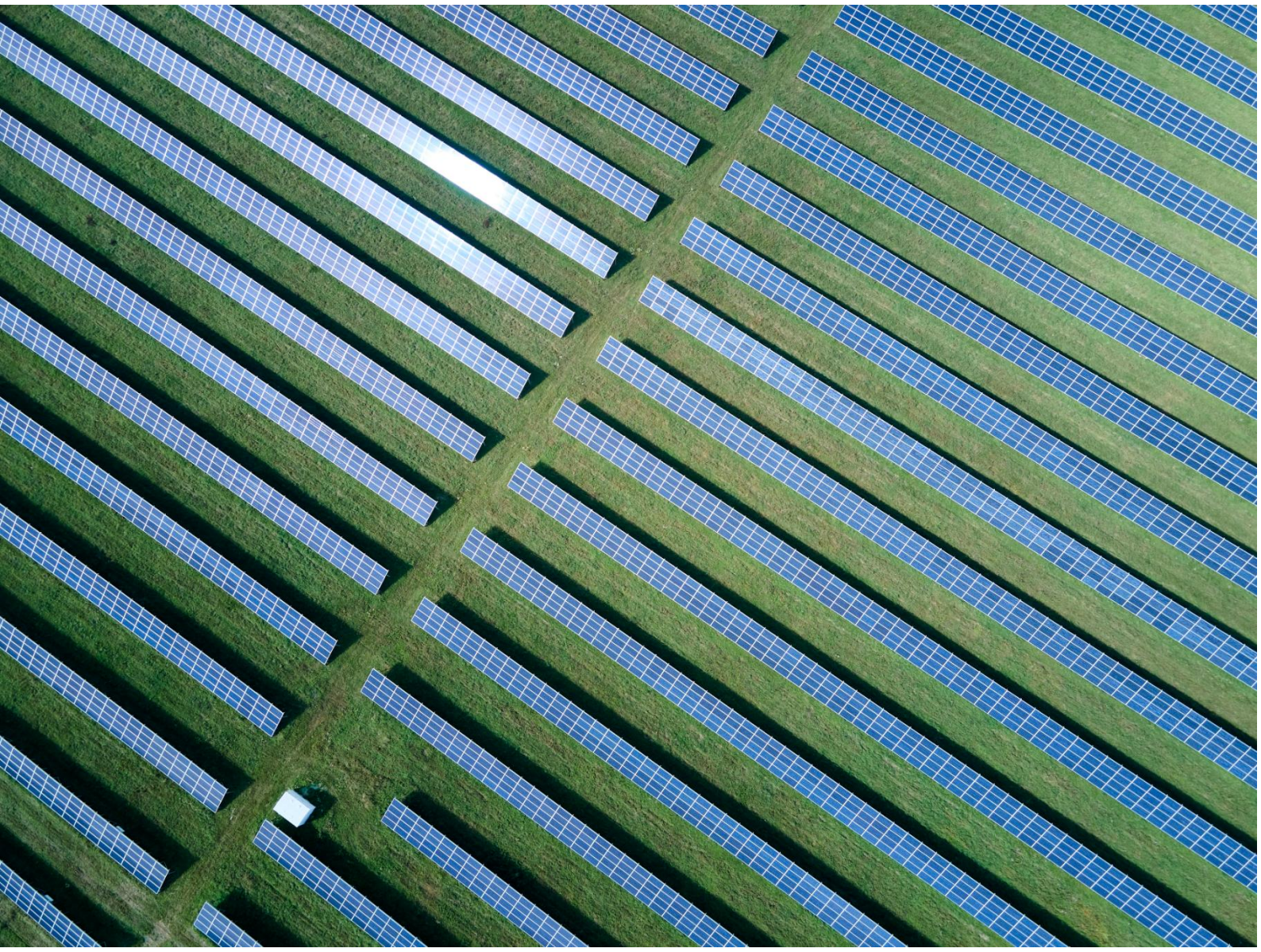
Environmental and Social Non-Technical Summary

450 MW Solar PV Power Plant and 250MW/1,000 MWh BESS Project, Hungary

DATE
November 2025



DOCUMENT DETAILS

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CONTENTS

ACRONYMS AND ABBREVIATIONS

Acronym	Description
AC	Alternating Current
BESS	Battery Energy Storage System
DC	Direct Current
EPC	Engineering, Procurement and Construction
ESDD	Environmental and Social Due Diligence
ESHS	Environmental, Social, Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
EBRD	European Bank for Reconstruction and Development
EU	European Union
HSE	Health, Safety and Environment
IFC	International Finance Corporation
kV	Kilovolt
MW	Megawatt
MWp	Megawatt-peak (installed DC capacity of solar panels under standard test conditions)
MWh	Megawatt-hour
MWac	Megawatt (Alternating Current, grid export capacity)
OHS	Occupational Health and Safety
PV	Photovoltaic
SEP	Stakeholder Engagement Plan
SPV	Special Purpose Vehicle
SPT	Solarpro Technology Bulgaria
ZRt.	Zártkörűen működő részvénytársaság (Hungarian designation for a private limited company, e.g. MAVIR ZRt.)

1. ABOUT THE PROJECT

1.1 WHAT DOES THE PROJECT CONSIST OF

The Project is a renewable energy development comprising a portfolio of five utility-scale solar photovoltaic (PV) power plants with a combined installed capacity of approximately 450 megawatts-peak (MWp), and five co-located battery energy storage systems (BESS) with a total capacity of 250 megawatts / 1,000 megawatt-hours (MW / MWh).

It is being developed by Renalfa IPP through its wholly owned Hungarian subsidiary Renalfa Hungary Kft (the Company). Each of the five sub-projects is being developed through a dedicated Hungarian special purpose vehicle (SPV).

The Project is financed by the European Bank for Reconstruction and Development (EBRD) and potentially other financial institutions.

The Project portfolio is summarized in Table 1 below

TABLE 1 PROJECT PORTOFOLIO

SPV	**Project**	**PV Capacity (MW / MW_p)**	**BESS Capacity (MW / MWh)**
Zenu Solar Kft	Szihalom PVPP Solar I and Szihalom BESS I sub-project	49.92 / 90	50 / 200
Holmu Solar Kft	Szihalom PVPP Solar II and Szihalom BESS II sub-project	49.92 / 90	50 / 200
Urus Solar Kft	Szihalom PVPP Solar III and Szihalom BESS III sub-project	49.92 / 90	50 / 200
Pata Solar Kft	Szihalom PVPP Solar IV and Szihalom BESS IV sub-project	49.92 / 90	50 / 200
Egur Solar Kft	Szihalom PVPP Solar V and Szihalom BESS V sub-project	49.92 / 90	50 / 200
Total Capacity		**249.6 / 450**	**250 / 1000**

The Project sites are located within the municipalities of Szihalom, Maklár and Mezőszemere in Heves County, northeastern Hungary. Each PV plant will have an installed capacity of 49.92 MW, resulting in a combined grid-connected generation capacity of 249.6 MW (AC). All BESS units will be co-located at a central site together with a new 220/33 kV substation, providing the interface to the Hungarian national grid operated by MAVIR Zrt.

Each subproject will include solar PV panels, inverters, battery energy storage systems associated electrical infrastructure, and grid connection facilities. The PV plants will be connected via 33 kV underground cables and fibre optic lines to a new 220/33 kV user substation to be constructed at the BESS site. This substation will in turn be linked to the Hungarian national grid through a newly built 220 kV switchyard and a short section (25 m) of reconstructed 220 kV overhead line, which will be handed over to the Transmission System Operator, MAVIR ZRt., for operation.

All permits required for the construction of the PV Plants project component were obtained. BESS construction permits are yet to be obtained, although the BESS site has already been assessed within the permitting process for the PV plants. All permits include requirements for soil protection, biodiversity, cultural heritage, fire safety, and occupational health and safety.

Construction of the Project is scheduled to commence end 2025 – beginning of 2026, with the first units becoming gradually operational by May 2027.

A Project location map and its layout are provided in the below figures.

FIGURE 1 PROJECT LOCATION MAP

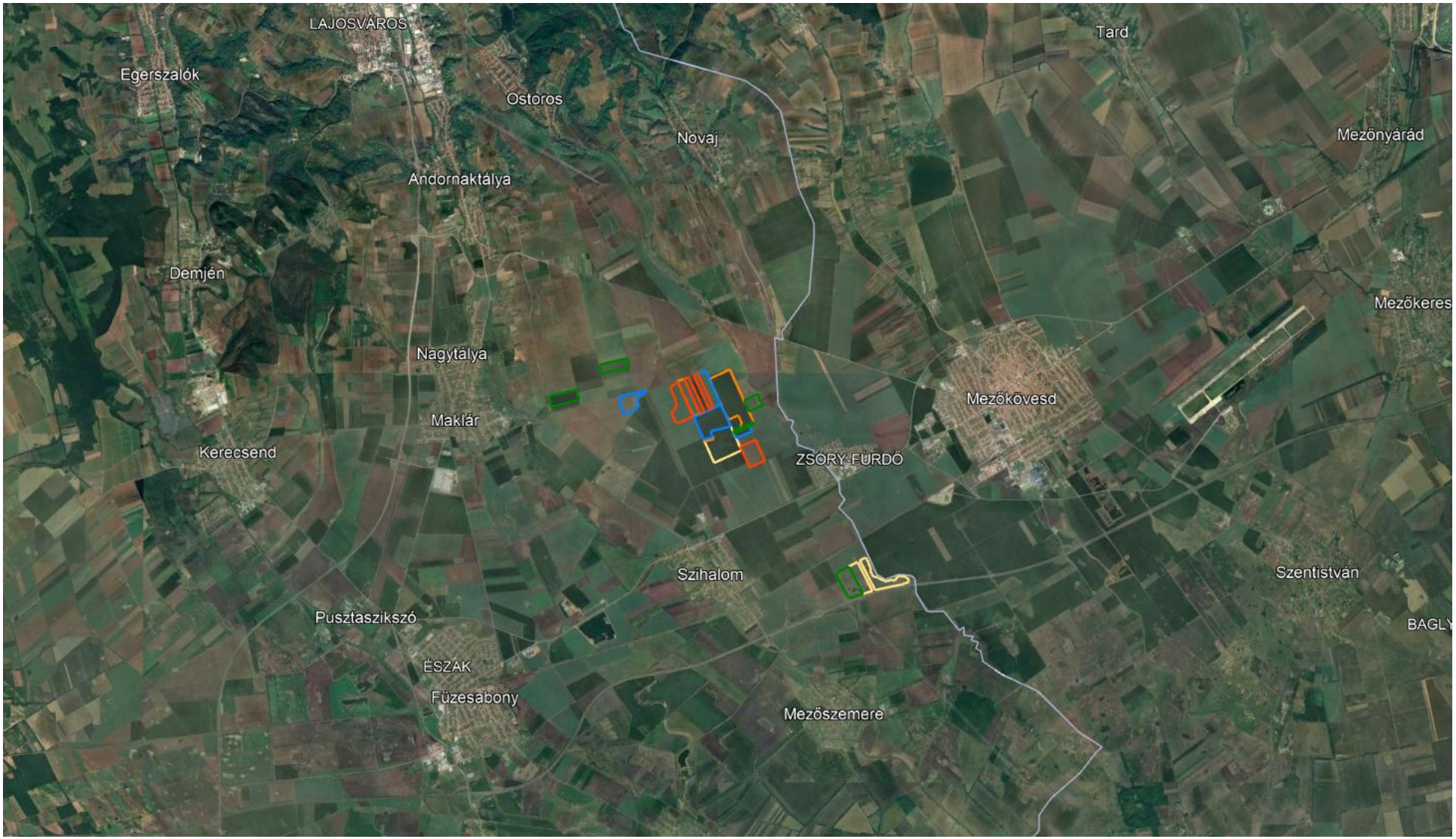

FIGURE 1 PROJECT LAYOUT MAP

1.2 WHAT ARE THE KEY BENEFITS OF THE PROJECT

The Project will result in a number of environmental, climate, and socio-economic benefits, including:

- Clean Energy Generation: The five solar farms will generate around 480 gigawatt-hours (GWh) of electricity annually (based on energy yield simulation). This is equivalent to the annual consumption of more than 190,250 households, reducing Hungary's reliance on imported fossil fuels.
- Energy Storage and Grid Stability: The co-located BESS facility (240 MW / 1,000 MWh) will provide flexibility and reliability to the Hungarian transmission system. By storing electricity during peak solar generation and releasing it when needed, the Project will support grid stability, load balancing, and integration of additional renewable capacity.
- Climate Impact: By replacing fossil fuel–based generation, the Project is expected to cut carbon dioxide emissions by approximately 160,800 t yearly, making a significant contribution to Hungary's and the EU's climate goals.
- Support for Hungary's Energy Transition: The Project will increase the share of renewable energy in Hungary's electricity mix, contribute to meeting EU Green Deal targets, and support diversification of the country's energy supply.
- Local Economic Development: Construction and operation will create local jobs and procurement opportunities, and generate tax revenues for municipalities, supporting the communities in this rural area of Heves County.

2. HOW ARE THE PROJECT'S ENVIRONMENTAL AND SOCIAL ASPECTS ADDRESSED DURING PROJECT CONSTRUCTION AND OPERATION

An independent Environmental and Social Due Diligence (ESDD) was carried out for the Project to ensure the project meets the European Bank for Reconstruction and Development (EBRD) Environmental and Social Policy (ESP) 2024 requirements. The assessment followed both Hungarian regulations and international standards, including all relevant EBRD Environmental and Social Requirements (ESRs).

The ESDD process included:

- Reviewing project documents and technical studies
- Site visits and interviews with project representatives
- Checking possible environmental and social impacts of the Project
- Checking if the Project follows national and EU laws, as well as the EBRD standards.

The assessment confirmed that the project has been designed to minimize environmental and social risks. Key findings include:

- The Project will not affect protected areas or cause significant biodiversity loss. Measures are in place to protect wildlife and manage land responsibly.

- Land for the project was acquired through voluntary agreements, with compensation exceeding market value. No one was forced to move.
- The project developer has a company-wide Environmental and Social Management System (ESMS), and a detailed Environmental and Social Management Plan (ESMP) will be finalised before construction starts.
- Worker rights, supply chain verification, and community health and safety are all performed to meet EBRD requirements.
- A Stakeholder Engagement Plan (SEP) and a process allowing people to raise concerns related to the Project (Grievance Mechanism) have been set up to ensure ongoing communication with local communities.

These aspects are explained further in the following subsections of this document.

To address areas where further action is needed, an Environmental and Social Action Plan (ESAP) has been developed. The ESAP contains the main steps needed to fully meet EBRD ESP 2024, such as:

- Finalizing and implementing the ESMP and supporting plans before construction
- Strengthening workforce and supply chain management at the Project level
- Improving how the project communicates with stakeholders and handles complaints
- Making sure environmental and social performance is regularly checked and reported.

In summary, the ESDD confirms that the project is aligned with EBRD ESP 2024 requirements, and the ESAP sets out clear steps to address any remaining actions and make sure the Project is delivered responsibly.

2.1 ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL IMPACTS

The potential Project impacts have been assessed in accordance with the Hungarian regulations.

All Project sites have been assessed, and the permitting process for the solar PV component of the Project was finalized with the five solar PV subprojects receiving the required construction permits in 2024. The BESS facilities are co-located on a site covered by the assessment performed but require separate construction permits, which are currently in process.

The assessment performed for the Project followed by the environmental authorities' review process resulted in the identification of potential impacts and of the measures needed to avoid, minimize, and mitigate these impacts. Based on these requirements, the Company and its contractors will establish and implement Environmental and Social Management Plans (ESMPs) and allocate the necessary resources to ensure that all potential environmental and social risks associated with the Project are properly addressed during both construction and operation.

These management processes will cover the full range of environmental, social, health and safety (ESHS) topics, including:

- Project environmental, social, health and safety (ESHS) management structure, controls, and assurance processes;

- Workforce management, including worker grievance mechanism;
- Pollution prevention and control;
- Waste management;
- Health and safety, including:
  - Occupational health and safety for Project workers during construction and operation;
  - Community health and safety, addressing risks such as construction traffic, temporary work on public land, prevention of communicable diseases, and respectful conduct by foreign workers;
- Emergency preparedness and response;
- Biodiversity protection and management;
- Protection of cultural heritage, including procedures for handling unexpected archaeological finds during excavation.

The Company is responsible for ensuring that these measures are implemented and maintained. During construction, responsibility will be shared with the EPC contractor (Solarpro Technology Bulgaria), while during the operation phase, responsibility will be shared with the operation and maintenance contractors.

The following subsections provide an overview of how key environmental and social aspects will be managed during construction and operation.

2.2 POLLUTION PREVENTION AND CONTROL

As indicated above, a comprehensive set of measures will be implemented to ensure that the Project's environmental impacts are managed and mitigated throughout both the construction and operation phases. These include procedures, clearly defined responsibilities, and adequate resources allocated by the Project Developer and its contractors, in line with Hungarian regulatory requirements and the good international industry practice.

The most relevant environmental and social aspects related to the implementation of the Project are summarised below.

Pollution Prevention and Control

Construction activities may involve risks such as accidental fuel or oil spills from machinery. Contractors will be required to follow strict spill prevention procedures, including designated refueling areas, double-walled fuel tanks, and secondary containment. No hazardous materials will be stored permanently on site.

In the event of an accidental spill, immediate response measures will be carried out by contractors in line with the Project's spill prevention and emergency response plans.

All waste generated during construction will be separated by type and removed by licensed waste management companies.

The Project will require limited water use during construction and for occasional cleaning of solar panels during operation. Drainage systems will be designed to avoid water accumulation and runoff to neighboring agricultural land.

Topsoil Management

Topsoil is a valuable natural resource and is strictly regulated under Hungarian law. The Project Developer has addressed this during the permitting process through Topsoil Management Plans prepared for each subproject site. These plans specify the removal and temporary on-site storage of fertile soil during construction, prevention of contamination, avoidance of compaction, rainwater drainage, and measures for reuse.

A key objective is to ensure that the humus-rich topsoil is preserved and reused on site wherever possible. Where reuse is not feasible, relocation to pre-approved areas may take place, subject to approval from authorities and the payment of applicable soil protection fees.

Waste Management

All construction waste will be carefully separated, stored securely, and disposed of in compliance with national regulations. Hazardous waste, such as oils or solvents, will be managed under strict documentation and transferred to licensed waste handlers. Contractors will be contractually required to comply with all legal obligations and use only certified waste management companies.

Water Management

The Project is not associated with significant water consumption.

During the **construction phase**, drinking water for workers will be provided in bottles, and temporary facilities (such as portable toilets and wash stations) will be supplied with water from tanks. No industrial water processes are involved.

Wastewater generated during construction will be limited to sanitary wastewater from the temporary facilities. This will be collected and removed from the site by licensed contractors. No industrial or contaminated wastewater will be discharged.

During the **operation phase**, the Project will run without permanent staff, so there will be no regular water use. There will be no need for sanitary water facilities. No wastewater will be produced during normal operations. Rainwater will be managed through drainage ditches. In the unlikely event that rainwater becomes contaminated with oil (for example, from transformer equipment), it will be treated using an oil separator before being safely discharged.

Overall, the Project is designed to have a very low impact on local water resources and will not discharge harmful wastewater into the environment.

Pest and Vegetation Management

Disturbance during construction may create conditions for invasive plants to spread. Preventive measures will be implemented, including careful control of soil and equipment brought onto site. During the operation stage, vegetation within the solar farm boundaries will be managed mainly through mechanical mowing. Herbicides will be applied only where strictly necessary and always in line with Hungarian and EU regulations.

2.3 LABOUR AND WORKING CONDITIONS

The construction phase of the Project will be the most labour-intensive phase of the Project, involving a significant number of workers. Some of these workers will be from Hungary, while

others may come from abroad depending on the specific skills required. The non-local construction workers will be accommodated in spaces rented within the nearby settlements.

During the operational phase, workforce needs will be limited, with only a small number of contracted personnel required for the operation, maintenance, and monitoring of the PV plants, BESS facilities, and substation.

In addition to complying with the provisions of the Hungarian Labour Code, the Project Developer has established commitments to ensure fair, safe, and equitable working conditions, in line with both national legislation and international standards. These commitments include:

- Fair Employment Practices: All workers will receive clear, understandable contracts before starting work. Employment practices will comply with Hungarian law and international labour standards.
- Labour Rights: The Project will respect rights to fair wages, safe working conditions, equal treatment, and freedom of association. Child labour and forced labour are strictly prohibited, and special attention is given to the rights and treatment of migrant workers.
- Contractor Requirements: Contractors and subcontractors will be required to comply with national laws and international standards, ensuring safe working environments and respect for labour rights.
- Health and Safety: Safety is a top priority. Risk assessments will be completed prior to work, workers will have the right to stop unsafe work, and emergency response plans will be in place. OHS practices will align with international standards.
- Worker Grievance Mechanism: Workers will have access to a confidential and transparent process to raise concerns without fear of retaliation.
- Ongoing Monitoring: Regular audits, inspections, and reviews will ensure continuous improvement of working conditions.

These commitments will be implemented on site through a Workforce Management Plan.

The Project Developer also follows a responsible sourcing process, ensuring that solar panels, BESS systems, and other equipment are procured from suppliers whose practices are not associated with labour rights abuses.

2.4 HEALTH, SAFETY AND SECURITY

Occupational Health and Safety

The Project Developer is committed to ensuring that workers involved in construction and operation are provided with a safe and healthy working environment. Occupational health and safety (OHS) management will follow the requirements of Hungarian legislation and align with good international industry practice.

During construction, the Project will implement measures to manage OHS risks, particularly those associated with the use of heavy machinery, electrical works, and installation of solar and battery equipment. This will include scheduling of regular maintenance and inspections, as well as implementation of site-specific risk mitigation procedures.

In line with regulatory requirements, the Project will ensure adequate occupational health and safety oversight, including the provision of medical support and regular monitoring of workers'

health during construction. These measures will be embedded in the Engineering, Procurement, and Construction (EPC) contract with Solarpro Technology Bulgaria (SPT) and aligned with the Project's Environmental and Social Management Plans (ESMPs) and the contractor's Health, Safety and Environment (HSE) procedures.

Community Health and Safety

In addition to managing the occupational health and safety aspects, the Project is committed to addressing any potential health and safety impacts from Project implementation on general public and communities.

The Project sites are located on agricultural land in Heves County, at a distance from residential areas. As such, potential community health and safety risks are expected to be limited. The main risks during construction are linked to increased traffic on public roads for the transport of materials, equipment, and components, as well as temporary works carried out on or across public land for cabling and electrical grid connections.

The Project Developer will ensure that traffic safety measures and other community risk management arrangements are implemented through the own and the contractor's health and safety procedures, in compliance with national regulations and good international industry practice.

Emergency Preparedness and Response

Emergency preparedness and response procedures will be developed and implemented to manage potential emergency situations during both construction and operation. This will include risks associated with electrical installations, fire safety, and battery storage systems.

The procedures will comply with Hungarian regulatory requirements and be aligned with international best practice.

All workers and contractors will receive training on emergency procedures, roles, and responsibilities to ensure preparedness in the event of an incident.

2.5 LAND ACQUISITION, RESTRICTIONS ON LAND USE AND INVOLUNTARY RESETTLEMENT

The land required for the Project was secured in 2024 through voluntary acquisition agreements with the former landowners. The land consisted primarily of agricultural plots, without buildings or residential structures.

All transactions were conducted on a willing-seller, willing-buyer basis, with compensation levels agreed above market value. No people were physically displaced, and there were no significant impacts on livelihoods, as the acquired land did not constitute the primary source of income or subsistence for the former landowners.

In addition to the Project sites footprints, the Project required legal easements for underground cabling and related infrastructure. These easements were established in line with Hungarian law, with compensation provided as applicable.

No complaints or disputes have been recorded during or after the land acquisition process.

A grievance mechanism has been established to allow any affected landowner or land user to raise concerns with the Project Developer. This mechanism is integrated into the Project's Stakeholder Engagement Plan to ensure clear communication and timely resolution of any issues (see Section 2.8).

2.6 BIODIVERSITY

The Project is located in an area that has been heavily shaped by agriculture over many decades. Most of the land is used for growing crops and has low ecological value. Natural habitats have largely disappeared, and the remaining biodiversity is mainly found in narrow strips of trees and shrubs along field edges and drainage channels.

These green strips, often made up of species like black locust and common ash, provide some ecological benefits. They help regulate microclimates, offer shelter for small animals and insects, and support activities like beekeeping. The plant life in these areas includes common weeds and grasses that are well adapted to disturbed soils. While some protected plant species have been recorded nearby, none are considered threatened at the European or global level.

Animal life in the area is typical of farmed landscapes. It includes small mammals like moles, hares, and deer, as well as generalist bird species such as skylarks, starlings, and buzzards. Amphibians like the common toad may breed in nearby wet areas. Insects, especially butterflies, are also present, mostly species that thrive in disturbed environments.

Although the Project area itself is not legally protected, it is relatively close to several important ecological zones. These include a nationally designated ecological corridor along the Ostoros Stream and three Natura 2000 sites located within a few kilometers. These areas support rare and protected bird species such as the Eastern Imperial Eagle, Saker Falcon, and European Roller. Some of these birds use the Project area for foraging, even though no nesting sites have been found within the Project footprint.

To protect biodiversity, the project will follow several mitigation measures. These include:

- Avoiding construction during bird nesting season.
- Preserving existing trees and shrubs.
- Creating new habitats along project boundaries.
- Leaving undeveloped buffer zones under power lines and along stream channels.

A **Framework Biodiversity Management Plan (BMP)** has been developed to guide these efforts. It includes all required mitigation measures and outlines how the project will avoid or minimize impacts on biodiversity. A detailed **Biodiversity Management Plan** will be afterwards prepared to ensure to guide the implementation of the identified and any additionally-recommended biodiversity mitigation measures during the construction and operation of the Project.

The Project also includes measures to control invasive plant species, which are common in the area. These will be managed through regular mowing before they can spread, especially near sensitive ecological zones.

2.7 CULTURAL HERITAGE

As part of the permitting process, all five solar sub-project sites underwent Preliminary Archaeological Investigations. These included background research, field walkovers, and formal documentation in line with Hungarian heritage protection laws.

Archaeological sites were identified at four of the five sub-projects. These include several known sites from the prehistoric period, such as the Neolithic, Copper Age, Bronze Age, and Iron Age, as well as more recent periods like the Sarmatian and Migration eras.

As part of the permitting process, the Hungarian authorities required that cultural heritage be safeguarded during construction. Across all sites, the building permits require that earthworks be carried out under the supervision of qualified archaeologists. These specialists will be contracted from the Dobó István Castle Museum in Eger, which oversees cultural heritage in the region. If any archaeological features are uncovered during construction, they must be carefully excavated and documented according to national regulations.

The permits include clear instructions for how to handle unexpected discoveries and the planned archaeological supervision ensures that any cultural heritage encountered during construction will be properly managed and preserved. To ensure the effective implementation of these requirements by the contractors, a Chance Finds Procedure instructing on the steps to be followed in the event of unexpected cultural heritage discoveries will be implemented.

2.8 INFORMATION DISCLOSURE AND STAKEHOLDER ENGAGEMENT

To date, stakeholder engagement for the Project has primarily taken place through the local councils of Szihalom, Maklár, and Mezőszemere, in line with Hungarian permitting requirements. Information about the Project has been shared with local authorities as part of the permitting and land acquisition processes.

A formal Stakeholder Engagement Plan (SEP) was developed for the Project to ensure structured, transparent, and ongoing engagement with all stakeholders, including affected communities, authorities, and other interested parties.

The SEP also establishes a Project-specific grievance mechanism, providing accessible channels for stakeholders to raise questions, concerns, or complaints. All grievances will be recorded, reviewed, and addressed in a timely and fair manner.

The SEP will be updated as the Project progresses, ensuring that stakeholder engagement remains meaningful throughout construction and operation.

To make the grievance process accessible to all, multiple channels will be established, including the following:

- in person (verbally or in writing) to the Community Liaison Officer:
- verbally through the Grievance Mechanism telephone hotline: +3620 219 0094
- in writing through the Grievance Form (available for download and print from the Project webpage: please provide link) as follows: https://www.renalfaipp.com/sustainability

- printed versions sent via post - to the following address: 1026, Budapest, Riado u. 1-3
- electronic version sent via email at: laszlo.modos@renalfa.com
- Through grievance boxes available in local municipalities, using either the grievance form or free-handwritten letters (currently planned; grievance boxes locations will be provided once established).