

NON-TECHNICAL SUMMARY OF OSM SOLAR DOOEL

1. About the project

This Non-Technical Summary has been updated to include the adjacent BESS installation and the associated owner-level environmental, social, health, safety and stakeholder-engagement commitments.

OSM SOLAR DOOEL is a special purpose vehicle (SPV) registered in North Macedonia for the realisation of Project Oslomej. The project was awarded to the SPV because of a public tender for entering a Public Private Partnership (PPP) for the project. The public partner in the PPP is ESM, which is the North Macedonian, state-owned operator of most power plants in the country. More information regarding the parameters of this tender is described in the following paragraph:

TE Oslomej is an existing thermal power plant owned by AD ESM with one block of 125 MW of installed capacity, i.e. the second largest thermal power plant in the electricity system of the Republic of North Macedonia. This power plant started work in 1980 and participates with 10% of the total domestic production of electricity and works until 2015. Achieved on average per year electricity production in a period of 15 years (1999-2015) is 430 GWh. The thermal power plant has so far used lignite as the primary fuel for electricity production from the Oslomej-East and Oslomej-West mines in the Kichevo region. Due to the exhaustion of the operating reserves of coal, the power plant in Oslomej after 2015 does not operate at full capacity in line with the projected annual production of electricity.

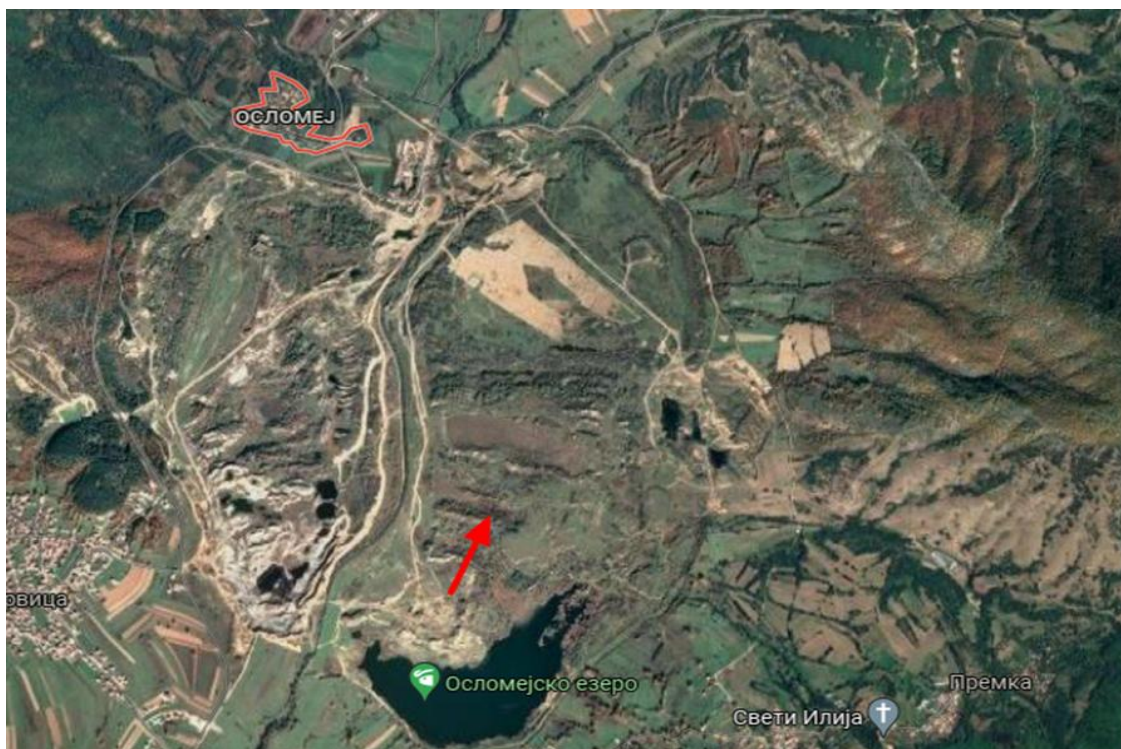
To take into account the effects of the exploited mine on the living environment, the land from the mine must be returned to its natural state. For this measure, this land could easily be converted for the construction of a photovoltaic power plant (PVPP) and exploited as a source of electricity from renewable sources. With the construction of the FPP Oslomej 3 in TE Oslomej, it is planned to increase the capacity of the renewable energy sources for an additional 100 MW, (2 x 50 MW). The indicative area required for the installation of the cumulative capacity will be up to 150 ha, 2 x 75 ha for the two FPPs, on an already used area of 660 ha.

- The life cycle of the project is 25 years, the investment period is 13 years;
- *Construction Phase*: activities in this phase include clearing of low-grade dirt, construction of an access road to the site itself, installation of PV panels, and construction of an electrical grid connection if there is existing infrastructure;
- *Operational phase*: includes implementation and monitoring;

The Project is also being expanded with an adjacent battery energy storage system (BESS). The BESS component is intended to have a rated energy capacity of 203.19 MWh and a rated power of 50 MVA. It will include battery equipment, foundations, battery placement, medium-voltage, low-voltage and DC cabling, signal and fibre-optic cabling, grounding, and interconnection works.

The BESS is an adjacent component to the existing PVPP project and is managed through the Owner-level ESMP and supporting EPC contractor plans. The BESS construction and commissioning activities may involve temporary civil works, delivery of oversized or heavy equipment, lifting and

placement of battery containers, electrical interconnection and energisation works, and emergency-preparedness interfaces specific to battery storage technology.



credit: Oslomej Environmental Study by GEING Krebs und Kiefer International and others, DOO Skopje

2. Assessment and Management of Environmental and Social Impacts

The Project's environmental and social impacts were assessed in line with the North Macedonia regulations' provisions, and all permits required for construction were obtained.

Regarding the Oslomej Project under the Law on Environment an environmental study for the project (Elaborate for the construction of a photovoltaic power plant at the site of the Oslomej - FPP Oslomej 3) has been prepared by "GEING Krebs und Kiefer International" and on 01.12.2022 the Ministry of the Environment and Spatial Planning (MoEPP) has approved the environmental elaborate and on 21.02.2023 and has issued a water management approval for the construction the Oslomej Project.

The authority review process resulted in the identification of the Project potential impacts and of the mitigation measures to be implemented for the Project to address these potential impacts.

On this basis, the Company and the construction and operator and maintenance contractors have defined required management processes and allocated resources needed to ensure the potential environmental and social impacts associated with the Project are mitigated at all times.

In practice, this will be ensured through the implementation of a package of environmental and social management planning (ESMP) procedures and the provision of the resources and staffing needed for their implementation. These management processes address all Project environmental and social aspects, including:

For the BESS addition, the ESMP package also covers BESS-specific interfaces, including traffic and abnormal-load management, electrical and fire-safety risks, emergency preparedness and response,

hazardous materials and spill prevention, waste management for battery and electrical components, contractor work permits, and stakeholder engagement on BESS-related community health and safety matters.

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The responsibility for the implementation of the above-indicated measures and the management of the Project's environmental, health and safety and social impacts is shared between the Company and during the construction phase it was shared with the construction contracts, while during the operation stage, it is shared with the operations and management constructors. The below sections provide highlights on how the above-indicated Project aspects are handled during the Project construction and operation.

3. Environmental Management Measures and Monitoring

As indicated above, a complete set of measures aimed at ensuring that Project impacts on the environment are at all times managed and mitigated are put in place during the Project construction and operation stages. This includes procedures, allocation of responsibilities, resources and staffing ensured by the Company and their contractors and addressing all potential environmental aspects, as informed by the environmental assessment performed for the Project. Of these, the most relevant environmental aspects associated with the Project implementation are summarised below:

For the BESS addition, the most relevant additional environmental and social aspects are temporary construction traffic and abnormal-load deliveries, dust and noise from civil works, lifting and placement of containers, electrical interconnection and energisation, fire and spill scenarios, new waste streams from battery/electrical equipment and packaging, and emergency-response coordination with the EPC contractor and relevant external parties.

- **Air Emissions**

The environmental assessment presented in the Environmental Study (*Elaborate for the construction of a photovoltaic power plant at the site of the Oslomej - FPP Oslomej 3*) that has been prepared by GEING Krebs & Kiefer International and approved by the Ministry of the Environment and Spatial Planning of the Republic of North Macedonia stipulates the following:

“In view of the small volume of construction activities and the short time period required for the installation of the photo panels, we appreciate that there should not be significant air congestion which necessitates the need to take measures. ”

However, as an environmentally responsible company OSM SOLAR DOOEL believes and proclaims sustainable emission management and along its value chain. Therefore, since the construction and operation of the projects are preliminary done by third-party contractors, the company aims to make a reasonable effort to communicate its Code of Conduct responsible environment treatment principles to all contractors. Furthermore, based on the contractual agreements interface established with contractors the Company aims to choose legitimate companies that will responsibly manage air emissions generated by their activities.

During the construction of the project Oslomej, as stipulated in the Environmental study there were not found any suspicions of significant air congestion which necessitates the need to take measures.

However, although the risk from air emissions is not significant, as part of the Company and contractor contract-based interface, the Company will aim to make a reasonable effort through the means of information and evidence requests to track the sustainable air emission management of the contractor during the operational phase.

During BESS construction, temporary dust and exhaust emissions may arise from heavy deliveries, cranes, concrete works, trenching, telehandlers and other machinery. The EPC contractor will be expected to apply dust suppression, speed control, vehicle/equipment maintenance, good housekeeping and avoidance of unnecessary engine idling.

- **Water and Wastewater**

The Project does not require water use other than water for sanitary purposes. During construction, mobile facilities equipped with fresh water and waste storage were used. Throughout the operation, water for sanitary purposes is used in the lavatory facility built in the substation of the plant, however, water for it is sourced off-site and once used it goes through a local on-site build treatment plant. After the purification, this wastewater is discharged clearly into the nearby waterbody- river Temnitsa. However, periodical chemical analysis will be carried out to ensure that this treatment plant is operating properly and that no contaminated water will be dismissed in the river Temnitsa. Furthermore, the Oslomej plant is constructed on an old coal mine and during natural processes such as snow melting and rainwater potential sediment might wash off in the surface water of the nearby manmade lake Oslomej. Therefore, regular chemical analysis of surface and wastewater will be performed regarding lake Oslomej and river Temnitsa.

As for water consumption on site by the workers of the operator of the plant, it would be in the form of bottled water. No water will be used for cleaning the solar panels.

For the BESS works, temporary water and wastewater risks may also arise from welfare facilities, concrete washout, stormwater runoff around foundation works and accidental leaks or spillages from fuels, oils or other chemicals. These will be controlled through the EPC contractor's waste management, spill prevention and emergency-response arrangements, with owner oversight through information and evidence requests.

- **Waste**

The constructor and operator of the project have a waste management plan for the construction and operation phases of the plant that has been approved by the Company and its execution in the approved form is monitored on an annual basis by the Company. Regarding recycling of the panels, the contractors have a contract with a Bulgarian-based company for recycling such and in case of any broken, defected they will be transported to this facility in Bulgaria at the expense of the contractor. Under the approved waste management plan the contractors are dedicated to using only licensed, specialized waste-handling contractors and disposal facilities. During the construction period, there was no information regarding improper waste dumping from the contractors. However, the municipality of Kichevo has an ongoing problem with illegal waste dumping from locals. Therefore, as a responsible business that operates in the region OSM SOLAR DOOEL aims via its Stakeholder Engagement Plan (SEP) to contribute to educating the members of local communities that such practices are dangerous and unlawful.

For BESS battery components and other hazardous materials arising during operation or future end-of-life/decommissioning, the Company will require responsible waste management through authorised solutions, including arrangements with Nula Otpad where applicable.

For the BESS addition, waste management will also cover hazardous and non-hazardous waste streams such as battery and electrical-equipment packaging, wooden pallets, cardboard, scrap metals, cabling off-cuts, concrete residues, oils/greases, paints, solvents, absorbents and contaminated materials from spill clean-up. Transfer records, segregation at source, temporary storage and removal by authorised waste operators will be retained and made available to the Company.

4. Social Management Measures and Monitoring

- **Labour Matters**

Throughout the lifecycle of the Project, the construction stage is the most labour-intensive. During operations, the workforce needs are rather limited and comprise few contracted personnel in charge of operating and maintaining the PV Plant.

The BESS implementation will also require temporary contracted and subcontracted personnel for specialised activities such as civil works, lifting, battery placement, cabling, testing and commissioning. These workers will be expected to receive site induction, code of conduct information, information on workers' grievance channels and task-specific health and safety instructions before performing BESS-related works.

In addition to complying with the provisions of the Macedonian Labour Law, the Project is committed to implementing measures aligned with best industry practices in terms of labour and working conditions. Therefore, the Company has drafted its own set of labour policies that outline the international and national labour protection rights principles that, if the company gains in the future direct workers they will apply to them.

However, the company also makes a reasonable effort to give a copy of those policies to its third-party contractors to inform the contracted workers, as well as to give those policies as guidelines to its contractors for sustainable labour management. The Company monitors on an annual basis via information and evidence requests that the contracted workers have familiarised by their direct employer with those policies.

Also, the workers' grievance mechanism of the mother company of the Oslomej project- Renalfa IPP GmbH is alternatively available to the contracted workers of the operator contractors. Under it, they can raise any workplace-related concerns and have them addressed through Renalfa's dedicated grievance personnel with their direct employer to ensure that their concerns won't be ignored by their direct employer. During the construction phase, there was no record of labour matter-related grievances regarding the construction contractor.

The project developer has implemented a responsible sourcing process ensuring that the solar panels are delivered by suppliers procuring in their turn the needed materials from sources not associated with labour abuses.

- **Occupational Health and Safety**

The Company is committed to ensuring that workers involved in the Project construction and operation are provided with a safe and healthy work environment and conditions. These are ensured through reviewing and approving the contractors' management procedures on the basis that they are guided by the national occupational health and safety regulatory requirements as well as with good international industry practice on the matter. These are ensured through planning, organizational capacity and resources provided by the project developer and the employed contractors.

Furthermore, the company does not have direct employees and its construction, operation and maintenance are conducted by third-party companies but the project developer has an emergency response plan which is communicated and executed by the operator of the project. The owner monitors its implementation on an ongoing basis through information and evidence requests that the contracted workers have been subjected to emergency response training, and drills. OSM SOLAR DOOEL also monitors the implementation of the approved incident investigation processes of the contractors by causing them to report immediately the occurrence of each incident on the same day of its occurrence, as well as maintaining a health and safety incident log and present its data on annual basis to OSM SOLAR DOOEL. During the construction phase, there was no record of any incidents.

BESS-specific occupational health and safety controls will focus on risks associated with electrical works and energisation, lifting and mechanical handling, work at height where relevant, hot works, battery installation and commissioning, fire prevention and emergency response. The Company will oversee these matters through review of EPC contractor plans, risk assessments, method statements, work permits, incident reporting and evidence of training/drills.

- **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 the general public and communities. Potential risks associated with community health and safety are expected to be associated with the construction of traffic on public roads. Also, the potential for exposure to disease from the workers on site and if they interact with the locals. Therefore, community health and safety management arrangements addressing the above have been considered by the Project Developer as part of the overall Project management, guided by the national regulatory requirements and the international best practice guidelines. In that regard based on the contractual interface OSM SOLAR DOOEL has with its contractors the company causes them to apply those requirements and practices and monitors through information and evidence that the health and safety of the local communities has been preserved. Monitoring is in parallel also assured by the figure of the Community Liaison

Officer (CLO) who acts as a bridge between the interests of the locals and is responsible for executing the Stakeholder Engagement Plan (SEP) of the company and the contractors. He is responsible for administrating the external grievance channel and conducting meetings with local communities. He also submits data on an annual basis regarding the engagements performed with local communities and whether they feel that their health and safety are protected by the project-related activities. During the construction phase of the project, there were no signals regarding issues related to the protection of the community's health and safety.

For the BESS addition, community health and safety management will also address temporary traffic and abnormal-load movements, coordination of emergency access, communication of relevant emergency contacts, and stakeholder awareness of the grievance mechanism. Where BESS emergency-response matters require external coordination, the Company will engage with relevant local authorities, emergency services, neighbours and other stakeholders through the SEP.

5. Biodiversity Conservation and Sustainable Management of Living Natural Resources

The Project has not been classified as affecting any valuable biodiversity. However, since it is in proximity to the manmade lake Oslomej and the river Temnitsa the company is dedicated to performing in the summer of 2024 a biodiversity study of the lake and the river.

The BESS installation will be confined as far as practicable to the approved working footprint, existing access routes and designated laydown/storage areas. Temporary waste storage, spill prevention, housekeeping and stormwater controls will be maintained so that the BESS works do not create secondary impacts on nearby habitats, Lake Oslomej or the river Temnitsa.

6. Stakeholder Engagement Plan (SEP)

A Stakeholder Engagement Plan (SEP) including an External Grievance Mechanism was developed for the Project and is publicly available on the site of [Renalfa IPP](#) together with this NTS.

The SEP provides a framework for the Project stakeholder engagement and will be further developed as needed as the Project progresses to ensure meaningful consultation with stakeholders and communities throughout the Project lifecycle.

The SEP includes an External Grievance Mechanism administrated by the CLO- Alexandar Gigov. It can be accessed by anyone to raise complaints and comments about the Project and ensures that any complaint raised is addressed and responded to. To ensure facile access to the External Grievance Mechanism, several interfaces have been established including a Grievance Form that can be used for submitting a grievance (attached in **Appendix A below**).

For the BESS addition, the SEP has been updated to include BESS-specific stakeholder engagement and disclosure. This includes recording communications with the EPC contractor, competent authorities, local authorities, emergency services, relevant neighbours and affected communities on BESS construction scheduling, traffic/abnormal loads, emergency preparedness, fire-safety interfaces, waste management and the external grievance mechanism.

The Company will maintain a stakeholder dialogue log for BESS-related communications, recording the date, stakeholder/group, participants, topic, information disclosed, concerns raised,

commitments made, responsible person and close-out status. Any BESS-related grievance may be submitted through the existing External Grievance Mechanism.

Before the BESS facility enters the decommissioning phase, the Company will prepare a decommissioning plan addressing responsible management of wastes arising from that phase, including battery components and hazardous materials, and will identify authorised waste-management routes and stakeholder communication requirements for that phase.

APPENDIX A EXTERNAL GRIEVANCE FORM

Reference No: _____

Full Name Note: <i>you can remain anonymous if you prefer or request not to disclose your identity to the third parties without your consent</i>	First name _____ Last name _____ ☐ I wish to raise my grievance anonymously ☐ I request not to disclose my identity without my consent
Contact Information Please mark how you wish to be contacted (mail, telephone, e-mail).	☐ By Post: Please provide mailing address: _____ _____ _____ ☐ By Telephone: _____ ☐ By E-mail _____
Preferred Language for communication	☐ Macedonian ☐ English
Description of Incident or Grievance:	What happened? Where did it happen? Who did it happen to? What is the result of the problem?
Date of Incident/ Grievance	
☐ One time incident/grievance (date _____) ☐ Happened more than once (how many times? _____) ☐ On-going (currently experiencing problem)	

What would you like to see happen to resolve the problem?

Signature: _____

Date: _____

Please return this form to OSM SOLAR DOOEL

Address: 14-1/9 Miroslav Krleza Str., Skopje-Centar, 1000 Skopje, Republic of North Macedonia

Tel.: +38970277870

Email: a.gigov@renalfa.com