**Project idea - description**

***Describe your project idea, taking into account the guideline values for the number of characters per chapter, on a maximum of 4 pages and submit your description to the network coordination of the Green Energy Lab showcase region:*** ***welcome@greenenergylab.at******.***

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| **Title** | *Short and long title of the project* |
| **Planned term** | *from MM/JJ to MM/JJ* |
| **Total cost** | *Total amount in €* |
| **Planned implementation path** | 🞏 National funding program*If known with a request to disclose the funding track being considered.* Text 🞏 International funding programs*If known with a request to disclose the funding track being considered.* Text 🞏 Direct use case without the use of funding |
| **Consortium:** *Details with company name and distinction between consortium leader, project partner and third-party provider.*  |
| Summary of the project including mention of planned milestones and expected results:*Reference value: 1.000 characters* Text  |
| How well does the project idea fit with the strategic orientation of Green Energy Lab and to what extent does the solution to be developed contribute to the achievement of Ö energy/climate goals?*Reference value: 1.500 characters* *What contribution does the project make to the four thematic spotlights: 1) Climate-neutral supply security and resilience, 2) Circular economy in energy systems of the future, 3) Green heating and cooling, 4) Social acceptance of climate protection technologies and measures.**Synergies and cooperation with existing Green Energy Lab projects are particularly relevant.**How relevant is the project's contribution to the following objectives: Increase in the share of renewable energy; development of an integrated energy system; use of flexibilities in energy production, distribution and consumption; potential to increase energy efficiency and reduce greenhouse gas emissions.**To what extent does the solution to be developed contribute to achieving the Ö energy/climate goals? To which of the SDGs (Sustainable Development Goals of the United Nations) does the project contribute and in what way?*Text How high is the degree of innovation or innovation hub in the course of the project? *Reference value: 1.500 characters**Brief description of the state-of-the-art (e.g., technology already available, products for sale, system integration, comparable projects). How high is the degree of innovation compared to the state-of-the-art? With which TRL/SRL/MRL level is started and which is planned to be reached? Important note: The TRL to aim for at the end of the term is 8-9. (Explanations: TRL: Technology Readiness Level; SRL: System Readiness Level; MRL: Market Readiness Level - a listing and explanation of each level is on the last page of this document).*Text Is there a technological pioneering role ? *Reference value: 1.000 characters**Which relevant national / international pre-developments exist in the consortium? What is the current status of prior developments in national / international comparison? Can a technological pioneering role be achieved through the project goals?*Text How big is the market potential and scalability? *Reference value: 1.500 characters**To what extent are the defined project goals suitable for a broad market introduction (transferability, scalability, ease of duplication)? Is a demonstration of the solution to users foreseen? How high is the exploitation potential (customers, market segments) and how will this be achieved (prototypes, demonstrators, business models)?*Text How well is the integration of users developed?*Reference value: 1.500 characters**To what extent are users already integrated in the development phase and in the course of the project? Describe their involvement and how it is planned.*Text Are the project consortium and project management suitable for the successful implementation of the project? *Reference value: 1.000 characters**To what extent are the required (interdisciplinary) scientific and application-oriented competencies covered for the project? What experience and competencies are available for efficient and successful project management?*Text  |

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| **Technology Readiness Level (TRL)** |
| **1** | **Application-oriented basic research** | Basic operating principle studied. |
| **2** | Functionality & applications described (process studies without proof of concept). |
| **3** | Proof of function (component) provided in the laboratory. |
| **4** | **Application-oriented research** | General function demonstrated in test environment (system capability in principle). |
| **5** | Implemented in application-grade system & feasibility demonstrated under laboratory conditions. |
| **6** | Works in an application-like environment (close to reality). |
| **7** | **Reallabs** | Prototype tested in operational environment (1-5 yrs). |
| **8** | Sales sample for end use Qualified system Functional in the field of application. |
| **9** | Commercial use. Qualified system successful use. |
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| **System Readiness Level (SRL)** |
| **1** | **System conception** | System components only tested stand-alone so far. |
| **2** | System environment for integration is defined. |
| **3** | System integration concept is available. |
| **4** | **System testing** | System integration concept has been modeled. |
| **5** | System integration tested experimentally in the laboratory. |
| **6** | System integration tested in pilot project. |
| **7** | **System integration** | System integration has been demonstrated several times in the application environment. |
| **8** | System integration guidelines and norms/standards are available. |
| **9** | System integration is state of the art. |
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| **Market Readiness Level (MRL)** |
| **1** | **Basic research** | Requirements are known, but not yet evidence-based. |
| **2** | **Needs formulation** | Concept and scope are defined and formulated. |
| **3** | **Needs validation** | "Initial offer" available; relevant stakeholders like your presented projects. |
| **4** | **Small scale stakeholder campaign** | Field test/project carried out with relevant stakeholders (around 50 friendly customers involved). |
| **5** | **Large scale early adopter campaign** | Field test/project conducted with early adopters (around 100 involved friendly customers in total). |
| **6** | **Proof of Traction** | You have more than 100 paying customers. |
| **7** | **Proof of satisfaction** | Team and customer satisfaction demonstrably testify to their success and progress. |
| **8** | **Proof of scalability** | A stable sales pipeline and a good understanding of the market enable revenue forecasts. |
| **9** | **Proof of Stability** | They generate sustainable revenue and expect further growth. |