



**i-nergy**  
Artificial Intelligence  
for Energy

**1st Open Call**

**Frequently Asked Questions**



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[www.i-nergy.eu](http://www.i-nergy.eu)

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# 1 General Questions about I-ENERGY

## 1.1 What is I-ENERGY

I-ENERGY is an EU funded innovation project around Artificial Intelligence for Next Generation Energy.

AI spreading in the energy sector is expected to dramatically reshape the energy value chain in the coming years by improving business processes performance, while increasing environmental sustainability, strengthening social relationships, and propagating high social value among citizens.

However, uncertain business cases, fragmented regulations, standards immaturity, and low-technical SMEs workforce skills barriers are currently hampering the full exploitation of AI along the energy value chain.

I-ENERGY will deliver financing support for third parties through 2 Open Calls to select up to 10 project in the 1st Open Call, and up to 15 projects in the 2nd Open Call distributing up to 2 million euro among them for new energy use cases and technology building blocks validation, as well as for developing new AI-based energy services in order to to strengthen the SME competitiveness on AI for energy and enrich the AI resources and tools catalogue for Energy on Europe's AI-on-demand platform AI4EU. After both Open Calls the selected projects will participate in a Technology Transfer Programme (TTP) receiving technical mentoring services provided by the core partners, which is one of the added values of the project.

The I-ENERGY Consortium consists of 17 partners, coordinated by the Institute of Communication and Computer Systems (ICCS) of the National Technical University of Athens.

## 1.2 Where can I find information about the project?

Webpage- <https://i-energy.eu/>

Twitter- [https://twitter.com/inergy\\_h2020](https://twitter.com/inergy_h2020)

Community- <https://spaces.fundingbox.com/c/I-ENERGY>

Open Calls webpage- <https://i-energy-opencalls.fundingbox.com/>

## 2 Questions related to I-ENERGY 1<sup>st</sup> Open Call

### 2.1 Who could be a perfect candidate for this Open Call?

The ideal project is a single applicant (SME) with a use case developing building blocks and applications for new AI algorithms/services and small-scale experiments (prototypes) using own resources (modules, models and components) that addresses the developments and implementation of technology and systems applicable to at least one of the outlined specific cross-sectorial Challenges in the Energy Sector for the purpose of enriching the AI resources and tools catalogue for Energy on Europe’s AI-on-demand platform AI4EU.

The preferable initial TRL (Technology Readiness Level) should be **TRL3**<sup>1</sup> (Proof of Concept Established)

For more detailed information please check our [Guide for Applicants](#).

### 2.2 What are SMEs?

Small and medium-sized enterprises (SMEs) are defined in the [EU recommendation 2003/361](#). The main factors determining whether an enterprise is an SME are: (1) staff headcount, (2) either turnover or balance sheet total

Company category	Staff headcount	Turnover or	Balance sheet total
Medium-sized	< 250	≤ € 50 M	≤ € 43 M
Small	< 50	≤ € 10 M	≤ € 10 M
Micro	< 10	≤ € 2 M	≤ € 2 M

Additional details can be found: [https://ec.europa.eu/growth/smes/sme-definition\\_en](https://ec.europa.eu/growth/smes/sme-definition_en)

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<sup>1</sup> TRL, Technology Readiness Level. Technology Readiness Levels (TRLs) are indicators of the maturity level of particular technologies. This measurement system provides a common understanding of technology status and addresses the entire innovation chain. There are nine technology readiness levels; TRL 1 being the lowest and TRL 9 the highest. In our project we refer to [Annex G of the General Annexes](#) to the Work Programme 2016/17 for a full description of TRLs.

## **2.3 Can I submit my application if my company (SME) is not yet established?**

SMEs must be registered as legal entities by the 8th of November 2021.

## **2.4 How do I submit my application to the Open Call?**

Online through the I-ENERGY microsite for this Open Call at FundingBox Platform:

<https://i-energy-1-oc.fundingbox.com/>

## **2.5 How long does it take to fill in the application?**

To successfully fill in the application form, you will probably need 1-2 days. You can split the proposal writing between your team members. You will be able to add contributors to your application so that each team member can complete their section.

Specific character limits have been established in each section of the online application form. We encourage you to keep your proposal focused on the requested information. We recommend you to start the submission process well before the deadline in order to avoid last minute circumstances.

## **2.6 Which requirements must the application fulfil?**

Proposals must be submitted in English online through the FundingBox and before the deadline for this call (20th January 2022 at 17:00 CET).

They also must not have any conflict of interest nor be included in any exclusion cases to be eligible for funding.

Check section 3 (Eligibility criteria) of the Guide for Applicants for this open call for the complete list of requirements.

## **2.7 Can a company submit two project ideas?**

If more than one proposal is identified, only the last proposal which has been submitted will be evaluated. So, no point multiplying your chances this way, it is better to submit only one proposal and make it shine.

## 2.8 Can I apply if my company is associated with I-ENERGY partners?

No, applicants cannot be affiliated (directly or indirectly, for example through board members or third parties) to any of the consortium partners. They can't be consortium partner's employees nor board members.

## 2.9 What happens if I do not submit my application within the deadline?

We do not accept applications after the deadline. We strongly encourage you not to wait until the last minute to submit your proposal. Failure of meeting the submission deadline for any reason, including extenuating circumstances, will result in the rejection of the proposal

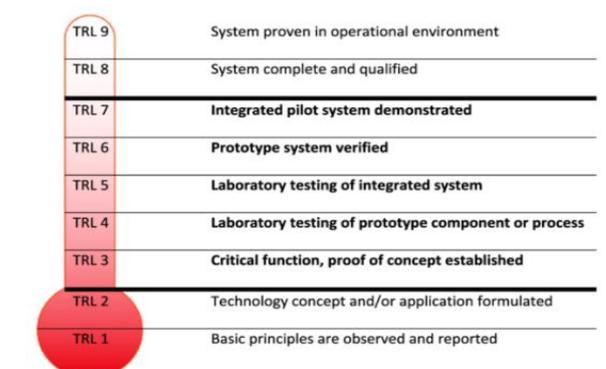
## 2.10 Will I be able to modify my proposal after submission?

You can modify the application as many times as you need **before the deadline**, but remember that you need to submit before the **20th of January 2022 at 17:00 CET**. You won't be able to modify your application after this deadline.

## 2.11 What is TRL?

Technology Readiness Levels (TRLs) are indicators of the maturity level of particular technologies. This measurement system provides a common understanding of technology status and addresses the entire innovation chain.

There are nine technology readiness levels; TRL 1 being the lowest and TRL 9 the highest. In our project we refer to Annex G of the General Annexes to the Work Programme 2016/17 for a full description of TRLs.



## 2.12 What type of support is available for preparing the proposal?

The [Guide for Applicants](#) is the main reference document. It provides detailed information about the requirements of the evaluation and selection process, and the Technical Transfer Programme (TTP) offered by I-ENERGY.

Additionally, we will be holding several webinars/infodays where you can pose questions and get to know the details and tips for increasing your chances of success.

You will also be able to find up to date information in the [I-ENERGY Online Community](#), where you can also interact with your peers and consult with us via the [Open Call HELPDESK space](#).

As the last option you can write to us at [i-energy.help@fundingbox.com](mailto:i-energy.help@fundingbox.com) to clarify any doubts you might have and couldn't get answers to via the other channels.

## 2.13 What are the challenges within the energy sector that the proposal can address?

The Bottom-up projects should address the development and implementation of technology and systems applicable to these specific cross-sectorial challenges:

- **AI for network assets predictive maintenance:** AI-based predictive and prescriptive analytics and DT models for assessing the health of network assets (aka transformers, power lines, etc.) to increase their lifetime and reduce failure rates.
- **AI for network loads and demand forecasting towards efficient operational planning:** AI-based forecasting techniques supporting network load and demand assessment to improve the reliability of the grid operation.
- **AI for energy demand and supply prediction:** AI-based analytics enabling to assess, balance and/or match energy supply and demand.
- **AI for energy storage management decisions:** AI-based decision support algorithms for managing power flow fluctuations, matching energy supply and demand, optimising the operation of energy storage devices, etc.
- **AI for integrated TSOs / DSOs asset management:** AI-based predictive analytics supporting system/grid level condition monitoring and management of network assets.
- **AI-based consumption and flexibility prediction:** AI-based analytics for predicting consumption based on customer needs, habits, weather forecasts and other aspects, forecasting aggregated customer demand and enabling flexibility sources' and dynamic load management.

- **AI services for Solar Energy and Photovoltaic Applications:** AI services and applications enabling data-driven operation and maintenance (O&M) of solar energy and photovoltaic projects and installations.
- **AI for Electric Vehicles:** AI algorithms and services enabling to forecast, analyse and manage the load or flexibility potential of electric vehicles' charging stations and/or support related techno-economic decisions (e.g. charging stations' installation, pricing of charging sessions, etc.)
- **AI for trading in energy communities:** AI-based analytics supporting peer to peer energy trading and flexibility management within communities.
- **AI for energy efficiency investments and decision support systems:** AI-based decision support techniques and services enabling evaluation, planning and prioritisation of energy efficiency investments and thereby investment de-risking.
- **AI for improved energy performance:** AI-based analytics for monitoring and optimising the energy performance of buildings, electric vehicles' and other energy consuming/generating infrastructures.
- **AI for energy savings and contracts:** AI-based analytics allowing to assess, monitor and verify energy savings, and increase the reliability and trust on energy performance contracts.
- **AI for fighting climate change and transform environmental impact of business:** AI models and services depicting and predicting the impacts of climate change, and generating accordingly recommendations and actionable insights to mitigate the latter and create environmentally sustainable business models.
- **Applications of reinforcement learning in energy systems:** Application and evaluation of reinforcement learning techniques to improve the reliability and transferability of data-driven models for energy systems.
- **Open Innovation:** AI-based services boosting prosumer empowerment and the creation of collaboration models.

## 3 Questions related to I-ENERGY Evaluation Process

### 3.1 What happens after my application has been submitted?

After the Open Call deadline, applications will be subjected to the evaluation process.

### 3.2 What is the evaluation process like?

The Selection process has 5 Steps:

#### **Step 1: Automatic Eligibility Check**

The eligibility check will determine whether applicants meet the eligibility criteria listed in Section 3 of the Guide for Applicants.

#### **Step 2: Pre-scoring** (if more than 55 proposals are submitted)

The automatic pre-scoring system will assign a score to the eligible proposals according to the predefined criteria listed in Section 4.2 of the Guide for Applicants and select the 55 top proposals to pass on to the next phase: the External Evaluation.

#### **Step 3: External Evaluation**

In this phase, each project will be evaluated by **2 external and independent evaluators** specialized in the AI and energy field, following the process and considering the standard criteria outlined in Section 4.3 of the Guide for Applicants.

#### **Step 4: Consensus Meeting**

Based on the ranking obtained as a result of the External Evaluation, the 'Selection Committee' will decide by Consensus or minimum  $\frac{2}{3}$  of majority votes the List of applicants to pass to the next phase.

#### **Step 5: SubGrant Agreement Preparation and Signature**

Before signing the Agreement, you should pass the standard ethical check and provide documents regarding your formal status.

### 3.3 What is the criteria to assess the proposals?

External Evaluators will evaluate and score the Excellence, Impact and Implementation sections of the proposal.

Each evaluator will rank the application assigning a score from 0 to 5 for each criterion and produce an Individual Evaluation Report. The final score will be calculated as an average of the individual assessments provided by the Evaluators.

A detailed description of each criterion and the scoring is included in Section 4 of the Guide for Applicants.

### **3.4 Who are the external evaluators?**

Evaluators are external independent experts with proven experience in AI. The panel of external experts is selected and invited by the I-ENERGY consortium. Each evaluator signs a code of conduct and confidentiality clause before the evaluations are assigned.

### **3.5 What is the minimum score to pass the External Evaluation phase?**

The default threshold for Excellence, Impact and Implementation criteria is 3. The default overall threshold, applying to the sum of the three individual scores, is 10.

### **3.6 Who is the Selection Committee?**

The 'Selection Committee' is made up of one member for each of the following consortium partners:

- FUNDINGBOX (responsible for FSTP management),
- INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS (Project Coordinator),
- ENGINEERING (responsible for the technical and innovation management),
- ASM TERNI SPA (as EPES beneficiary and pilot leader)
- PARITY PLATFORM (as SME with significant experience in acceleration programmes)

### **3.7 What happens after the Consensus Meeting?**

The Provisional List of up to 10 proposals selected during the Consensus Meeting and the Reserve List will be sent to the European Commission for validation before the Formal Check process begins.

### **3.8 What documents will be required during the formal check?**

A formal check is conducted to verify that selected applicants fulfil legal requirements. To do so, each applicant will need to provide documents regarding the formal status listed in the table below:

Section	Comments
Legal entity data	<p>Please provide the information about the company: name, address, main registration number, VAT, signatories authorized to represent the company.</p> <p>This information has to be confirmed by documents</p> <ul style="list-style-type: none"> <li>• an extract of the current official registration document or its equivalent</li> <li>• official document proving your VAT registration.</li> </ul> <p><b>Information about staff headcount:</b> Please provide the information about staff headcount of the last 3 years (if your history is shorter please provide data starting from your set-up date).</p> <p><b>The Staff headcount</b> corresponds to the number of annual work units (AWU), i.e. the number of persons who worked full-time within the enterprise in question or on its behalf during the entire reference year under consideration. The work of persons who have not worked the full year, the work of those who have worked part-time, regardless of duration, and the work of seasonal workers are counted as fractions of AWU. The staff consists of:</p> <ol style="list-style-type: none"> <li>a) employees;</li> <li>b) persons working for the enterprise being subordinated to it and deemed to be employees under national law;</li> <li>c) owner-managers;</li> <li>d) partners engaging in a regular activity in the enterprise and benefiting from financial advantages from the enterprise.</li> </ol> <p>Apprentices or students engaged in vocational training with an apprenticeship or vocational training contract are not included as staff. The duration of maternity or parental leaves is not counted.</p> <p>To confirm staff Headcount please provide the following documents:</p> <ul style="list-style-type: none"> <li>• Enterprise <b>statistic reports/annual report/financial statement or any other supporting documents which demonstrate staff headcount.</b> It can be an official and signed declaration indicating the number of employees expressed in Annual Working Units.</li> </ul> <p><b>Funding within Horizon 2020 Programme:</b> if you already have been participating in Horizon 2020 Programme, please provide the information about your projects funded within H2020 – what kind of project has been granted, the amount and when.</p> <p><b>Conflict of interest:</b> Please provide the information about any actual or potential conflict of interest with any of the I-ENERGY Consortium partners.</p>
SMEs Company Check	<p>Please answer the questions related to the SME Company status verification</p> <p><b>SMEs Company confirmation:</b> to confirm that your company is an SME you will need to submit the following documents</p> <ul style="list-style-type: none"> <li>• an official and signed declaration indicating your shareholders and the percentage of shares that they own in your company (Document showing the holding structure of the Applicant enterprise)</li> <li>• or certificate of being an SME (if your country issue such). The certificate of being an SME is not mandatory.</li> </ul>
Attachments	<p>Please include all the attachments requested</p> <p><b>Official, valid and current registration document of the Applicant enterprise:</b> An extract from the current official registration document (or its equivalent: Company Register, Official Journal) indicating the name of your organization, the address of the head office, its registration number, authorized representatives. The enterprise <b>registration document</b> is a written statement from the Government or other authority which confirms that the company legally exists and confirms its data.</p> <p><b>Document showing the holding structure of the Applicant enterprise:</b> Shareholders and the percentage of shares that they own in the applicant enterprise.</p>

	<p><b>VAT Registration:</b> Copy of an official and valid document proving your VAT registration. To confirm the VAT number you can also confirm the VAT Information Exchange System (VIES) - <a href="http://ec.europa.eu/taxation_customs/vies/vatRequest.html">http://ec.europa.eu/taxation_customs/vies/vatRequest.html</a>.</p> <p>The above documents should have been established recently and in any case, no more than 6 months ago.</p> <p><b>Statistic reports/annual report/financial statement or any other supporting documents</b> indicating the number of declared employees of the Applicant enterprise (for last 3 years or, if it not applicable, for the period starting at the registration date).</p> <p><b>Additional applicant documentation:</b> e.g. certificate of being SME issued by your country authorities – please bear in mind that this certificate is not mandatory.</p> <p><b>Additional documentation of partner and linked enterprises:</b> if applicable, please enclose:</p> <ul style="list-style-type: none"> <li>• document showing the holding structure of partner/linked enterprise, e.g. official extract of your Shareholders (from the Chamber of Commerce or any other Official Register) or instead we can accept an official and signed declaration indicating shareholders and the percentage of shares that they own in the organization.</li> <li>• Statistic reports/annual report/financial statement or any other supporting documents indicating the number of declared employees of partner/linked enterprise. If the number of employees is not indicated in the above-mentioned documents, we can accept other supporting documents such as an official and signed declaration on the staff headcount expressed in Annual Working Units.</li> </ul>
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### 3.9 What licensing rights apply?

The ownership of all IPR created by the Beneficiaries, via the I-ENERGY funding, will remain with the Beneficiaries. Results are owned by the Party that generates them. An agreement will introduce provisions concerning joint ownership of the results of the sub-granted projects (if this will be the case). It will be assessed and negotiated case by case. The beneficiaries commit to exploit the results via the AI4EU marketplace (mandatory publication on AI4EU Catalogue). Optional publication on AIEU Experiments. Please find more information in the development section on [AI4EU Platform here](#).

## 4 Questions related to I-ENERGY funding

### 4.1 What are the payment conditions?

For the sake of simplicity and transparency, the Financial Support will be paid against specific Deliverables (which will be included in the 'Individual Mentoring Plan' annexed to the FSTP Agreement) and based on the results of the Interim Reviews.

The Interim Review will be carried out by the 'Mentoring Committee', following the steps indicated in Section 5 of the [Guide for Applicants](#).

The payments of the EU Funds will be linked to the outcome of these reviews and have to be approved by the 'Selection Committee'. Those not reaching the performance requested will not receive corresponding payments.

### 4.2 What is "lump sum"?

The lump sum is a simplified method of settling expenses in projects financed with Horizon 2020 funds. It means that you are not required to present accounting documents to prove the investment-related costs incurred (e.g. invoices). However, you are obliged to demonstrate that the implementation of the project is in line with the milestones set for it.

### 4.3 What is the payment schedule?

The final beneficiaries will receive the funding in the form of 'lump sum' as follows:

- Up to €10,000 will be paid after successful conclusion and validation of Deliverable 1 (IMP validation, identification of Proof of Concept [PoC]).
- Up to €40,000 will be paid after successful conclusion and validation of Deliverable 2 ('Prototype').

## 4.4 What services does I-ENERGY offer in the Support Program?

The first Technical Transfer Programme (TTP) will last 6 months and is articulated as a totally customised service, where highly specialised technical mentors are specifically selected to fit the needs of the up to 10 bottom-up projects and guide them along the whole program.

The Technical Mentors will support the bottom-up projects in defining their Individual Mentoring Plan (IMP) and Proof of Concept (PoC), as well as help to develop prototypes and MVPs, acting as a kind of 'Advisory Board' member for the selected bottom-up projects complementing the capabilities of the team members.

Please find more detailed information in Section 5 of the Guide for Applicants.

## 4.5 What is the Individual Mentoring Plan?

This document will be created at the beginning of the Technical Transfer Programme (TTP) by the beneficiary, supported by your mentor and include the specific milestones (KPIs and Deliverables) that will be reviewed by the 'Mentoring Committee' when evaluating the performance, deliverable and resource allocation, following the steps indicated in Section 5 of the [Guide for Applicants](#).

## 5 Questions about how to get help regarding the I-ENERGY Open Call

### 5.1 Where can I ask my questions?

If you still have any doubts regarding our Open Call process, feel free to get in touch with us:

- Ask your question in the Helpdesk space of [I-ENERGY Community](https://spaces.fundingbox.com/spaces/i-energy-open-call-helpdesk) at <https://spaces.fundingbox.com/spaces/i-energy-open-call-helpdesk>
- Send us an email to the following address: [i-energy.help@fundingbox.com](mailto:i-energy.help@fundingbox.com)

### 5.2 How can I complain about the results of the evaluation?

First of all, be aware that we won't be reviewing your complaint if:

- ...It is anonymous.
- ...The information is incomplete.
- ...It is not related to the results of the evaluation of the eligibility check and pre-scoring. Indeed, most of the evaluation process is run by independent experts in the field. The project consortium does not interfere with their assessment.

If, after receiving the results of any of the selection phases you consider that a mistake has been made, resulting in the rejection of your application, you have the right to send us a complaint. You can email us in English to [contact@i-energy.eu](mailto:contact@i-energy.eu) including the following information:

- Your contact details (including email address).
- The subject of the complaint.
- Information and evidence regarding the alleged mistake.

Important note regarding the timeline:

You have 3 calendar days to submit your complaint starting from the day after the communication was sent. On our side, we will review them within no more than 7 calendar days from its reception. If we need more time to assess your complaint, we will inform you by email about the extension.