, the Knowledge community links to selected Digital Platform Providers and Living Labs for advanced testing.

The key means of managing a lively Knowledge Community are Living Documents and physical and virtual Working Group meetings. Cooperation and knowledge are being managed on the comprehensive <u>Expera web platform</u>.

The Knowledge Community Management will implement an interactive, formative evaluation process where the projects' results are assessed on a peer-to-peer basis and against stateof-the-art knowledge. Thus, projects get the opportunity to monitor their progress and results and communicate it to the involved funding partners and other projects. The evaluation will emphasise the importance of interoperability, scalability, and replicability of the results. It may also aid the exploitation and deployment of the solutions on a national and international level.

The Knowledge Community is an integral part of the Joint Call 2023 concept. It is therefore important that applicants fully consider this concept and its content when formulating the project proposal (e.g., by applying and accessing the Expera platform as an expert).

6 GUIDANCE FOR APPLICANTS

6.1 Call procedure

The call procedure has three steps;

- the proposal phase
- the evaluation phase and eligibility check
- the selection phase

During the proposal phase, there will be a compulsory advisory period for all potential project applicants. During the advisory period, the project applicants are obliged to seek support and guidance from their respective agencies. This is to increase the suitability of the projects with respect to national/regional requirements.

During the eligibility and evaluation phase, the project proposals will be subjected to an eligibility check of formal requirements, national or regional eligibility check, and a transnational

⁷ <u>http://www.eranet-smartenergysystems.eu/About/Our_Organisation</u>

⁸ including funded projects from previous ERA-Net SES calls

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independent expert evaluation. The project proposals must include all necessary information and documentation, as well as any information needed to fulfil national/regional requirements. If these formal requirements are not met, the project proposal will not pass the evaluation phase. The different steps of the evaluation are described in more detail in the following sections (6.1.1-6.1.4).

Call procedure timings					
Proposal phase	Call opens	14 June 2023			
	Compulsory advisory period	14 June- 12 September 2023			
	Proposal submission deadline 12 September 2023				
Eligibility and evaluation phase	Eligibility check of formal requirements Transnational expert evaluation National/regional eligibility check	June –September 2023			
Selection phase	Decision communicated to applicants	November 2023			
Project phaseProject start dateDecember 2023 – March 2024					

The ERA-Net SES Call Management⁹ will facilitate the call process.

6.1.1 Project proposals

The project proposal phase opens on 14 June 2023. Consortia are required to submit their registration of interests and project proposals and any supporting documents in English via the Electronic Submission System, available on the <u>ERA-Net SES website</u>.

The submission portal is called INSIGHTS and is administrated by NordForsk and Nordic Energy Research.

Text and page limits are set within the Electronic Submission System, and applicants are advised to include information only directly relevant to this call to preserve focus, structure, and clarity in the application.

The deadline for submission of the project proposals via the <u>Electronic Submission</u> <u>System</u> is 12 September 2023 at 14:00 CEST.

Please note that some national/regional funding agencies may require additional documentation from the project partners according to national/regional regulations¹⁰. These should **not** be submitted in the central ERA-Net Smart Energy Systems Electronic Submission System, but directly to the relevant funding agency through their national/regional submission system (if applicable). Please consult your national/regional funding agency regarding this issue during the advisory periods. It is the responsibility of each individual project partner to ensure that all the necessary documents are submitted on time to the appropriate recipient.

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⁹ <u>http://www.eranet-smartenergysystems.eu/About/Our_Organisation</u>

¹⁰ Including regulations adopted to implement EU State aid rules



6.1.2 Advisory period

We strongly advice applicants to contact their respective national or regional funding agencies during the proposal submission period.

The applicants may receive feedback on their proposed project ideas from their individual national or regional funding agency in terms of scope, eligibility of partners and relevance of the project proposal depending on national and regional regulations. This will give the project partners the opportunity to revise their ideas and re-evaluate the participating partners and obtain necessary national/regional funding agency requirements information.

The national or regional contact points may provide information on the national or regional requirements for the project proposals, such as the potential requirement to submit a full *national or regional* proposal (i.e. in the national or regional funding agencies' submission system and language, adhering to national or regional regulations). Each project partner is responsible for the preparation and submission of all required documents according to their respective national or regional funding agencies is non-binding. The advice given by the funding agencies with respect to acceptance or rejection of the project proposal.

6.1.3 Evaluation and eligibility process

The evaluation criteria are built upon three main criteria:

- a. Excellence
- b. Impact
- c. Quality and efficiency of the implementation

For a more detailed explanation of each criterion, please see <u>Annex D</u>. No preference is given to projects with partners from numerous different countries or regions. Different project types require different numbers and types of partners (industry, academia etc.). The roles and activities of each partner within a project consortium should clearly add value to the objectives of the proposed project. Manageability of the consortium is key and must be demonstrated.

The evaluation and eligibility process comprise three steps, which are explained in detail below:

1. Eligibility check

The Call Management will perform an eligibility check of formal requirements as described in the last paragraph of <u>Section 5.1</u>.

The national or regional funding agencies will consider the proposals based on specific national or regional requirements (<u>Annex B</u>).

As such, projects will be subjected to a check of eligibility both with regards to partners involved and if applicable, with regards to the relevance of the project proposal to national or regional programmes.

2. Transnational evaluation of the project proposals

In the evaluation phase a panel of at least three independent experts will evaluate each project proposal, based solely on the evaluation criteria specific to the Joint Call 2023 (see <u>Annex D</u>). Each independent expert will first individually evaluate the assigned project proposals. Afterwards, the experts will meet to form a consensus evaluation. This process will be overseen by an independent observer.

The consensus evaluation will result in a ranked list of project proposals.



All evaluators and observers selected are required to declare their independence to the projects to avoid conflict of interest. They must adhere to the confidentiality conditions of the evaluation process.

3. ERA-Net SES selection and outcome

The final step of the evaluation process is a joint meeting of the Joint Call 2023 consortium to select projects for funding according to the ranked list from the independent experts. The outcome will be reported to the applicants by November 2023.

6.1.4 Confidentiality

Handling of project proposals and any information relating to them will be kept confidential in accordance with the applicable national or regional regulations. Project proposals will not be used for any purpose other than the evaluation of the applications, funding decisions, monitoring of the projects and mandatory reporting to the European Commission.

6.2 Consortia

To aid applicants in forming project consortia, the ERA-Net SES initiative will host a webinar where applicants may receive answers to questions.

The ERA-Net SES initiative has also coordinated a collection of Living Lab interested to engage with projects. Information on how to connect to and find potential Living Lab collaboration partners will also be readily available on the initiative <u>website</u>. The initiative will establish an Associated Partner Network with digital platform providers (DPP). The goal is to stimulate cooperation and create offers from these digital platform providers to RDD project consortia. Information on how to connect with DPPs is also available on the <u>website</u>.

Consortia may be constructed from at least two active partners from at least two different countries or regions participating in the Joint Call 2023. They must abide by the requirements given in <u>section 5.1</u> and the regional or national requirements in <u>Annex B</u>.

Partners from countries that are not members of Joint Call 2023 (see list of funding partners under <u>section 6.3</u>, "Funding arrangements") are encouraged to join a project consortium as additional partners. However, these additional partners must finance their activities from other sources, as each Joint Call 2023 funding agency will only fund partners from their own country or region.

The project partners are required to sign a consortium agreement to agree on Intellectual Property Rights (IPR) and other relevant issues dealing with responsibilities within the project and exploitation of results. They should ensure that the agreements are not in conflict with the regulations of the relevant national/regional funding agencies. Model consortium agreements can be found at <u>Europe - Useful documents (europa.eu)</u>. The Consortium Agreement is not required to be signed prior to the application deadline but is required for funded projects.



6.3 Funding arrangements

The total funding available for Joint Call 2023 projects is 6 750 000 Mio \in , made up of national or regional budgets. Funding of eligible costs will have to be in compliance with national rules – see <u>Annex B</u>.

Funding partners					
Country/ region Funding (€) (minimum regional/national funding available)		Organisation name	Acronym		
Austria	600 000	The Austrian Research Promotion Agency	FFG		
Czech Republic	1 000 000	Technology Agency of the Czech Republic	TA CR		
Germany 1 000 000 F		Forschungszentrum Jülich GmbH	PtJ		
Romania 500 000 (to be confirmed)		Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării	UEFISCDI		
Scotland (UK)	1 150 000 (1 000 000 GBP)	Scottish Enterprise	SCOTENT		
Sweden	1 000 000	Swedish Energy Agency	SWEA		
Turkey 500 000		The Scientific and Technological Research Council of Turkey	TÜBİTAK		
	5 750 000				
Total sum	(5 250 000 if UEDISCDI will not confirm)				

6.4 **Project duration**

Projects are required to start as soon as possible from December 2023 until March 2024. The recommended duration is 18 months. The maximum duration of a project is 36 months (subject to national or regional specific requirements). The minimum allowed duration of a project is 6 months.

6.5 **Project monitoring and expected deliverables**

Each project partner will be responsible for the necessary reporting to their funding agency according to national or regional rules. Yearly reports are required to obtain and maintain funding during the lifetime of their portion of the project. Apart from the national or regional project review, the transnational cooperation aspects will be monitored on the ERA-Net Smart Energy System level.

Any substantial change in an on-going project must be reported immediately to the funding agencies involved, and subsequently reported to the Call Management. Project partners



should be aware that changes may have implications on past, present and planned future funding.

In addition to the national or regional requirements, the additional Joint Call 2023 projects are required to deliver the following:

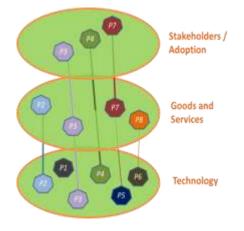
- 1. Participation in and presentation at meetings to report on the status of and results from the project. Detailed requirements for the contribution at these seminars will be specified in due course.
- 2. A single publishable and public final project report, which describes the activities and outcomes of the work. This should include an exploitation plan that states how the results of the project will be used. Detailed requirements for this report will be specified in due course. An abstract of the main results of the project will also be part of this report. Detailed requirements for the abstract will be specified in due course.

Applicants should be aware of the core ideas of the Knowledge Community and how the Knowledge Community Management will affect the work and composition of the projects (see Annex F). Active participation in knowledge-sharing and formative evaluation activities organised by the Knowledge Community Management must be considered (e.g., in terms of resource allocation) when planning and managing the project workplan, set-up and budget.



ANNEX A – THREE-LAYER RESEARCH MODEL

To reach the goals and desired impacts of the additional Joint Call 2023 partners in a multi-dynamic environment, it is necessary to continue developing and introducing the right enabling technologies, develop and structure the market with new goods and services, and to learn more about how to overcome barriers built into communities and society. This indicates the need for a cross-sectoral and interdisciplinary approach, including regionally available renewable resources, system integration of technologies, services, tools, business processes, market architectures and regulatory regimes, potential synergies in infrastructures, convergence of technology and application areas as well as basic design principles (security and privacy, resilience, energy and resource efficiency of equipment and components).



The essential innovations to be achieved can be visualised in these three layers:

Stakeholders / Adoption – overcoming: why do or don't we do it?

(Innovation and transition processes with stakeholders, consumer acceptance, education, policy, retail, community and society, social research, etc.)

Goods and Services - structuring: how do we organize it?

(Business models, regulatory framework, market design with new goods and services, economic research etc.)

Technology – enabling: which technology do we need?

(incl.: how can we make technologies form other sector available for the energy system? - telecommunications, machine learning, cross energy carrier solutions, grid automation, technological research etc.)

Please note that the methodologies and approaches to study the layers included in the project should be clearly defined. The work plan and deliverables should reflect all included layers and the potential interconnections between them. For projects covering more than one-layer, interdisciplinary teams including partners and experts with different backgrounds (e.g. economy, market design, management, social sciences, technology) may be of great value for the project. It is also important that the risk assessments for the projects fully consider all layers involved in the project, not only potential technological aspects.

The additional Joint Call 2023 partners will prefer projects that cover more than one of these three research layers (ideally all three). Projects covering stakeholder/adoption and/or goods and services layers as well, will be given priority over single layer projects. Projects should therefore clearly state goals for the stakeholder/adoption and goods and services layers in relation to technological issues.



ANNEX B – NATIONAL/REGIONAL REQUIREMENTS

Funding agency name	Forschungszentrum Jülich GmbH Project Management Jülich (PtJ)				
Programme name and link	Energy Research Programme https://www.energieforschung.de/energieforschungspolitik/energieforschungsprogramm				
Contact person	Ralf Eickhoff: <u>r.eickhoff@fz-juelich.de</u> , +49 2461 61-9419, +49 1515 8858107				
Eligible applicants	Stephan Schulte: s.schulte@fz-juelich.de, +49 2461 61-96649 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				
Eligible costs	Public organisations and municipalities Only eligible in this call				
	 Personnel costs including overheads (if applicable) Travel expenses (default rate per journey: € 250 domestic, € 750 Europe) 				
Type of research funded	Focus on applied research (from TRL 4 up to TRL 8)				
Require separate national or regional full application	Successfully selected full-proposal must later submit national applications (<u>https://foerderportal.bund.de/easyonline/</u>)				
National or regional funding available	1 Mio. €				
Further specifications	Applicants are obliged to contact PtJ for advice in advance; depending on the number of applications, a pitching event will be organised in September, where applicants have to present their proposal. Project duration: 18 – 30 month (minimum of 18 month)				



AUSTRIA

Funding agency name	Austrian Research Promotion Agency (FFG)				
Programme name and link	https://www.ffg.at/programm/era-net-ses-enerdigit				
Contact person	Urban Peyker, urban.peyker@ffg.at, +43 5 77 55 5049				
Eligible applicants	Legal entities, partnerships and sole traders that are not part of the Austrian federal administration are eligible to receive funding.				
	The following are eligible for funding:				
	Companies of any legal form				
	Institutions of research and knowledge dissemination				
	Universities				
	Universities of applied sciences				
	Non-university research institutions				
	 Technology transfer institutions, innovation agents and other research- oriented organisations such as associations with a relevant purpose 				
	Other non-commercial institutions				
	Local authorities and autonomous bodies				
	 Non-profit making organisations such as NPOs 				
Eligible costs	 All project related costs (e.g. Personnel, Equipment, Consumables, Training, Travels, etc.). Eligible costs must be allocable directly to the project. This means that: they are incurred additionally to the normal operating costs during the funding period they are in accordance with the Funding Contract they can be evidenced by receipts Support is paid in the form of non-repayable grants and is limited to amaximumof EUR 2 millionper project. The funding rate varies depending on the type of partner. 				



			*	ERA-Net	
	Type of organi-	Industrial re-	Experimental		
	sation	search	development		
	Small enterprise	80 %	60 %		
	Medium-sized	70 %	50 %		
	enterprise				
	Large enterprise	55 %	35 %		
	Research insti-	85 %	60 %		
	tutions (non-				
	commercial ac-				
	tivities)	000/	000/	_	
	Non-commercial	80%	60%		
	institutions(non- commercial ac-				
	tivities)				
	111103)				
Type of research funded	Industrial Research / Experimental Development				
Require separate					
national or regional full	Projects need to submit a national proposal parallel to the				
application	transnational Joint Call proposal.				
National or regional					
funding available	600.000 Euro				
Further specifications	Projects with funding provided by FFG are required to last min. 12 and max. 24 months.				



CZECH REPUBLIC

Funding agency name	Technology Agency of the Czech Republic (TACR)
Programme name and link	EPSILON programme for applied research and experimental
	<u>development</u>
Contact person	Ondřej Kusbach
	ondrej.kusbach@tacr.cz
	+420 770 127 549
Eligible applica-	1. Enterprises (according to Annex 1 of the Regulation);
nts	2. Research organizations (according to Article 2 paragraph 83 of the Regulation);
	3. 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).
	TACR excludes the disbursement of individual aid to an en- terprise:
	 against which a recovery order has been issued which is un- paid;
	 meeting the definition of an "<u>undertaking in difficulty</u>"
	 which has not met the obligation to publish the financial statements for the years 2019, 2020, 2021 in the respective register the so-called "Veřejný rejstřík";
	 which has not disclose its ownership structure in the so-called "Evidence skutečných majitelů".
Eligible costs	1. Personnel costs (including scholarships);
	2. Subcontracting costs (max. 20% of total eligible costs throughout the whole project period);
	3. Other direct costs (write-offs, protection of intellectual property, operating expenses, travel costs, consumables);
	4. 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 <u>General Terms & Conditions</u> .



	VAT is not an eligible cost.
Type of research funded	Applied research (industrial research and experimental development)
	TRL: 3-9
Require separate	Mandatory forms to be submitted
national or re-	Czech applicants are requested to submit:
gional full appli- cation	- a Sworn statement of the applicant;
	 Completed "TACR Application Form" Excel file (submit- ted by the main Czech applicant only)*
	 Sworn statement of the composition of the consortium (submitted by the main Czech applicant only if there is Czech enterprise in the project consortium);
	 if planning to achieve the "Patent" type of results, patent search must be substantiated*;
	 "Do no significant harm" declaration (submitted by the main Czech applicant only).
	All mandatory documents to be found on TA CR website. Dead- line for submitting all documents is the same as the deadline for submitting proposals (12 September 2023). All documents prov- ing the eligibility of the Czech partner stated above shall be sub- mitted via the TACR data box (TACR data box ID: afth9xp).
	*Applicants who will not submit this mandatory form (if relevant) via databox before the deadline will be considered as not eligible for TA CR funding.
	Project start
	Please note that following national legislation, Czech applicants shall start within 120 days from the funding decision being com- municated by the Call Management (60-day period to enter into a contract + 60-day period to start the project).
	For more information see TA CR EnerDigit website or contact TA CR's contact person.
National or re- gional funding available	Funding commitment: € 1 000 000
	Maximum funding rate (intensity) per project (Czech part): 85 %



Further specifica-	Maximum project duration: 24 months*
tions	*possible divergencies have to be addressed individually and with regard to the duration of the national programme EPSILON
	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 re- sults.);
	 the aim of the project has to be relevant to the overall aim of the funding programme EPSILON;
	 the declared share of industrial research and experi- mental 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 realized results - prototype, functional sample;
	 Z - pilot plant, proven technology;
	• R – software;
	• F - results with legal protection - utility model, industrial design;
	• O – Miscellaneous.
	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 man- agement 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 na- tional/regional level
	Czech beneficiaries must follow the rules of TA CR for reporting on the project (i.e. submission of interim and final reports and



 ERA-Net
reports on the implementation of the results).
Publicity obligations
While promoting the project and its results Czech beneficiaries must follow the publicity rules of TA CR.
In addition, Czech beneficiaries in this Call must also follow the publicity rules of Národní plán obnovy (described in <i>Metodický pokyn pro publicitu a komunikaci pro Národní plán obnovy na období 2021-2016</i>).
Czech applicants in this Call will be funded from the EU Re- covery and Resilience Facility - Czech National Recovery Plan (Národní plán obnovy - NPO) their projects must there- fore:
 adhere to the "Do no significant harm" principle;
 meet at least one of the objectives of digitalisation;
 follow publicity rules of NPO;
• avoid conflict of Interest - "By submitting a project proposal, the applicant declares that neither the submission nor the subsequent implementation of the project will create a conflict of interest for the applicant within the meaning of Article 61 of Regulation (EU) 2018/1046 of the European Parliament and of the Council of 18 July 2018.";
• not include VAT as an eligible cost.
Guide for Czech applicants" and all mandatory forms will be available on <u>TA CR website</u> (in Czech).

TURKEY





UK, Scotland

Funding agency name	Scottish Enterprise
Programme name and link	EnerDigit Joint Call 2023, no link available
Contact person	Karen Fraser: <u>karen.fraser@scotent.co.uk</u> Rachel McCaw: rachel.mccaw@scotent.co.uk
Eligible applicants	Companies (SME or large) that are legal entities registered, operating and carrying out research and development activities within the Scottish Enterprise area or companies intending to establish a presence within the area to carry out research and development activities.
	 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 a company eligible for and requesting Scottish Enterprise 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 budget of the Scottish research organisations should be no greater than the combined budgets of the Scottish companies involved in the collaborative project and seeking funding from Scottish Enterprise.
Eligible costs	Project-specific costs including salaries, overheads, equipment, sub-contracting, consultancy, training, materials, trials, IP management (SMEs only), travel and subsistence, and audit certificates for financial claims (SMEs only). Detailed guidance available on request.
Type of research funded	No specific rules on TRLs. Projects should include the development of new products, processes or services for Scottish companies.
Require separate national or regional full application	Yes, a Scottish Enterprise application form and cost breakdown must be submitted within one week after the Proposal deadline. Forms are available from <u>karen.fraser@scotent.co.uk</u> .
National or regional funding available	Up to £1m (EUR 1.15m)
Further specifications	 Maximum grant rates are as follows: small and me- dium sized enterprises (SMEs) 50%; large companies 40%; research organisation 100% (or 80% FEC). The project / activity must be strategically important to the Scottish company(ies) and in line with its business plan.



SWEDEN





ROMANIA



ANNEX D – EVALUATION CRITERIA

Evaluation criteria

Scores 0 – 5 (0 = Fail/Missing; 1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excelle	nt)
(a) Excellence	
1. Relevance to the call	
- Proposed piloting, validation and demonstration fit the call aim	
- Proposed project is clearly based on a specific need, involving (a) specific "need-owner(s)" or clearly demonstrates engagement with relevant stakeholder	
2. Degree of innovation and innovative content	
 Project represents something genuinely innovative and/or is a significant improvement on current knowledge and expertise, including a clear description of the range of innovation (i.e. is it innovation on a local/international/worldwide scale) and type of innovation (such as process innovation, product innovation etc.) Feasibility of innovation and innovative content as a whole 	
 3. State-of-the-art, link and contribution to past and ongoing, relevant international initiatives in digitalisation of energy systems and networks Clear description of state-of-the-art within the project's field. Clear positioning of the project in relation to the described state-of-the-art and description of how the project builds on relevant international initiatives, knowledge and systematics 	
 4. Working methods and models <u>Excellence in collaboration:</u> Approaches and methods for collaboration are clearly defined, enabling relevant stakeholders to participate in co-creation of solutions. Considerations on how the execution of the project will be performed with minimal climate impact are included IPRs described and handled appropriately (licenses, patents etc.). Gender and diversity equality and perspectives are considered and implemented, both within the project group and in the development of solutions Coverage of three-layer research model: 	Score 0-5
 Coverage of three-layer research model: More than one layer covered 	



		ERA-Net	
4	Concrete methodological approach to the three-layer model (if only a single layer project, the reasons for this must be clearly explained and justified).		
	Specific adoption/market challenges related to technology development are addressed		
	Theories and methods behind social or market assumptions are relevant and clearly explained.		
~	If market/social research or interventions are to be performed the methodologies should identify which kind of data to collect, how to collect it, and how to analyse it.		
(b) Ir	npact		
1. Ex	pected impacts		
•	cted impacts are feasible and desirable, and include consideration of cietal, environmental and sustainability impacts		
- Shor	t-term and long-term impacts contribute to the call's aim	Score 0-5	
- Imple	ementation contributes to the expected impacts		
2. Sc	aling-up, reproducibility, replicability and interoperability potential		
- High scaling-up potential.			
- High reproducibility/replicability potential.		Score 0-5	
- High	interoperability potential.		
3. Tra	ansnational value		
	ed value of the project being transnational (as opposed to being only		
- Bene	tional) fits and relevance of the project internationally and contribution to fulfilling ational sustainable energy initiatives' objectives	Score 0-5	
-	propriateness of measures for dissemination and exploitation of sults		
0	et audience identified, clearly stating why they are important for the oject and how they will be involved		
- Suggested communication activities appropriate and related with identified stakeholders		Score 0-5	
- Mear	ns of dissemination and exploitation of results		
(c) Q	uality and efficiency of the implementation		
• •	ality and relevant experience of project team		
- Expe	rience, specific expert experience (CVs)	Score 0-5	
•	- Relevant interdisciplinary experience (complimentary expertise)		



 Beneficial team composition (national/regional and competence diversity – skills shall match the working areas identified in the project. Gender and diversity measures should also be considered in the team composition.) 	
2. Appropriateness of the management structure and resource allocation	
- Management structure (roles) clearly defined and appropriate	
- Manageability of consortium (number of partners, key players etc.)	Score 0-5
- Resources are allocated suitably depending on specific expert competencies	
3. Work plan, implementation, feasibility, and manageability	
- Detailed, clear, and logical work/implementation plan	
- Feasibility of deliverables and milestones with clearly defined KPIs	
- Project delivers results efficiently in relation to the project budget	Score 0-5
-Project has considered climate impact minimizations in the implementation	
4. Risk identification, analysis, and preventive measures	
 Risks appropriately identified, including a mitigation strategy for loss of project partners (if applicable) 	
 Risk analysis is clear, coherent, and logical. It should be applied to the work packages and the investigation approach used in the project 	Score 0-5
 Preventive and remedial measures are proposed, and measures seem feasible and valid 	
Total maximum score sum	60



ANNEX E – TECHNOLOGY READINESS LEVELS

The following definitions apply to TRLs:

- TRL 1 basic principles observed.
- TRL 2 technology concept formulated.
- TRL 3 experimental proof of concept.
- TRL 4 technology validated in lab.
- TRL 5 technology validated in relevant environment.
- TRL 6 technology demonstrated in relevant environment.
- TRL 7 system prototype demonstration in operational environment.
- TRL 8 system complete and qualified.
- TRL 9 actual system proven in operational environment.

ANNEX F – KNOWLEDGE COMMUNITY STANDARD WORK PACKAGE

Knowledge Community Standard Work Package

Please insert the tasks below into your overall Work Plan as appropriate, and allocate the resources needed in the project budget (see budgeting estimation below). Task 1 and 2 are organised by the ERA-Net SES Knowledge Community Management in cooperation with the funded projects. Task 3 will be organised by the Joint Call 2023 funding partners with involvement of the ERA-Net SES Knowledge Community Management as well as the Clean Energy Transition Partnership (CETPartnership) Knowledge Community. The schedule for these events will be jointly developed within the family of funded projects, call management and the national funding agencies.

Knowledge Community events will take place virtually whenever feasible. However, in case of physical events, ERA-Net SES encourages you to consider e.g. train options if feasible to avoid climate impact.

Task 1. Involvement in formative evaluation

Task 1.1 – Profiling

• Participate in an online survey on project experiences and deliverables related to topics of the Knowledge Community. The Project will answer about 25 questions about scope, targets, and results of the projects in an online tool according to an "evaluation and profiling"-manual that will be handed out to the projects at their start.

Task 1.2 – Feedback

- Receive written feedback and consider recommendations of evaluators.
- Review results of survey, partly in face-to-face or virtual meetings with the evaluating experts.
- Participate in a 2-day Knowledge Community joint project event or similar jointly organized activity, including a feedback meeting with experts and key project members (can partially be a *virtual meeting*).

Task 1 resource requirement estimation: 10 – 15 days/ project.

Task 2. Crosscutting Knowledge Community activities

Task 2.1 – Working Groups

- Participate in, prepare for and follow-up the following 6 working groups in physical and web-based meetings:
 - System Architecture & Modelling
 - Regulatory & Market Development
 - Consumer & Citizen Involvement
 - Storage and Cross Energy Solutions
 - Interoperability & Standardisation
 - Regional Matters
 - European Collaboration Platform for Interoperability Testing

For the relevant working groups, projects are expected to participate in a minimum of 1 physical and 2 virtual working group meetings.

Task 2.2 – Living documents

Smart Energy Systems



• Work with the knowledge sharing platform Expera, mainly contributing to the development of living documents (related to the topics of the abovementioned working groups), spotlights and policy briefs. Consortium members will contribute own and other project results, e.g., clarify conclusions, give feedback, provide examples etc.

Task 2.3 – Cooperation on communication and dissemination activities

- Participate in teleconferences and workshops to detect synergies between the projects, and support and improve (joint) communication and dissemination activities.
- Participate in a minimum of 1 joint project presentation activity organized by the Knowledge Community.

Task 2 resource requirement estimation: 10 – 15 days/ project.

Task 3. Deliverables to the joint call initiative (in addition to national or regional funding agency requirements, if applicable).

- Task 3.1 Annual report 2024. Presentations from participation in the Knowledge Community activities may be submitted as the content of the 2024 annual report.
- Task 3.2 Final reporting in 2024 or 2025, depending on project end date
- Task 3.3 A minimum of one project event, which can be in the framework of a Knowledge Community activity
- Task 3.4 Final joint call event
- Task 3.5 Abstract of the main results

Task 3 resource requirement estimation: 10 - 15 days/ project.

Budgeting of resources for the abovementioned tasks

The exact amount of resources to be committed depends on the project length, size, consortium composition and specific project focus. The final organisation and execution of the abovementioned tasks will be the result of an iterative process between the Knowledge Community Management and each funded project as applicable. The estimated resources required for Task 1, 2 and 3 are:

- i. 30 45 days/ project.
- ii. €5 000 €10 000/ project for travel, accommodation and related expenses.

The advised minimum total resource allocation is €15 000 regardless of project duration.



ERA-Net SES EnerDigit additional Call 2023 funding partners



Swedish

Sweden

Energy Agency







Czech Republic

UK, Scotland



Austria

Turkey



Romania