Annex 1. Detailed Terms of reference

Terms of Reference
for engaging an expert/company to prepare a feasibility study for establishing an energy community in the Municipality of Novaci

1. Basic information

Eko-svest (hereinafter referred to as the Client) with support from The Nature Conservancy (TNC), is implementing a project to analyze the feasibility of establishing a citizen **energy community** and other forms of management and repurposing of degraded land (brownfields) in the Municipality of Novaci, Republic of North Macedonia.

This initiative stems from the joint collaboration between TNC, Eko-svest and the Macedonian Academy of Sciences and Arts (MANU), which produced a map of the most favorable locations for installing photovoltaic and wind power plants on degraded lands. The old coal mines in Novaci were identified as priority locations, which can be used as land for another purpose - electricity production.

There are three coal mines in the Municipality of Novaci, two of which are state-owned and managed by ESM (Power Plants of Macedonia). In accordance with the draft National Energy and Climate Plan (NECP), these areas are recognized as priority for the development of photovoltaic power plants. At the same time, the legal framework for the introduction of **energy communities is being prepared**.

With this in mind, it is necessary to prepare a feasibility study that will analyze possible models and approaches for establishing an energy community or cooperation platform, which may include citizens, public institutions, private entities, civil society organizations and other relevant stakeholders, as well as various forms of partnership and association. The study should also take into account the interests of the main stakeholders such as the Municipality of Novaci and ESM and address the effects of the possible project implementation models on them. The feasibility study should assess and compare multiple project implementation models (including, but not limited to, an energy community model, public ownership and/or PPP or mixed models) and should not assume any single model as the default option.

The feasibility study should also consider an approach for the rehabilitation and future use of the degraded sites, in order to provide a new function within the local community through sustainable and innovative solutions. The study should analyze opportunities for the establishment of educational and demonstration centers related to renewable energy sources and the energy

transition, as well as opportunities for the involvement of academic institutions, local stakeholders and citizens in the management and use of such spaces, thus the project will contribute to a just and socially inclusive energy transformation.

2. Purpose of the engagement

The aim of the engagement is to prepare a feasibility study that will provide a comprehensive technical, economic, legal and organizational management analysis of possible models for establishing energy communities and other forms of cooperation, based on the use of different types of degraded land (including, but not limited to, former mines) in the municipality of Novaci. The study will consider the roles, relationships and correlations between the involved stakeholders – citizens, local government, public and private entities, civil society organizations and other relevant actors – as well as their readiness and capacity to associate. In addition, the long-term social, economic and environmental benefits will be analyzed, specific recommendations will be offered for financial and management models, distribution of benefits, active involvement of citizens and measures for rehabilitation and sustainable use of the locations. The proposed model should be flexible and replicable in the Kičevo region.

The results from this feasibility study will serve as an analytical contribution to the Government's Just Transition Plan and related planning documents, as well as a non-binding input for further discussions on the development of such projects in the future.

3. Scope of work

The expert or company will be tasked to:

1. Collect and analyze data on **the existing infrastructure** (power lines, substations, access roads) and **the energy potential** of the degraded areas in the Municipality of Novaci (the old coal mines in Novaci (in the process of closure)). Eko-svest as a client, as well the Municipality of Novaci and ESM as stakeholders, will provide support in collecting the necessary data.
2. Identify possible locations and technical solutions for the installation of photovoltaic systems, not limited only to photovoltaics, but also taking into account **battery storage systems, possibilities for conceptual integration or synergy with the existing infrastructure of REK Bitola (Thermal Power Plant Bitola). The old coal mines in the Municipality of Novaci** have been identified as priority locations . The expert should propose the size and capacity of the installation.
3. Prepare a comprehensive techno-economic analysis with multiple scenarios for different models of investment, ownership, management and use of energy, based on the use of different types of degraded land (including, but not limited to, former mines, industrial and infrastructure sites and other degraded areas), which will cover possible forms of association (joint venture) and partnership between citizens, local governments, public institutions, public and private entities and civil society organizations, with a clear definition

of their roles, investment ratio and distribution of risks and benefits, as well as an analysis of the possibilities and conditions for connection to the transmission and/or distribution electricity network, determination of the existing and projected energy consumption and scenarios for integration of the produced energy into the official distribution system. The expert should analyze the legal, financial and governance limitations of the energy community model (including profit sharing constraints) and compare their impact on the project's bankability, risk allocation and long-term benefits to the local community compared to alternative models.

4. Based on this comparative assessment, recommend the most appropriate implementation model or combination of models, from the perspective of:

   (i) economic and financial sustainability, (ii) risk sharing and (iii) maximization of benefits for the local community.

5. Analyze **legal and institutional aspects** of the establishing and registering of energy communities in North Macedonia, taking into account the experiences from other countries.

6. Propose **an approach for the rehabilitation and future use of the site**, with opportunities for **educational, demonstration or development activities** related to the energy transition. The expert should also make an indicative estimation of the necessary costs for rehabilitation and installation.

7. Prepare both **draft and final versions** of the feasibility study, including recommendations for future steps and potential sources of funding. The text of the analysis can be in Macedonian or English.

8. Present **the results** to the client, ensuring transparency and inclusion of citizens and the local community in the process.

4. Expected results

Result	Description
1. Draft feasibility study	The first version of the feasibility study for comments should include the following elements: • **Analysis of the energy potential of the location.** • **Techno-economic analysis with potential solutions.** • **Analysis of potential management models and different forms of ownership.** • **Initial analysis of business models.** • **Initial assessment of future use and rehabilitation** with calculated

Result	Description
	costs.
2. Final feasibility study	The final version of the feasibility study should integrate all findings, comments and recommendations from the draft and offer comprehensive and concrete solutions for establishing energy communities and other forms of cooperation in the Municipality of Novaci. The study should include: • **Complete analysis of the energy potential** of the site, including photovoltaic and battery storage. • **Techno-economic analysis with specific scenarios.** • **Complete analysis of management and ownership models.** • **Precise business models and financial recommendations.** • **Proposal for rehabilitation and future use of the area with costs.** • **Recommendations for project implementation and monitoring**.
3. Presentation of the results	The engaged expert or company will be obliged to present the findings and conclusions of the feasibility study to the Client and the general public. The presentation should include: • **Public presentation for the Client Eko-svest and stakeholders** ESM and the Municipality of Novaci, in order to obtain comments, suggestions and confirmation of the findings of the final study. • **Media promotion of the results** – preparation of a brief overview or info-graphic that will highlight the energy, economic and social value of the project. • **Demonstration of models and recommendations** – visual and documentary presentation of technical solutions, business models, rehabilitation opportunities and educational activities. • **Ensuring accessibility and clarity** – the presentation and accompanying material should be understandable to different types of stakeholders, including citizens, academic institutions, and local stakeholders. • All documentation should be prepared in Macedonian.

5. Time-frame and responsibilities depending on the contractor

Engagement implementation period: March - May 2026

6. Required qualifications

The highly qualified individual (expert) or company (legal entity) to be hired must have proven experience in the field of renewable energy, energy communities and local sustainable development. Given the multidisciplinary nature of the task, it is recommended that the expert has access to additional consultants or resources from different fields (energy, economy, environment, legal, urban development) to successfully cover all aspects of the assignment.

The lead expert or company team representative should meet the following criteria:

- University degree in the field of energy, economics, engineering, environment or a related field;
- Minimum 5 years of experience in analysis, development and/or project management in the field of renewable energy;
- Proven experience in preparing feasibility studies and techno-economic analyses;
- Knowledge of national and European legislation on energy communities, cooperatives and management of shared energy resources;
- Knowledge of practices for rehabilitation and repurposing of degraded lands will be considered an advantage;
- Experience with projects involving local communities, civil society organizations and public institutions;
- Excellent analytical, communication and presentation skills.

7. Supervision and reporting

The expert or company will work under the **supervision of the Client.**

During the assignment, **regular meetings and progress reports will be organized after the completion of each phase** (initial analysis, draft version, final version).

The final report should be **coordinated and confirmed by the Client** before the public presentation.