

**SOCIAL IMPACT ASSESSMENT  
NON-TECHNICAL SUMMARY**

**EVE Power Hungary Kft.**

## **1. Non-technical Summary**

This is the non-technical summary (NTS) of the Social Impact Assessment (SIA) for the Large Cylindrical Cell for Passenger Car Project in Debrecen, Hungary.

A separate Human Rights Impact Assessment (HRIA), an IPPC/Environmental Impact Assessment (EIA) and a Climate Change Risk Assessment (CCRA) have been developed for the project.

The NTS describes the project, the methodology and process of the SIA, the results of the impact analysis, and the mitigation measures.

This report is prepared in both English and Hungarian. In case of any discrepancies or ambiguities, the English version shall prevail.

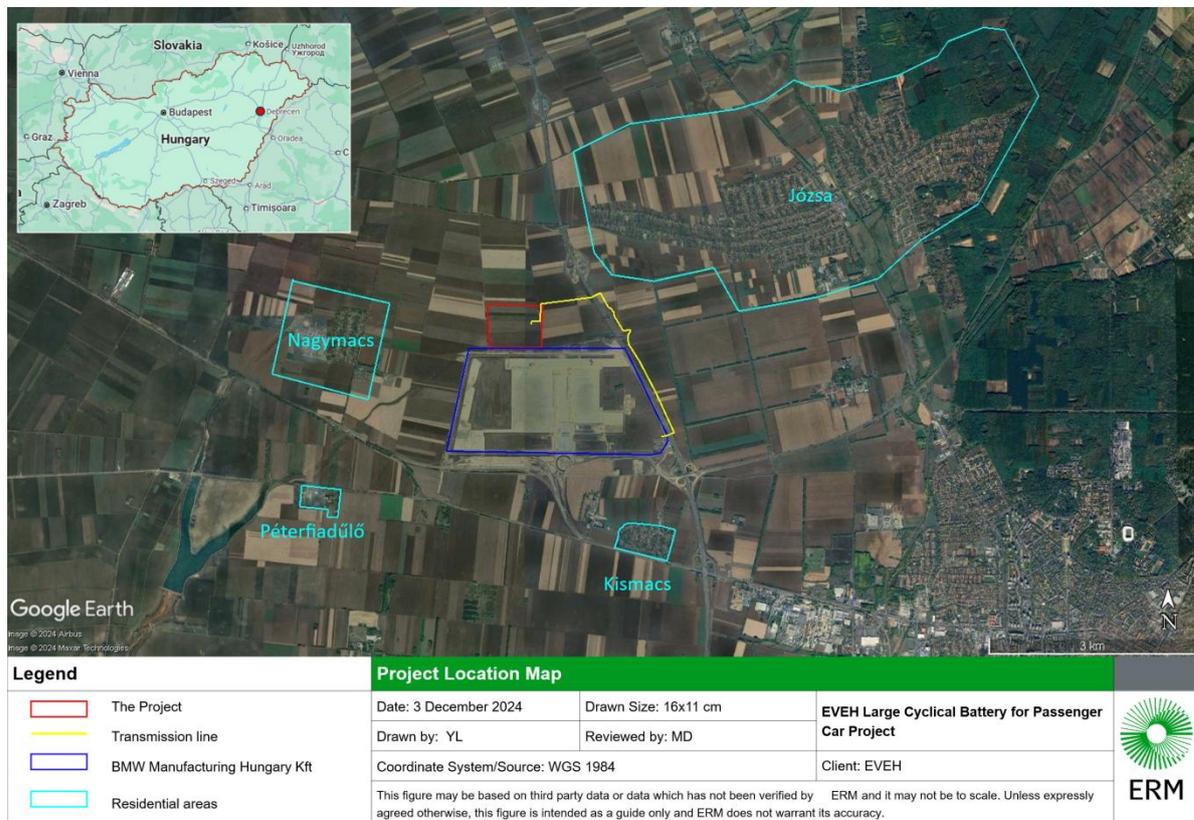
## **2. Overview of the project**

EVE Power Hungary Kft. (hereinafter referred to as “EVEH”) is developing a large battery manufacturing plant (the “Project”) in Debrecen, which is situated in the North-West Economic Zone, Debrecen City, Hajdú-Bihar County, Northern Great Plain region, Hungary. The Project construction started in 2023, and operation is planned to commence in 2027.

### **2.1 Project Location**

The Project is located at Plot No. 0237/405 in the North-West Economic Zone of Debrecen, Hungary. The Economic Zone is about 5 km west of Debrecen urban area, covering a total area of 500 hectares, with the Project occupying 45 hectares. As Hungary’s second-largest city and the county seat of Hajdú-Bihar, Debrecen has a total area of 465 km<sup>2</sup>. Most residents live in the downtown area. Its southern suburbs are dominated by agricultural and industrial activities, while the eastern part focuses on forestry.

Figure 2-1 Project Location



## 2.2 Project Components and Layout

The plant aims to produce lithium-ion batteries with an annual capacity of 30 GWh. The planned production plant will primarily supply the neighbouring BMW plant with cylindrical battery cells. Main components of the Project are listed in the Table 2-1 below.

**Table 2-1 Main Components of the Project**

Component	Note
<b>Production Facility</b>	
Electrode Workshop	A 2-storey building covering a land area of approximately 21,633.19 m <sup>2</sup> . Main functions: 3 anode production lines and 3 cathode production lines
Assembly Workshop	A 2-storey building covering a land area of approximately 20,873.46 m <sup>2</sup> . Main functions: Battery assembly
Formation Workshop	A 3-storey building covering a land area of approximately 16,568.63 m <sup>2</sup> . Main functions: Battery testing, ageing and sealing.
Pipelines	Communal drinking water supply network; Grey water and diluted water network; and Fire water and sprinkler network
<b>Auxiliary Facility</b>	
Raw Material Warehouses	A 3-storey building covering a land area of approximately 4,000 m <sup>2</sup> . Main functions: Store powder raw materials such as active cathode and anode materials, binders, conductive additives, and copper and aluminium foils.
Sorting Warehouse	A 3-storey building covering a land area of approximately 12,691.28 m <sup>2</sup> . Main functions: Elevated warehouse storage system for finished battery cells
NMP and Electrolyte Tank Farm	Covers a land area of approximately 964.88 m <sup>2</sup> . Main functions: Store and supply NMP and electrolyte solutions for electrode manufacturing and cell production.
Battery Test Lab	Covers a land area of approximately 1,035.26 m <sup>2</sup> Main functions: Battery testing and dismantling.
Battery Disposal Building	Main functions: Damaged battery dismantling.
Utility Building	A 2-storey building covering a land area of approximately 8,938 m <sup>2</sup> , to accommodate: <ul style="list-style-type: none"> <li>• 2×17.5 MW and 1×14MW hot oil boilers heated by gas burners;</li> <li>• 3×15 t/h steam boilers heated by gas burners;</li> <li>• Compressed air and nitrogen supply system;</li> <li>• Cooling water system;</li> <li>• Industrial wastewater treatment facility;</li> <li>• Greywater treatment area and associated pump house;</li> <li>• Refrigeration equipment for air handling units;</li> <li>• Industrial dilution water preparation system; and</li> <li>• 570 m<sup>3</sup> firewater storage tank.</li> </ul>
Stormwater Collection System	Two stormwater retention ponds, with a volume of 3,500 m <sup>3</sup> for each. Main Functions: Two separate internal stormwater networks, one for clean stormwater and one for potentially oil-contaminated stormwater.
Hazardous waste temporary storage	A 2-storey building covering a land area of approximately 371 m <sup>2</sup> . Main functions: Storage of hazardous waste from production and storage of hazardous raw materials (DMC, ethanol, thermal oil).
Multifunctional Building	A 3-storey building covering a land area of approximately 2,530.37 m <sup>2</sup> .

Component	Note
	Main functions: include office space, kitchen and canteen, test labs, central server room and on-site fire station
Transformer Substation	Covers a land area of approximately 4,000 m <sup>2</sup> . Main functions: The Substation receives power from 2*132 kV transmission lines and transforms voltage from 132kV to 11kV.
Other Building Units and Facilities	Consists of staff and VIP access points, a reception office, a guards' technical room, connecting bridges, smoking pavilions, and municipal waste collection points.
<b>Associated Facility</b>	
Transmission Lines	Two 7 km-length 132 kV transmission lines (underground cables), with a total length of 7.76 km, connecting the project substation with the Debrecen Eve 132/11 kV transformer substation. It will be constructed by contractors of EVEH 7 km-long 132 kV transmission lines and its ownership will be transferred to OPUSTITÁSZ during operation. The environmental impact of constructing and operating this underground cable was assessed in a preliminary study related to the establishment and infrastructure provision of the Debrecen North-West Economic Belt. The study concluded with the decision issued under registration number HB-03/KTF/00117-2/2019. Further social risks and impacts were assessed by the supplementary SIA document.
External Connection Pipelines	Connecting the drinking water, diluted industrial water and grey water pipelines to the Project. The external water pipeline networks will be constructed and operated by the City of Debrecen (DJMV). The length and layout of the water pipeline networks are unknown at the time of preparing this report.  The design, construction, and operation of the offsite water supply system serving the Project are under the responsibility of the local government, and EVEH does not have access to the related process documentation. Based on available information provided by EVEH, the environmental impact and risk assessments for the water supply system have already been integrated into the project development process in accordance with regulatory requirements. The environmental permit EVD (Előzetes Vizsgálati Dokumentáció - Preliminary Survey) has been obtained for the entire grey water system (grey water, diluting water, technology sewage). This EVD has also obtained a closing (approval) resolution HB/17-IKV/00049-2/2025. Therefore, no further assessment of this component is included in this report.

### 2.3 Project Alternatives

Only the “No-Project” option was considered in the design phase. The option to not proceed with the project will result in the proposed project area remaining in its current environmental state. The no action alternative entails no change to the status quo, in other words, the plant construction and equipment installation activities will not be conducted.

The project is located near highways and BMW's plant for cylindrical cell delivery, reducing transportation needs and related traffic, health and safety impacts. It is sited in the well-equipped North-West Economic Zone, which is away from residential areas.

### 3. SIA Approach and Methodology

The core objective of the SIA is to assess the effectiveness of the Project's measures and technical solutions in preventing and mitigating impacts. Where necessary, additional measures will be formulated to alleviate adverse impacts and enhance positive ones, and the SIA is an iterative process with regular feedback of findings.

A comprehensive SIA has been developed by ERM (Shanghai) Limited. ERM is an independent consultant to EVEH.

#### The SIA process consists of three overall steps:

- **Screening and Scoping:** Scoping identifies the Project's Area of Influence (AoI), judges the interactions between the Project and resources/receptors within the area, and classifies the impacts into three categories by importance:

**No interaction:** The Project has no connection with resources/receptors (e.g., the marine environment);

**Interaction but not significant:** The impact will not significantly alter the baseline state;

**Significant interaction:** The impact may cause major effects on resources/receptors.

- **Baseline Studies:** Baseline Studies determine the research scope and data sources for each assessment topic by integrating public data, stakeholder communications and other information, providing a baseline for scoping and impact assessment.

- **Impact Assessment:** Impact Assessment consists of four steps:

**Impact Prediction:** Judge the potential impacts of Project activities on

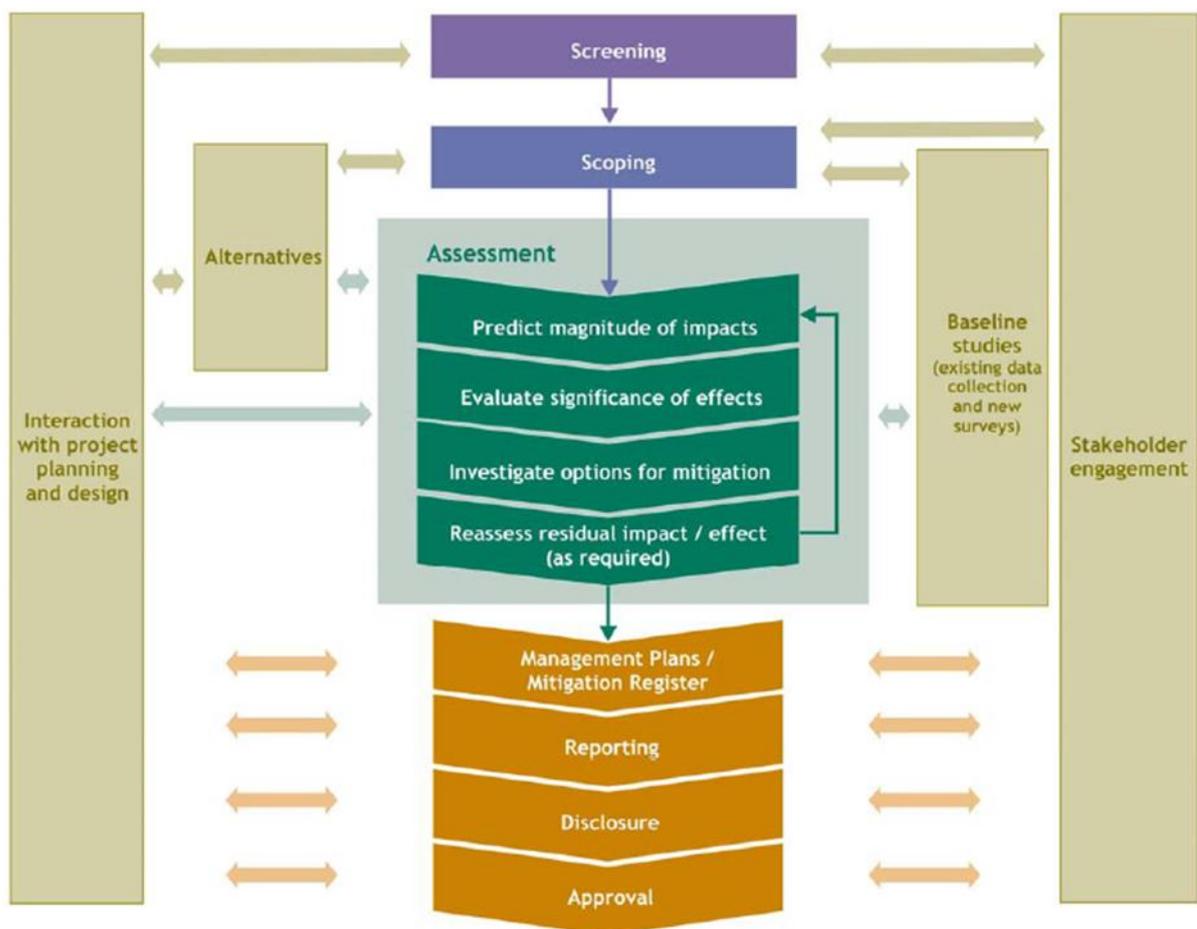
resources/receptors (including control measures already incorporated in the design);

**Impact Evaluation:** Determine the significance of impacts (classified as negligible, minor, moderate, or major) through a matrix method by combining the "magnitude" of impacts and "vulnerability of receptors";

**Mitigation and Enhancement Measures:** Formulate reasonable measures for negative/positive impacts;

**Residual Impact Assessment:** Evaluate the significance of residual impacts after the implementation of mitigation measures.

**Figure 3-1 SIA Approach**



**Key Dimensions of Impact Assessment:**

- **Magnitude** is determined based on four characteristics:

Extent: Geographical coverage (site/local/regional/national/international);

Scale: Degree of impact (large/medium/small);

Duration: Length of impact (short-term/long-term/permanent/temporary);

Frequency: Frequency of impact occurrence

(continuous/frequent/occasional/rare/one-off);

The final magnitude is classified into four categories: "negligible, small, medium, large".

- **Vulnerability** of Receptors is categorized based on the adaptability of receptors:

High: Almost no ability to adapt to changes (i.e., when they have low resilience);

Medium: Limited adaptability (i.e., medium resilience);

Low: Strong adaptability (i.e., high resilience).

The impact significance matrix (magnitude × receptor vulnerability) is used to determine impact levels, as follows.

**Figure 3-2 Impact Significance Matrix**

		Sensitivity/Vulnerability/Importance of Resource/Receptor		
		Low	Medium	High
Magnitude of Impact	Negligible	Negligible	Negligible	Negligible
	Small	Negligible	Minor	Moderate
	Medium	Minor	Moderate	Major
	Large	Moderate	Major	Major

The results of **Significance of Impacts** are divided into five categories:

- Negligible: No impact or the impact is indistinguishable from natural fluctuations;
- Minor: Perceptible impact, but with small magnitude/low receptor vulnerability, complying with standards;
- Moderate: Complying with standards but close to legal limits;
- Major: Exceeding standards, or causing large impacts on high-value/sensitive receptors;
- Positive: Beneficial impacts on receptors.

#### **4. Stakeholder Engagement**

##### **4.1 Stakeholder Engagement Plan**

The project has formulated an independent Stakeholder Engagement Plan (SEP), which includes:

- Compiling records of engagement activities already conducted by the project party;
- Identifying project-related stakeholders and defining corresponding engagement strategies;
- Incorporating an external grievance mechanism for the project.

##### **4.2 EIA and SEVESO Public Consultation (Compliance Consultation)**

During the approval phase, the project conducted public consultation in accordance with local regulations.

- **EIA-IPPC Permit Consultation:**

As of 9 December 2024 (the statutory disclosure deadline for IPPC), 236 public questions/concerns were received via official email, with core demands including:

Air pollution from project activities (production, transportation); project water demand and greywater/dilution water treatment technologies; wastewater

treatment; mitigation measures for the health and safety of employees/residents (air pollution, fire and explosion); establishment of an environmental monitoring system and disclosure of results; noise impacts from production/transportation; transportation of hazardous substances; transparency of public communication; adequacy of the EIA (e.g., failure to cover cumulative impacts); compliance with EU/local regulations (environmental protection, carbon emissions); social impacts of the project (employment, CSR).

- **SEVESO Permit Consultation:**

As of 5 December 2024 (the statutory disclosure deadline for the SEVESO report), 211 public questions/concerns were received via official email, with core demands including:

Early public participation in the planning/review phase; waste collection and treatment and municipal disposal capacity; sources of project employment and local job creation; rationality of agricultural land use; contingency plans for emergencies (fires, safety incidents); resource pressures on medical care, water use, energy, transportation emissions, and labor inflow; environmental impact monitoring measures during the construction phase; impacts of the plant on the community (residents on Elek Street are concerned about child traffic safety and quality of life).

### **4.3 SIA Stakeholder Engagement**

To refine the socio-economic baseline and impact assessment, the project carried out offline and online engagement activities with its major stakeholders, and the details of these activities were recorded in the SEP and disclosed within EVEH.

## **5. Screening and Scoping**

### **5.1 Social Area of Influence**

The project's Social AoI (Area of Influence) is defined as Debrecen City. It covers both direct impacts (from project activities like land acquisition or environmental

effects) and indirect/induced impacts (e.g., employment, infrastructure strain, social dynamics from workforce inflow).

- **Scoped-out Impacts (Not Prioritized for In-Depth Assessment)**

The following impacts are excluded from focused SIA evaluation due to low significance:

**Land and Livelihoods:**

The government acquired the project site by 2022 (90% via voluntary transactions, 10% under Hungary's Act CXIII of 2007 on Expropriation and Compensation, with fair market-based compensation);

The site was previously agricultural land; affected parties received fair compensation (cash or land replacement) assessed by independent appraisers, and could maintain their original livelihoods (agriculture/business) (local job opportunities are abundant);

No resettlement, informal land users, or grievances related to land acquisition were identified.

**Community Health/Safety Risks from Security Personnel:**

Security staff (hired locally from qualified agencies for construction/operation phases) will not carry weapons and receive training;

Relevant risks are covered in the Human Rights Impact Assessment, with adequate mitigation measures in place.

**Cultural Heritage:**

While the site is near archaeological areas, excavations (2019–2022) and artifact protection were completed before land transfer to the project;

Archaeological surveys for underground cable construction (identifying 11 sites) have been conducted; mitigation measures (on-site archaeological supervision, artifact documentation/protection per local laws) are

implemented, and the contractor has engaged a local museum to oversee works.

### **Unexpected Contingencies:**

The SEVESO report (28 October 2024) identified risks (e.g., fires, chemical leaks), but modeling shows these risks do not extend beyond the project site, so community health/safety impacts are insignificant.

### ● **Scoped-in Impacts**

The following high-potential significant impacts will undergo in-depth evaluation:

Economic displacement from temporary land access restrictions during cable construction;

Impacts of labor inflow (non-local workers, their families, and service providers) on community cohesion/social structure (e.g., social conflicts, community nuisance);

Impacts of the project workforce on community health/safety (e.g., increased traffic, communicable disease risks, illicit activities, gender-based violence);

Impacts of project air emissions, wastewater discharge, noise, and waste disposal on community health;

Impacts of project traffic and road accidents on community health/safety;

Impacts of goods/services procurement on the local economy and employment;

Impacts of direct job creation on the local economy and employment;

Impacts of project activities on public services/utilities (e.g., crowding of healthcare/commercial services);

Impacts of project water consumption on public services/utilities.

## **6. Social Impact Assessment**

Based on the scoping results, this SIA evaluated the potential impact of the project on

the social resources and receptors of the Debrecen City, covering the following main issues:

- Land use and livelihoods;
- Community cohesion and social structures;
- Community health, safety and security;
- Economy and employment;
- Infrastructure and public services; and
- Cumulative impacts.

Worker labour and working conditions (including occupational health and safety) are assessed in a separate HRIA, which covers mitigation for project-related human rights risks.

An overview of the results of the impact assessment is shown in Table 6-1. A brief description of each impact is given in the following sections. For the potential negative impacts, mitigation measures that can minimise these impacts have been identified. Similarly, for positive impacts, measures have been identified that can maximise these impacts. Proposed mitigation measures are listed in **section 7**.

**Table 6-1 Overview of impact assessment**

Issues	Impact Significance in Construction Phase	Impact Significance in Operation Phase
<b>1. Land use and livelihoods</b>		
Economic displacement due to temporal land access restrictions incurred by cables construction	<b>Negative-Minor impact</b> Impact magnitude: Small Receptor vulnerability: Medium	N/A
<b>2. Community cohesion and social structures</b>		
Impact on Community Cohesion and Social Structures from Labour Influx	<b>Negative-Minor impact</b> Impact magnitude: Small Receptor vulnerability: Medium	<b>Negative-Moderate impact</b> Impact magnitude: Medium Receptor vulnerability: Medium

<b>3. Community health, safety and security</b>		
Impacts on Community Health, Safety and Security due to the Presence of Project Workforce	<b>Negative- Minor impact</b> Impact magnitude: Small Receptor vulnerability: Medium	<b>Negative- Moderate impact</b> Impact magnitude: Medium Receptor vulnerability: Medium
Impact on Community Health and Safety Induced by Environmental Impacts	<b>Negative- Minor impact</b> Impact magnitude: Small Receptor vulnerability: Medium	<b>Negative- Minor impact</b> Impact magnitude: Small Receptor vulnerability: Medium
Impact on Traffic Volume and Road Safety	<b>Negative- Minor impact</b> Impact magnitude: Small Receptor vulnerability: Medium	<b>Negative- Minor impact</b> Impact magnitude: Small Receptor vulnerability: Medium
<b>4. Economy and employment</b>		
Impacts on economy and employment through the creation of direct and indirect employment opportunities, trainings and capacity building provided for local workforce, and local procurement	<b>Positive- Impact</b> Extent: International	<b>Positive- Impact</b> Extent: International
Impact of increased local prices and/or crowding out of community consumers due to labour influx during both construction and operation phase	<b>Negative- Moderate impact</b> Impact magnitude: Medium Receptor vulnerability: Medium	<b>Negative- Moderate impact</b> Impact magnitude: Medium Receptor vulnerability: Medium
<b>5. Infrastructure and public services</b>		
Impact from Project activities and labour influx on public services and utilities during construction and operation phases	<b>Negative- Minor impact</b> Impact magnitude: Small Receptor vulnerability: Medium	<b>Negative- Moderate impact</b> Impact magnitude: Medium Receptor vulnerability: Medium
Impact from Project activities and labour influx on water resources during operation phase	N/A	<b>Negative- Major impact</b> Impact magnitude: Medium Receptor vulnerability: High

### 6.1 Land Use and Livelihoods

63 land parcels (24,804 m<sup>2</sup>, covering arable land, agricultural land, public roads, etc.) east of the project site will be subject to temporary easement impacts during

construction.

- **Embedded Control Measures:**

Independent experts conducted market value analyses to set compensation standards.

Contractor is contractually obligated to compensate for incidental damages (e.g., crop damage) and undertake restoration work, with compensation amounts verified by independent experts in advance.

- **Impact Assessment:**

EVEH is responsible for land acquisition and compensation. 32 out of 37 landowners have signed agreements; 30 have received payments, and 2 returned payments will be reissued upon contact. Compensation for the remaining 5 landowners has been deposited with the competent district court per local laws. The incidental losses resulting from construction and other activities shall be directly compensated by the contractor to the landowner.

The project's impact is limited to the local area and is minor. Only one 91-square-meter plot has an affected proportion of 40%, while the rest are all no more than 8%. Overall, the impact level is classified as **Minor**.

- **Mitigation & Residual Impacts:** No Livelihood Restoration Plan (LRP) is required as the process complies with Hungarian laws. Mitigation measures are listed in Table 7-1 (Social Management Plan, Items 1.1). Proper implementation of controls and mitigations will render residual impacts **Negligible**.

## 6.2 Community Cohesion and Social Structure

The project will affect Debrecen's community cohesion and social structure due to non-local worker influx during construction and operation.

- **Embedded Control Measures:**

Local Talent Development: EVEH prioritizes local hiring, has an MOU with the

University of Debrecen for talent training, R&D and a battery institute, and is negotiating collaborations with other institutions.

Accommodation: Local employees live at home; EVEH provides housing for Chinese staff, contractors arrange accommodation for non-local workers in Debrecen.

Cultural Integration: A Guide to Work and Live in Hungary is available for Chinese expatriates. EVEH organizes Sino-Hungarian cultural exchanges and sponsors local sports/cultural events.

- **Construction Phase Impact Assessment:** Approximately 500 contracted workers on the project site (5% of whom are Chinese nationals or workers from non-EU countries) and 82 direct employees at peak period (from March to June 2025). Impact is localized, short-term, low spatial-temporal effect, pre-mitigation significance **Minor**.
- **Operation Phase Impact Assessment:** Larger workforce (1,500 initial direct employees, 1,019 at peak; 400–600 foreign workers). Impact is long-term, medium spatial-temporal effect; small communities resist foreign workers, pre-mitigation significance **Moderate**.
- **Mitigation & Residual Impacts:** Mitigation measures are listed in Table 7-1 (Social Management Plan, Items 2.1–2.2). After implementing the mitigation measures, the residual impact significance is **Negligible** in the construction phase and **Low** in the operation phase.

### 6.3 Community Health, Safety and Security

#### 6.3.1 Impacts on Community Health, Safety and Security due to the Presence of Project Workforce

The project will impact community health, safety and security in Debrecen due to the influx of non-local workers during construction and operation phases.

- **Embedded Control Measures:** EVEH will scatter project employees' and workers' accommodation across Debrecen to avoid overburdening medical services in specific communities.
- **Construction Phase Impact Assessment:** Non-local worker influx may raise risks of STDs, HIV/AIDS, influenza spread, GBV and public security issues. The impact was localized, occasional, short-term, with medium spatial effect and small magnitude; pre-mitigation impact significance was **Minor**.
- **Operation Phase Impact Assessment:** Risks were the same as the construction phase, but impact duration was long-term, with medium spatial effect and magnitude; pre-mitigation impact significance was **Moderate**.
- **Receptor Vulnerability:** Rated Medium for both phases, due to insufficient local medical resources and Hungary's prominent GBV problems.
- **Mitigation & Residual Impact:** Mitigation measures are listed in Table 7-1 (Social Management Plan, Items 3.1 – 3.2). Post-implementation, residual impact significance for the whole project cycle will be reduced to **Minor**.

### 6.3.2 Impacts on Community Health and Safety Impacts Induced by Environmental Impacts

The environmental impacts (air emissions, noise, vibration, wastewater discharge) of the project during construction and operation phases will exert effects on community health and safety.

- **Embedded Control Measures:** EVEH completed an EIA-IPPC report that assesses community health and safety impacts from the project's environmental effects and proposes corresponding mitigation measures.
- **Construction Phase Impact Assessment:** Construction activities (cable, external pipeline works) may impact health via air/noise/vibration/wastewater, but impacts

are minimal:

Air pollutant/dust levels at sensitive receptors are well below health limits;

Nearest residential area is 1.8 km away, with construction noise compliant and short-term;

No surface water within 4 km, and drainage facilities mitigate runoff impacts.

- **Operation Phase Impact Assessment:** Operational environmental impacts stay within acceptable ranges:

Noise/traffic noise increases meet regulatory standards and cause no significant perceived exposure changes;

Purified cooling system vapor has low harmful substance concentrations;

Wastewater is treated (partial reuse) and groundwater contamination risk is very low.

The impact is localized, small-scale, long-term, with low spatial-temporal effects and small receptor sensitivity.

Therefore, the resulting pre-mitigation significance is **Minor**.

- **Mitigation & Residual Impact:** Mitigation measures are listed in Table 7-1 (Social Management Plan, Items 4.1 – 4.2). Full implementation will render residual impacts **Negligible**.

### 6.3.3 Impacts on Traffic Volume and Road Safety

The project will generate impacts on traffic volume and road safety of relevant roads in Debrecen during construction and operation phases.

- **Embedded Control Measures:** On-site contractors (CREC, Synergy, BAUER) have developed project H&S plans as required, including transport-related rules: speed limits, traffic regulation compliance, and traffic control/protection for

public road construction.

- **Impact Assessment:**

**Affected Roads & Traffic Distribution:** Per the project's EIA-IPPC, congestion may occur on the M35 motorway, northern access road, BMW Boulevard, Highway 33 and Road 354. The site is in the Northwestern Industrial Park, mostly far from residential areas except Highway 33 (adjacent to Kismacs and Debrecen-Péterfiadútló). Construction impacts focus on M35, northern access road and BMW Boulevard; operation freight traffic serves the nearby BMW plant via M35. Freight traffic is split between M35's north-south sections to avoid affecting Highway 33/Road 354, and passenger traffic is multi-directional.

**Impact Characteristics:** Traffic volume growth is insignificant across both phases, especially on residential-adjacent Highway 33. Infrastructure construction uses minimal machinery and vehicles. The impact is localized in Debrecen, small-scale, low spatial effect, constant frequency (short-term for construction, long-term for operation), and low temporal impact, with Small magnitude. Nearby communities have limited transport options and insufficient public transport, leading to Medium receptor sensitivity and **Minor** pre-mitigation impact significance for construction.

- **Mitigation & Residual Impact:** Mitigation measures are listed in Table 7-1 (Social Management Plan, Items 5.1–5.2). Proper implementation will render residual impacts **Negligible**.

## 6.4 Economy and Employment

The project will generate positive economic and employment impacts at local, regional, national and EU levels through local procurement, job creation, talent training and tax contribution, while the labour influx induced by the project will lead to negative impacts such as local price inflation.

- **Positive Impacts & Embedded Controls**

**Controls:** Over 70% of production raw materials, plus logistics, maintenance and operation services, will be sourced from Hungary or other EU states. EVEH prioritizes local hiring, has an MOU with the University of Debrecen for battery talent training/scholarships/campus recruitment, and is negotiating collaborations with other academic institutions.

**Significance:** The project will boost local demand, rental income and business growth (e.g., markets, restaurants), and generate tax revenue. It will create over 100 direct local jobs during construction (95% of peak workers from Hungary/EU) and ~1,000 jobs during operation, while fostering long-term talent development via joint research/internships and driving indirect employment.

- **Negative Impacts (Price Inflation) & Significance**

**Performance:** Labour influx has caused tangible hikes in local property/rental and food prices (e.g., some employee accommodation rent doubled since 2022; canteen food prices up 100–200 Ft; Kismacs property prices rose alongside Debrecen's).

**Characteristics:** The indirect, localized impact is medium-scale, continuous and long-term. Medium receptor vulnerability (due to local concerns over low wages and high prices) leads to a **Moderate** pre-mitigation significance.

- **Mitigation & Residual Impact:** Enhancement and mitigation measures are listed in Table 7-1 (Social Management Plan, Item 6). Post-implementation, the residual impact of rising living costs will be **Minor**.

## 6.5 Public Service and Utilities

The project will impact Debrecen's public services and utilities (mainly healthcare and water supply) during construction and operation due to project activities and

labour influx.

### 6.5.1 Impact on Public Services and Utilities During Construction and Operation

- **Embedded Control Measures:** EVEH will scatter employee accommodation across Debrecen to avoid overburdening healthcare services in specific communities.
- **Construction Phase Impact Assessment:** The project has low resource demand (40 m<sup>3</sup>/day water, 5,000–25,000 kWh/month electricity) and small labour influx. The impact is localized, short-term and small-scale, with pre-mitigation significance **Minor**.
- **Operation Phase Impact Assessment:** Higher resource demand and larger labour influx amplify pressure on public services/utilities. The impact is long-term, medium-scale, with medium receptor sensitivity (due to existing healthcare gaps), leading to pre-mitigation significance **Moderate**.
- **Mitigation & Residual Impact:** Mitigation measures are listed in Table 7-1 (Social Management Plan, Items 8.1–8.2). The proposed mitigation measures help monitor and manage impacts but do not expand local public service/utility capacity or reduce project-related demand. Thus, the residual impact significance remains **Minor** for the construction phase and **Moderate** for the operation phase.

### 6.5.2 Impact on Water Resources During Operation

During the operation phase, the project's water use will impact local water resources.

- **Embedded Control Measures:** 83% of the project's total water consumption during operation will be industrial grey water and dilution water, minimizing freshwater usage to protect drinking water and groundwater resources.
- **Impact Assessment:**

Water Use Structure: Annual operational water consumption includes 984,060 m<sup>3</sup>

industrial grey water, 193,086.3 m<sup>3</sup> industrial dilution water, and 26,070 m<sup>3</sup> freshwater (for drinking).

Impact Characteristics: The impact is localized, long-term and constant, with medium magnitude. Receptor sensitivity is **High**, given Debrecen's history of drought-induced temporary water shortages, industrial supply gaps (e.g., ZF plant's operation suspension), and stakeholder concerns over water resources.

Affected Groups: Industrial water users are the primary receptors (Hungarian law prioritizes residential water supply). Domestic users may be affected if shortages worsen.

- **Mitigation & Residual Impact:** Mitigation measures are listed in Table 7-1 (Social Management Plan, Item 9). Effective implementation will reduce the residual impact of the project's water use to **Moderate**.

## 6.6 Cumulative Impacts

The cumulative impacts assessment focuses on socio-economic Valued Environmental and Social Components (cumulative environmental impacts were evaluated in the EIA and found to be insignificant), including:

- Local labor market and employment;
- Community cohesion and social structure;
- Community health, safety, and security;
- Local prices;
- Local water supply.

Projects in the Northwestern Industrial Park that may create cumulative impacts with the Project include:

- BMW's vehicle production project;

- Info Group's 22,000 sqm warehouse;
- Sinorg/Hunep's warehouse project;
- Schadle's project;
- ZF's suspension production project.

The assessment results of potential cumulative impacts are as follows.

- **Local Labor Market and Employment:** Surrounding projects (e.g., ZF requires 200 employees; BMW will create 1,000 local jobs) may exacerbate skilled labor shortages and drive up local wages, which could impact local small and medium-sized businesses.
- **Community-Related Impacts (Cohesion, Health, Prices):** Debrecen has a low local unemployment rate, and industrialization (along with surrounding projects) is expected to attract labor inflows. This may worsen declines in community cohesion, health/safety risks, and local price increases.
- **Local Water Supply:** Debrecen has experienced temporary water shortages in recent years (e.g., ZF cannot start operations due to water scarcity). While the Project's water consumption is unlikely to affect local residents, the prioritization of water supply (with residents as the ultimate users) requires ongoing monitoring.

## 7. Social Management Plan

Table 7-1 outlines the Project's Social Management Plan (SMP). EVEH bears overall responsibility for implementing these measures during construction and operation; all contractors/subcontractors must comply with the SMP's policies and plans.

**Table 7-1 social management plan**

No.	Impact	Project Phase		Significance	Mitigation/Enhancement Measures
		Construction	Operation		
1.1	Economic Displacement due to Temporal Land Access Restrictions Incurred by Cables Construction	√		Low	<ul style="list-style-type: none"> <li>EVEH should ensure, through regular monitoring, that all the affected landowners receive fair compensation.</li> <li>EVEH should conduct focused engagement with the affected landowners to disclose access restrictions and the Project's Community Grievance Mechanism (CGM), specifying that grievances related to land acquisition and compensation can be submitted via and promptly processed by the CGM.</li> </ul>
2.1	Impact on community cohesion and social structures from labour influx	√		Low	<ul style="list-style-type: none"> <li>To manage labour influx, discourage contractors from hiring "at the gate" of the Project site and setting up formal recruitment offices applicable to both skilled and unskilled workers.</li> <li>Employees' and workers' accommodation should be arranged in Debrecen urban areas by EVEH, its contractors and subcontractors, to avoid impacts on local communities.</li> <li>Develop and implement a Worker Code of Conduct (CoC) and extends its applicability to contractors' and subcontractors' employees working for the Project. The Worker CoC should include:               <ul style="list-style-type: none"> <li>Strictly prohibition of any illicit activities, including prostitution, violence, threat, humiliation, sexual harassment, exploitation, and abuse during working time and rest time, between workers and among local communities;</li> <li>Take all steps to follow the Project's environmental and social management plan;</li> <li>Treat all workers and local people with respect regardless of race, colour, language, religion, political stands, national, ethnic or social origin, property, disability, birth, or other status;</li> <li>The sanctions of non-compliance should not induce deduction of wages unless allowable by national law or authorized by the worker.</li> <li>When EPCs have developed their own Worker CoC, it should be in line with EVEH's Worker CoC.</li> </ul> </li> <li>Provide trainings of Worker CoC to all workers working for the Project, including contractors' and subcontractors' workers at induction and periodically during work.</li> <li>Engage with the local government, local communities and civil organizations on understanding local culture as part of the <b>Stakeholder Engagement Plan</b> and based on that, provide cultural awareness training(s) for workers regarding engagement with local community as part of the induction process and encourage workers to participate in local cultural events when it is welcomed and appropriate.</li> <li>Finalize and implement the Community Grievance Mechanism (CGM), through which the local residents of Debrecen can raise concerns in case of social conflicts or tensions. The CGM should be communicated to local communities on how to use it to report issues in a culturally appropriate manner and in local language – Hungarian. In addition, EVEH should monitor and evaluate the effectiveness of the CGM.</li> </ul>
2.2	Impact on community cohesion and social structures from labour influx		√	Medium	<ul style="list-style-type: none"> <li>Same as construction phase above</li> </ul>
3.1	Impact on community health, safety and security due to the presence of Project workforce (i.e., increased risks of	√		Low	<ul style="list-style-type: none"> <li>Construct the onsite emergency room or require the EPC contractor to do so, along with providing a fully stocked first-aid kit, equipment available for individuals to protect from communicable disease (e.g., face masks, sanitizers, etc.) as well as education</li> </ul>

No.	Impact	Project Phase		Significance	Mitigation/Enhancement Measures
	communicable diseases, GBV and other illicit behaviours)				<p>materials for the prevention and response of communicable diseases available in the languages used by workers onsite. The emergency room should serve for employees and contracted workers during both construction and operation phase.</p> <ul style="list-style-type: none"> <li>Update its Project HSE Plan and integrate the following topics to manage community-related health and safety impacts:                             <ul style="list-style-type: none"> <li><u>Infectious Disease Management:</u> <ul style="list-style-type: none"> <li>Provide workers with trainings on standard hygiene practices (washing hands, etc.);</li> <li>Actively engage with local health authority to understand the recommended vaccinations for influenza in the area and suggest all workers for vaccinations;</li> <li>Integrate STDs education into worker health and safety induction programs and as part of continuous trainings for workers;</li> <li>If workers require diagnostics or treatment for potentially infectious diseases, have them taken directly to a hospital to avoid potential contact with community members en route.</li> </ul> </li> </ul> </li> <li>Worker accommodations should comply with the IFC’s Workers’ accommodation: process and standards (2009). This includes recommendations around spacing, amenities, and sanitary conditions of accommodations.</li> <li>Formulate its Worker Code of Conduct (CoC) as mentioned in the previous section.</li> <li>Provide trainings to all its employees about the transmission of diseases, age of consent in project area, and reminder about Code of Conduct commitments and sanctions for noncompliance.</li> <li>Conduct monthly monitoring on publicly available local population health data from the local authorities, in particular for transmissible diseases including sexually transmitted diseases (STDs), HIV/AIDS, and influenza and influenza-like illness, to understand if the presence of Project workforce has led to increased cases of diseases.</li> <li>Introduce sanctions (e.g., dismissal) for all workers working for the Project involved in criminal activities.</li> <li>Finalize and implement the Community Grievance Mechanism (CGM) as mentioned above for local communities to report on health, safety and security issues in relation to the Project and monitor and evaluate the effectiveness of the CGM.</li> <li>Formulate commitment/policy to cooperate with law enforcement agencies investigating perpetrators of gender-based violence and other illicit activities.</li> <li>Develop and implement a Gender-Based Violence and Harassment (GBVH) policy and reflect the company position on GBVH as well as a set of standards of acceptable conduct and behavior, which applies to all project workers including contractors and subcontractors.</li> <li>Identify and explore the possibilities to collaborate with national and/or local civil society organizations who can provide support to workers and community members who have experienced GBVH, for example, through health services, counselling or legal support.</li> </ul>
3.2	Impact on community health, safety and security due to the presence of Project workforce (i.e., increased risks of communicable diseases, GBV and other illicit behaviors)		√	Medium	<ul style="list-style-type: none"> <li>Same as construction phase above</li> </ul>
4.1	Impacts on health of the community due to Project’s environmental impacts	√		Low	<ul style="list-style-type: none"> <li>Ensure the implementation of mitigation measures illustrated in EIA-IPPC and the compliance of the environmental monitoring records with the regulatory requirements.</li> <li>Disclose mitigation measures in EIA-IPPC, SEVEO permit, monitoring results on noise and wastewater discharged, as well as the</li> </ul>

No.	Impact	Project Phase		Significance	Mitigation/Enhancement Measures
					<p>emergency response plan in safety report of the Project to the public, particularly local communities in an easily accessible manner for them, e.g. on company website in lay language.</p> <ul style="list-style-type: none"> <li>Engage with the Municipality of Debrecen to ensure the implementation of mitigation measures illustrated in the Decision on the Preliminary Investigation for the Establishment and Provision of Infrastructure to the Debrecen North-West Economic Zone (File No. HB-03/KTF/00117-2/2019).</li> <li>Finalize and implement the Community Grievance Mechanism (CGM) as mentioned above for local communities to report on health and safety issues in relation to the Project and monitor and evaluate the effectiveness of the CGM.</li> </ul>
4.2	Impacts on health of the community due to Project's environmental impacts		√	Medium	<ul style="list-style-type: none"> <li>Same as construction phase above</li> <li>Disclose the environmental monitoring results to the public, particularly local communities in an easily accessible manner for them, e.g. on company website in lay language.</li> <li>Implement other activities to facilitate transparency with the public, particularly community, such as Open Day</li> </ul>
5.1	Impact on community safety from increased traffic and rise in accidents	√		Low	<ul style="list-style-type: none"> <li>Request all contractors to prepare a Road safety section in their Project health and safety plans. The road safety section should at least include: <ul style="list-style-type: none"> <li>All permanent and temporary routes onsite should be adequately signaled and upgraded, if necessary, in order to secure safety to enable continuous vehicle and pedestrian traffic flow at all times with the highest safety standards possible;</li> <li>Safety management procedures on vehicles and drivers, including all documents (copy of driver's license and identification) will be available in the driver's vehicle file, which must be inside the vehicle at all times;</li> <li>Project vehicles to be identifiable (e.g., an easy-to-read/see sign or symbol on vehicles which shows that they are connected to the Project);</li> <li>Road accident reporting procedures and available emergency services;</li> <li>Defensive driving training materials</li> </ul> </li> <li>Collaborate with BMW and local communities to appeal to the local government of Debrecen for solutions on improvement of public transport infrastructure in Debrecen and provide supports when necessary.</li> </ul>
5.2	Impact on community safety from increased traffic and rise in accidents		√	Medium	<ul style="list-style-type: none"> <li>Same as the construction phase above</li> </ul>
6	Impacts on economy and employment through the creation of direct and indirect employment opportunities, trainings and capacity building provided for local workforce and local procurement	√	√	Positive	<ul style="list-style-type: none"> <li>Continue to seek opportunities in local procurement of raw materials for production, with costs taken into consideration, and increase its local procurement rate during operation.</li> <li>Disclose its recruitment plans to local communities in a culturally appropriately manner (e.g. posting Hungarian job advertisements online) to facilitate local recruitment.</li> <li>Seek to extend the collaboration between EVEH and University of Debrecen to other local universities and vocational centers for the promotion of talent development and local recruitment.</li> </ul>

No.	Impact	Project Phase		Significance	Mitigation/Enhancement Measures
7.1	Impact on local economy from inflation of prices and crowding out of local consumers	√		Medium	<ul style="list-style-type: none"> <li>Implement the CGM as mentioned above and monitor and evaluate the effectiveness of the CGM.</li> <li>Conduct quarterly monitoring on the prices of local accommodation, food, and other life necessities to meet both Project and local community demand. Monitoring methods can be through local publicly available data on prices etc. provided by the local government, engagement with local communities in a culturally appropriate manner (e.g., survey at the local market) and tracking the records of Project's CGM.</li> <li>If significant price hikes and unavailability of certain life necessities incurring from the Project activities are identified in the local communities, relative mitigation measures should be implemented by EVEH including renting accommodation for employees, particularly for migrant workers, in nearby towns, diversifying procurement strategy, etc. Additionally, if low-income renters or households, from nearby communities are adversely affected by significant price increases or shortages of essential goods resulting from Project activities (for example, as evidenced through grievances submitted via the Project's CGM), EVEH should consider engaging the local government to initiate and support targeted assistance programs for them.</li> </ul>
7.2	Impact on local economy from inflation of prices and crowding out of local consumers		√	Medium	<ul style="list-style-type: none"> <li>Same as the construction phase above</li> </ul>
8.1	Impact on public services and utilities	√		Low	<ul style="list-style-type: none"> <li>Either construct the onsite emergency room itself or require the EPC contractor to do so. The emergency room should serve for employees and contracted workers during both construction and operation phase.</li> <li>Conduct quarterly monitoring on the capacity and corresponding patient volume of healthcare services in Debrecen. If significant impacts on local healthcare services incurring from the Project activities are identified in the local communities, support relevant authorities when they implement mitigation measures (e.g. support the improvement of existing healthcare services).</li> <li>Finalize and implement the Community Grievance Mechanism (CGM) as mentioned above for local communities to report on public services and utilities issues in relation to the Project and monitor and evaluate the effectiveness of the CGM.</li> </ul>
8.2	Impact on public services and utilities		√	Medium	<ul style="list-style-type: none"> <li>Establish an emergency centre onsite with a physician during operation phase.</li> <li>Conduct quarterly monitoring on the capacity and corresponding patient volume of healthcare services in Debrecen. If significant impacts on local healthcare services incurring from the Project activities are identified in the local communities, support relevant authorities when they implement mitigation measures (e.g. support the improvement of existing healthcare services).</li> <li>Implement and monitor the effectiveness of CGM.</li> </ul>
9	Impact on water resources during operation		√	Major	<ul style="list-style-type: none"> <li>Regularly discuss with and obtain data from Debrecen Waterworks to monitor the Project's impacts on water resources, understanding whether the Northwestern Industrial Park and local communities have stable access to water resources.</li> <li>Liaise and engage with Debrecen Waterworks and relevant authorities to ensure continuity of water supply and services provided to communities.</li> <li>Adhere to its plan and commitment that 83% of the water demand of the Project should be met by using the industrial grey water and dilution water. In addition, EVEH should disclose data on water consumption and recycling to local communities in culturally appropriate manner in Hungarian.</li> <li>Finalize and implement the Community Grievance Mechanism (CGM) as mentioned above for local communities to report on</li> </ul>

No.	Impact	Project Phase		Significance	Mitigation/Enhancement Measures
					<p>public services and utilities issues in relation to the Project and monitor and evaluate the effectiveness of the CGM.</p> <ul style="list-style-type: none"> <li>Collaborate with Debrecen Waterworks, neighbouring companies, universities and academic institutions and industrial associations on joint research activities focusing on water conservation technologies and measures.</li> </ul>
10	Cumulative impacts associated with local labor market and employment, labor influx and local water supplies	-	-	-	<ul style="list-style-type: none"> <li>Engage with the local government of Debrecen, Debrecen Waterworks, DIF (the infrastructure developer in Debrecen), industrial associations including the Hungarian Battery Association, adjacent companies (especially with BMW and its suppliers nearby in the Northwestern Industrial Park) and other relevant external stakeholders to address the potential social impacts and local concerns. For instance:               <ul style="list-style-type: none"> <li>Work with local authorities to address local concerns over the industrialization of the region, and cooperate in local programs and events aiming at the promotion of social integration, environmental protection (e.g. tree-planting), health and harmony of the local society;</li> <li>Work with Debrecen Waterworks and DIF on infrastructure development and improvement;</li> <li>Work with local universities and vocational centers for talent development, local recruitment, R&amp;D in technological advancement and sustainability in the battery sector and broader issues such as decarbonization;</li> <li>Work with neighboring companies, especially BMW and other suppliers of BMW in Debrecen, to address common environmental and social impacts including labor influx by supporting local cultural events and appealing to the local government to improve local public infrastructure, utilities and services together etc; and</li> <li>Explore the possibilities to collaborate with local industrial association(s) and NGO(s) on joint research activities and provide awareness raising programs for the public on battery industry.</li> </ul> </li> </ul>