

Innovation report



Abbildung 10: Location EGIS Operations Austria

Management Summary

We have implemented numerous measures in the fields of ecology, technology/safety and employee health that improve our environmental performance as well as occupational safety and staff motivation. In addition to the ecological enhancement of our sites and the modernisation of our vehicle fleet (e.g. hydraulic quick-change systems, LED conversion), we focus strongly on safety through digital and AI-based solutions such as the CollisionEye® collision warning system and apps for lone workers and safety data sheets. Complementary health initiatives, such as a workshop on healthy nutrition in shift work and planned ergonomics programmes, provide important impulses for the long-term health of our workforce. Future projects, including the scientific evaluation of our filter basins in cooperation with BOKU and the introduction of a digital inspection and defect management system, will further strengthen our quality assurance and transparency towards clients and authorities.

Ecology, Land & Biodiversity

1. **Greening of parking areas at the woodchip heating plant (implemented)**

During the construction of the woodchip heating system, concrete strips in the parking area had to be opened. We used this opportunity to green these areas.

Native perennials and grasses were planted that are particularly attractive for insects. The beds were covered with lava mulch to prevent the soil from drying out – especially during hot summer months – and to minimise weed growth. Since planting, the perennials and grasses have developed very well and contribute to a more natural and welcoming appearance of the site.



Abbildung 11: Bed greening shortly after completion

2. **“Pick me” garden (in preparation, planting planned for spring 2026)**

A “pick me” garden has been planned: around 40 native fruit trees and shrubs have been ordered from a local tree nursery and will be planted in spring 2026.

Passers-by will be able to help themselves to the fruit. This will:

- create additional blossoms and food sources for insects,
- provide added value for local residents,
- and have a positive effect in terms of public relations and image.

3. **Structural measures on compensation areas (implemented)**

On several ecological compensation areas, additional structural elements have been created in order to enhance habitats ecologically.

These include:

- stone piles and
- deadwood / shrub piles,

which provide retreat, basking and overwintering sites for insects, reptiles and small mammals and increase structural diversity on our areas.

Raised beds and plant containers (implemented)

To link health, environmental aspects and employee motivation, raised beds and plant containers have been installed.

They are used to grow lettuce, tomatoes and other vegetables that are available to employees as healthy snacks. At the same time, these green elements visually enhance our site.



Abbildung 10: First harvest



Abbildung 11: Raised beds

4. Scientific evaluation of filter basins with BOKU (planned)

We are planning a cooperation with BOKU (University of Natural Resources and Life Sciences) to scientifically evaluate our filter basins.

The goals are:

- to analyse retention performance (e.g. for sediments and pollutants),
- to assess ecological quality and biodiversity,
- and to derive recommendations for optimising design, operation and maintenance.

The findings will help us to further develop our facilities both ecologically and technically.

Technology, Energy & Safety

1. Energy-saving measures – lighting (partly implemented, further conversion planned 2026/2027)

The drive-through lighting has already been converted to LED technology.

For 2026/2027, we plan to convert the entrance lighting to LED as well, in order to further reduce energy consumption and maintenance needs.

2. Hydraulic quick-change systems on L2 and L3 (implemented)

Vehicle L2 has been equipped with a hydraulic quick-change system that allows fast switching between summer and winter operation.

In addition, vehicle L3 has been converted to a hook-lift system with roll-off containers. This allows significantly faster changeovers between:

- winter service (spreader) and
- summer service (container, e.g. for green waste).

This reduces changeover time from around 1.5 hours to approximately 15 minutes.

Benefits:

- shorter downtimes and more flexible deployment,
- especially in winter, tasks can be reassigned quickly even when fewer staff are available,
- the issue of driving and rest times is mitigated because vehicles can be prepared and handed over more efficiently.



Abbildung 13: L2 container removed



Abbildung 12: L2 in summer operation with container



Abbildung 14: L2 in winter service with spreading attachment

3. **Winter service equipment with side snow plough (implemented)**

New winter service equipment including a side snow plough for trucks has been purchased.

The increased clearing width allows routes to be serviced with fewer runs. This leads to:

- fewer kilometres driven,
- lower fuel consumption,
- and a noticeable reduction in emissions,
- while also improving options for personnel planning.

4. **Lone worker app (in evaluation)**

A lone worker app is currently being evaluated to improve the safety of staff working alone. Planned features include:

- better recording and monitoring of lone working activities,
- defined emergency and alarm functions,
- faster response in critical situations.

5. **App for safety data sheets (in evaluation)**

An app for managing safety data sheets (SDS) is also being evaluated. The objectives are:

- to provide every employee with direct mobile access to relevant SDS,
- to ensure that essential information is quickly available in an emergency,
- and to improve action capability and safety when handling hazardous substances.

6. **CollisionEye® – AI-based collision warning system (pilot in preparation)**

Highway workers are constantly exposed to serious risks from speeding vehicles that can unexpectedly enter construction or roadside assistance areas. Despite existing safety equipment, accidents can still happen because drivers may not always notice these sites due to distractions.

To address this safety challenge, we plan to test the AI-based collision warning system **CollisionEye®** developed by EYES. Using advanced detection technology, CollisionEye® identifies potential collisions early and warns both traffic and on-site workers.

CollisionEye® uses a two-level warning concept:

1. First, it alerts oncoming drivers via a signalling horn to give them time to avoid the danger zone.

2. If drivers do not react, it immediately warns on-site employees with visual and audible signals via a signalling device.

Recognised with the Vision Zero Award from the German Road Safety Council and based on seven years of AI development, CollisionEye® acts as a “third eye” to protect those who work in high-risk environments and to help prevent severe accidents.

7. Sharemat – fleet management system (implemented, further development planned)

We use Sharemat as a digital fleet management solution. Sharemat supports us with:

- cost control and cost allocation,
- automatic reminders for inspections and legal checks (e.g. vehicle inspections),
- operating hours recording and utilisation analysis.

In future, Sharemat is also intended to simplify the international exchange and shared use of machines within the group by making availability and usage data transparent across locations.

8. Digital inspection and defect management system (planned)

As a further step towards digitalisation and quality assurance, we are planning to introduce a digital system in which all regular inspections and drive-through checks are recorded (e.g. basins, drainage ditches, wildlife watering points, game fences, loess walls).

The idea is:

- to store all objects (including location data) and maintenance intervals centrally,
- to display via tablet/phone which objects are due for inspection during field visits,
- to record identified defects directly in the system, assign them and track them until completion,
- and to close completed tasks in the same system.

This will increase transparency and traceability and enable us to clearly document to clients and authorities that our facilities are inspected and maintained in line with requirements.

Employees, Health & Social Issues

1. **Lecture “Healthy nutrition in shift work” (implemented)**

A lecture on healthy nutrition with a focus on shift work was held. The following topics were covered:

- challenges associated with changing working hours,
- strategies against fatigue and food cravings,
- practical tips for meal planning and breaks.

This supports our employees in maintaining a healthy lifestyle despite shift work.

2. **Ergonomics and back health programme (idea)**

To further promote employee health, a regular ergonomics and back health programme has been introduced.

Possible additional components include:

- workplace-specific ergonomics training (lifting, carrying, working with machinery, driving posture),
- optional checks and advice from occupational health professionals or physiotherapists.

The aim is to reduce musculoskeletal and orthopaedic strain, prevent long-term health issues and support employees in remaining healthy and productive in the long term.