

PROJECT INFORMATION BROCHURE

Battery Energy Storage System (BESS) Feasibility Study and Preliminary Environmental & Social Impact Assessment (PESIA)

Assessing a proposed BESS facility at EPBiH's Kakanj Thermal Power Plant (TE Kakanj) to support a more flexible and resilient electricity system.

Your knowledge and local experience matter.

Learn about the proposed Project, the assessment process, and how your views can help inform the next steps.

PROJECT STAGE

Scoping Report completed

Feasibility Study and PESIA underway

Consultation period: 22 July – 20 August 2026



01 Understanding the proposed Project

A Battery Energy Storage System stores electricity from the power system and releases it back to the grid when needed. It does not generate electricity itself. The system charges when electricity is available and discharges when additional power or grid support is required. It can respond within a short time to changes in the electricity system, helping to balance supply and demand.

Why is the Project proposed?

The Project is expected to contribute to the modernization of BiH's electricity sector by:

- Improving power system flexibility and operational efficiency.
- Increasing grid stability, reliability and resilience.
- Supporting energy security and the efficient use of existing generation assets.
- Contributing to the country's energy transition objectives and progressive alignment with European energy and climate policies.

!! 74% EPBiH's electricity generation in 2024 came from thermal power plants.

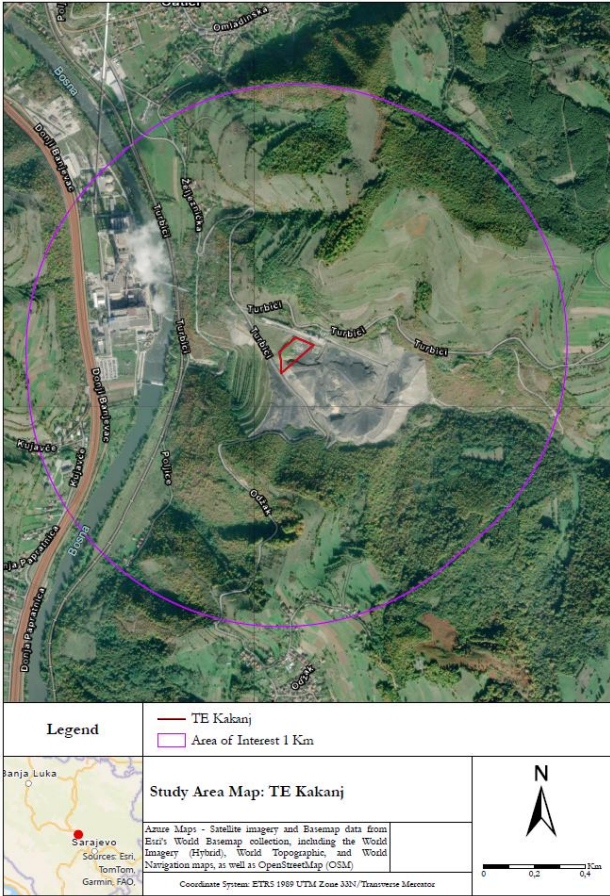
Battery storage can help support a more flexible electricity system as the share of variable renewable energy increases.
What would the Project include?

What would the Project include?

1. BATTERY UNITS Containers housing lithium-ion battery modules that store electrical energy.	2. POWER CONVERSION Inverters and power conversion equipment enabling the batteries to charge from and discharge to the electricity grid.	3. GRID CONNECTION Transformers, switchgear and underground cables connecting the BESS to the existing electricity infrastructure.
4. SAFETY SYSTEMS Fire detection, fire suppression, emergency response and electrical protection systems.	5. SITE INFRASTRUCTURE Equipment foundations, internal access roads, drainage, fencing, lighting and security systems.	6. MONITORING AND CONTROL Battery management, energy management, SCADA and communication systems supporting safe and efficient operation.

Final components and layout will be confirmed through the Feasibility Study and Conceptual Design.

Where would the Project be located?



Indicative location of the proposed BESS within the Kakanj Thermal Power Plant area



- The Project would be developed on EPBiH-owned land within the Kakanj Thermal Power Plant, an established industrial site with existing roads, utilities, drainage and electrical infrastructure.
- The site is outside protected, biodiversity-sensitive and other designated ecological areas.
- No registered cultural heritage site, agricultural land, grazing area or residential building has been identified within the proposed footprint, and no land acquisition or physical or economic displacement is anticipated.
- The nearest identified residential areas and community facilities are generally located more than 1 km from the proposed BESS footprint.

Project at a glance

LOCATION Kakanj TE, Zenica-Doboj Canton of BiH	FOOTPRINT (max) Approx. 25,000 m²
CAPACITY (max) 125 MW / 500 MWh	PROJECT OWNER JP Elektroprivreda Bosne i Hercegovine d.d. Sarajevo (EPBiH)

Availability of Project Information

Project information and consultation materials will be made available through: <https://www.epbih.ba/>

02 What potential impacts are being considered?

The Scoping process identifies the main environmental and social topics that require further consideration in the Preliminary Environmental Impact Assessment (PESIA).

HOW THE PROCESS WORKS

01**SCOPING**

Screens environmental and social topics and identifies those needing further consideration.

**02****PESIA ASSESSMENT**

Considers the final Project design and assesses potential adverse and beneficial impacts.

**03****MANAGEMENT &
FEEDBACK**

Defines proportionate management measures and takes stakeholder feedback into account.

**SCOPED IN ≠
SIGNIFICANT IMPACT**

A topic is scoped in when further information or assessment is needed before a conclusion can be reached.

02A Potential Impacts During Construction

Given the brownfield setting, construction activities are expected to be relatively limited.

Construction activity / Source	What may happen	What/Who may be affected	Initial Scoping View
Grading, foundations, excavation and cable trenching.	The ground may be disturbed, compacted or locally reshaped.	Soil within the final BESS footprint.	Major alteration of the wider landform is not anticipated. Impacts are expected to remain localized within the proposed footprint.
Excavation in industrial fill or potentially contaminated ground.	Existing contaminated material may be exposed or spread in dust or runoff.	Construction workers, site soil and shallow groundwater.	The site has already been heavily modified by previous industrial activities. Any contamination-related impacts are expected to be localized, and excavation depths will be limited.
Construction runoff, sediment or accidental spills.	Sediment, fuel, oil or contaminants washed from disturbed industrial soil may enter site drainage.	The TE Kakanj drainage system and, if carried off site, the Bosna River is about 400 m away.	The Bosna River is approximately 400 m from the proposed BESS area, and no direct hydraulic connection is anticipated at this stage. The PESIA will confirm drainage routes and any potential off-site pathways.
Equipment delivery, vehicle movements and construction machinery.	Temporary dust, exhaust emissions, noise, traffic disruption and access delays may occur.	TE Kakanj workers, contractors, visitors and road users.	Impacts are expected to be short-term and mainly limited to the industrial site and access routes.
Installation of BESS equipment and supporting infrastructure.	The appearance of the site may change slightly.	Existing industrial landscape and people working in or visiting TE Kakanj.	Visual impacts are expected to be limited because the BESS would be located within an already highly modified power-plant setting.
Clearance and occupation of the final footprint.	Small areas of ruderal vegetation or local habitat may be removed or disturbed.	Common plants, small fauna and micro-habitats within the footprint.	Significant ecological impacts are not expected.
Works near operating plant infrastructure.	Construction may temporarily interfere with internal roads, drainage, utilities or ongoing plant activities.	TE Kakanj personnel, contractors and existing plant operations.	Impacts are expected to be temporary and manageable through coordination with existing plant operations.
Livelihoods and economic activities.	Construction may create short-term demand for labor, contractors, goods and services.	Local workers, contractors and suppliers in Kakanj.	A modest, temporary beneficial impact may arise through employment and demand for local goods and services.
Community health and safety context.	Traffic, moving machinery, dust, noise and exhaust emissions may create temporary nuisance or safety risks.	Existing TE Kakanj workers, contractors, visitors, emergency responders and road users.	The main receptors are expected to be people already using the industrial site. Significant impacts on the wider community are not expected, subject to confirmation through the PESIA.

02B Potential Impacts During Operation

Operation activity / Source	What may happen	What / Who may be affected	Initial Scoping View
Operation of transformers, inverters and cooling equipment.	Low-level noise and heat may be generated during normal operation.	Workers and other users of the TE Kakanj industrial complex.	Significant noise impacts on nearby communities are not expected because the BESS would be located within an existing industrial setting and the nearest residential areas are generally more than 1 km away.
Battery fault, damage or abnormal overheating	In rare cases, a battery failure could lead to thermal runaway, fire or explosion, releasing heat, smoke, flammable gases or potentially harmful substances.	Workers, emergency responders, nearby plant infrastructure and, depending on the scale of the incident, the surrounding environment.	Such events are expected to be unlikely. Modern BESS facilities normally include battery and temperature monitoring, gas and smoke detection, ventilation, fire protection and emergency response systems. The final safety arrangements and potential impacts will be assessed through the PESIA.
Fire response and firefighting water	Water used during an emergency could become polluted by battery materials, smoke residues, metals or chemicals.	Site drainage, soil, groundwater and potentially downstream water receptors.	The Bosna River is approximately 400 m from the proposed BESS area, and no direct hydraulic connection is currently anticipated. Impacts on the river are therefore not expected where suitable drainage isolation and firewater containment are provided.
Transformer oil or other accidental leaks	Insulating oil or other hazardous substances could leak from electrical equipment or damaged components.	Soil, drainage and groundwater within or near the BESS site.	Potential impacts are expected to remain localized where suitable containment, inspection and early detection systems are in place. The PESIA will consider the final equipment and spill-management arrangements.
Battery maintenance, replacement and end of life	Damaged or spent batteries and other electrical components may require removal, temporary storage, transport, recycling or disposal.	Workers, soil and water if materials are not handled appropriately.	Significant impacts are not expected where authorized handling, transport and recycling or disposal arrangements are used.

The mitigation hierarchy

- 1 Avoid
- 2 Minimize
- 3 Restore
- 4 Offset / compensate where justified

Where relevant, the PESIA will identify appropriate measures to avoid, reduce or manage potential adverse impacts and to enhance potential benefits. It will also define responsibilities, monitoring requirements and actions to be implemented during project construction, operation and decommissioning in line with the final Project design and assessment findings.

What would you like the PESIA to examine?

Do you know of any local environmental or social issue, sensitive location, access constraint, safety concern, community activity or other matter that should be considered?

For feedback related to the PESIA, you may:

- ☒ Complete the Project Feedback Form provided during the consultation.
- ☒ Speak to the Project team during the consultation.
- ☒ Contact the PESIA Project team afterwards using the following contact details:

Contact Name: **Nina Krilić Žutić**

Telephone: **+38762693177**

Email: krilic@enydron.com

You are welcome to comment on any aspect of the proposed Project or raise any issue that is important to you.

03 Have your say and contact us

Project Grievance Mechanism

Formal Project-related concerns or complaints could be submitted separately through the Project Grievance Mechanism. EPBiH is committed to implementing the Project in a transparent and responsible manner. Any individual, group or organization may submit a concern, complaint and question/suggestion related to the Project, free of charge.

How will EPBiH process grievances?

- 1 Receipt of grievance.
- 2 Registration in the Grievance Register.
- 3 Acknowledgement.
- 4 Investigation and assessment.
- 5 Proposed corrective action and response.
- 6 Resolution and closure.
- 7 Monitoring corrective actions.

Concerns, complaints, questions/suggestions

The Project Grievance Mechanism is available free of charge. Concerns may be submitted also confidentially or anonymously.

GRIEVANCE CONTACT DETAILS

Contact Person: Lejla Telalagić

Email: l.telalagic@epbih.ba

Telephone: +38733751737

What to expect

Acknowledgement within **5** working days.

Review and response within **30** working days.

Information on escalation or appeal options.

IMPORTANT TO KNOW

No person will be disadvantaged or subject to retaliation for submitting grievance in good faith.

Thank you for taking part. Local knowledge can help identify risks early and improve project outcomes.

Documents available at: <https://www.epbih.ba/>

04 Project Feedback Form

TE Kakanj BESS - Stakeholder Consultation

Please use this form to share your views, local knowledge, concerns or suggestions on any aspect of the proposed Project or the PESIA. Completing the form is voluntary.

Your feedback will be recorded and considered as part of the PESIA and stakeholder engagement process.

CONSULTATION DETAILS

- Date:
- Location:

ABOUT YOU (OPTIONAL)

- Name:
- Organization/community:
- Telephone:
- Email:

HOW TO SUBMIT THIS FORM

Return it to the Project team during the consultation
or send it to: krilic@enydron.com

IMPORTANT

This form is for consultation feedback. Formal concerns or complaints should be submitted through the Project Grievance Mechanism described in this brochure.

1. What should be examined further?

2. Main comments, concerns or suggestions

3. Local information, sensitive locations or community activities related to Project

4. Would you like the Project team to contact you regarding your feedback?

☐ No ☐ Yes

Preferred method: ☐ Telephone ☐ E-mail

Best time to contact: _____



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