



# ASI Plant Report

## Introduction

Nemak, is a leading provider of innovative lightweighting solutions for the global automotive industry, specializing in the development and manufacturing of aluminum components for e-mobility, structure & chassis, and ICE powertrain applications. In 2023, the Company employed approximately 24,000 people at 38 production facilities worldwide. For more details about the Company, please refer to Nemak's most recent version of the Annual Report.

This report has been created for Nemak TURKEY, with the main address of Atatürk Organize Sanayi Bölgesi 10006/1 No:4 Çiğli İzmir Turkey. Therefore, all information disclosed in this report is only relevant for the scope of the location, unless otherwise specified.

# Policy and Management

## Impact Assessments

At Nematik’s location in TURKEY, Environmental and Social Impact Assessments for new projects or major changes to the existing facilities are conducted. Such environmental and social impact assessments strive to identify and addresses risks associated with developments, expansions, exploration activities and significant changes to Nematik’s Site in TURKEY.

Since June 2022 (start of ASI membership), the site has undergone the following major changes or new projects:

PROJECT	
<b>Name</b>	New OEM
<b>Date</b>	2023
<b>Short Description</b>	Gearbox Right & Left
<b>Significant Impacts</b>	<p>New OEM area is established with brand new CNCs and conveyors. There are positive impact as;</p> <ul style="list-style-type: none"> <li>• New OEM machining area is isolated from casting, very well ventilated and lighting.</li> <li>• Parts are moved on conveyor.</li> </ul> <p>There is a possibility to work for handicapped or heath issues operators. Limited manuel handling gives more female operators working chance.</p>
<b>Mitigation Actions</b>	This area is an opportunity to hire more female operator.

## Human Rights Impact Assessments

Since June 2022 (start of ASI membership), Nematik TURKEY has undertaken a human rights impacts assessment in the framework of the projects listed in the previous section. The main results of the assessment are summarized below:

SALIENT HUMAN RIGHTS RISKS	RIGHTSHOLDERS	KEY ACTION PLAN POINTS
Accidents caused by new hired employees’ unsafe acts	All employees	Buddy system will be improved. Poka Yoke systems, robots, automations will be generalized.
Unsafe work environment caused by new hired employees’ violation of rules	All employees	Disciplinary actions will be implemented strictly.
Unfair working conditions	Company & all employees	Transparency Helpline is promoted for employees. Commitment and Motivation Programs will be implemented.
Transportation issues to reach the company	Employees	Transport company and busses will be audited more systematically.



The latest version of the Global Human Rights Policy and Due Diligence Process can be found here: <https://nemak.com/sustainability/?sc=0#sustainabilityPolicies>.

### **Impacts on Communities:**

The area of social influence for Nemak Turkey is defined as the area within 5 Km radius from the site:



Figure 1: Area of influence for Nemak TURKEY 5 Km radius)

A Corporate Citizenship materiality assessment has been conducted through interviews with several internal and external stakeholders, within its area of influence, to identify the needs of the communities which Nemak could support as well as potential negative impacts which Nemak could avoid and mitigate.

Nemak TURKEY regularly engages with the local communities through initiatives such as:

- Turkey Earthquake Donation in 2023
- LÖSEV Tangerine Farm Volunteer Work
- Apprenticeship Programs
- Donation to LÖSEV
- Tree donation 1 for each employee – 750 trees

Nemak TURKEY has identified that its operations can have actual and potential negative impacts on local communities. The identified risks are related to natural resources consumption by using natural gas, water and creating waste on manufacturing operations.

Nemak is implementing the following actions to prevent and minimize the identified risks.

RISKS IDENTIFIED	KEY ACTION PLAN POINTS
Waste	Reduce and recycle waste generated in operations. Aim to achieve zero waste.
Emissions	Reduce energy consumption. Control air emissions and comply with legal limits
Water	Reduce water consumption. Control water discharge and comply with legal limits.

## Emergency Response Plan

While Nemak TURKEY prioritizes transparency in its operations, the site's Emergency Response Plan is not fully disclosed in this report due to confidentiality reasons. However, the plan has been diligently prepared according to ISO 45001 Standard and İşyerlerinde Acil Durumlar Hakkında Yönetmelik, audited by Fire Brigade against the Binaların Yangından Korunması Hakkında Yönetmelik, submitted to local authorities, and is available upon request for interested parties.

The figure below represents an overview of the Emergency Response Plan:

Nemak Turkey is located in Atatürk Organize Sanayi Bölgesi on 47,150 m<sup>2</sup> land. Emergency Plan is prepared by Plant Management team and regularly reviewed to update in case of need. Following emergency conditions are evaluated and action plans are defined for Emergency Team and also for employees and visitors.

Emergency 1	: Fire
Emergency 2	: Industrial Accident
Emergency 3	: Radiation Accident
Emergency 4	: Earthquake
Emergency 5	: Flood
Emergency 6	: Storm
Emergency 7	: Environmental Accident
Emergency 8	: Work at Height Accident
Emergency 9	: Confined Space Accident
Emergency 10	: Dangerous Goods Transportation Accident
Emergency 11	: Pandemic

Emergency Team is organized according to legislation. Annual internal and external trainings are defined for emergency team. Annual drills are realized for different shifts. Evacuation, injury, fire, spill, etc case emergency team and other employee's response tested and reported as a result of drill.

Plant has fire extinguishers, sprinkler, hydrant and other firefighting equipment with proper number and type.

The hazardous materials, waste, chemicals are separately conditioned and stocked on site. Inventory and transfer also arranged according to legislation and risk.

# Transparency

## Non-compliance and Liabilities

Nemak TURKEY did not receive any fines, lawsuits, sanctions or penalties due to non-compliance with applicable legislation.

Safety and Environmental compliance are followed by company HSE Specialist, External Environmental Consultant and ADR Consultant.

Labor Rights are managed and controlled by company and union lawyer.

# Material Stewardship

## Environmental Life Cycle Assessment

In general, Nemak relies on the ISO 14040/44 (Life Cycle Assessment -LCA methodology) to estimate through internal tools a product carbon footprint (PCF) considering a Cradle-to-Gate scope to guide its Sustainability Strategy and improve its understanding of the environmental impacts of its products throughout the entire value chain. The Cradle-to-Gate approach measures each product's environmental and climate impacts from the extraction of raw materials to delivery to customers. Nemak has successfully conducted LCAs for three of its product categories and aims to have completed Cradle to-Gate LCAs for all electrified portfolio products by 2030. At the same time, Nemak actively provides key customers with information about the carbon footprints of products, demonstrating its ability to apply LCA methodologies on demand.

For Nemak TURKEY, Cradle to Gate- PCF have been completed for 2 products. Due to confidentiality, Nemak does not disclose the results of the assessments, which can be provided to relevant stakeholders upon request.

# Greenhouse Gas Emissions

## Energy Consumption & GHG Emissions

Nemak acknowledges the environmental impact of its operations and is actively engaged in initiatives to enhance energy efficiency. In line with its commitment to sustainability, NEMAK TURKEY closely monitors its energy consumption and continually explores innovative methods to reduce its carbon footprint. The following table provides a breakdown of the energy consumption data, highlighting the contribution from various energy sources.

### GRI 302-1

ENERGY CONSUMPTION MILLIONS OF GJ	2023
<b>Total Energy consumption</b>	<b>263,494</b>
<b>Direct use</b>	<b>130.131</b>
Natural gas	129,998
LPG	68
Diesel	65
<b>Indirect use</b>	<b>133.363</b>
Electricity consumption (non-renewable)	133.363

Building upon its commitment to sustainability, NEMAK TURKEY extends its transparency to encompass Greenhouse Gas (GHG) emissions. Acknowledging the interconnected relationship between energy consumption and environmental impact, the company diligently tracks its emissions data. The table below indicates the GHG emissions (in tons CO<sub>2</sub>e), categorizing them into Scope 1 and Scope 2. Scope 3 emissions (global) is available in NEMAK's Annual Report.

### GRI 305-1/2/3

EMISSIONS IN TONS CO <sub>2</sub> E	2023
<b>Total</b>	<b>22,225</b>
Scope 1*	6,547
Scope 2**	15,678

\*Scope 1 covers fuels, excluding process and refrigerants emissions.

\*\* Scope 2 location-based emissions, which is equal to market-based emissions as there were no purchased renewable energy in 2023.

Scope 1 and 2 emissions for all reported years have been verified by a third party.

## GHG emissions reduction

As an organization, Nematik has defined Science Based Targets to reduce its Scope 1&2 emissions by 28%, using a 2019 baseline. On a plant level, Nematik TURKEY aspires to the same level of ambition. To achieve this target, specific initiatives such as energy efficiency and purchase of renewable energy have been identified. The figure below illustrates Nematik TURKEY emissions pathway to achieve the 28% reduction goal by 2030.

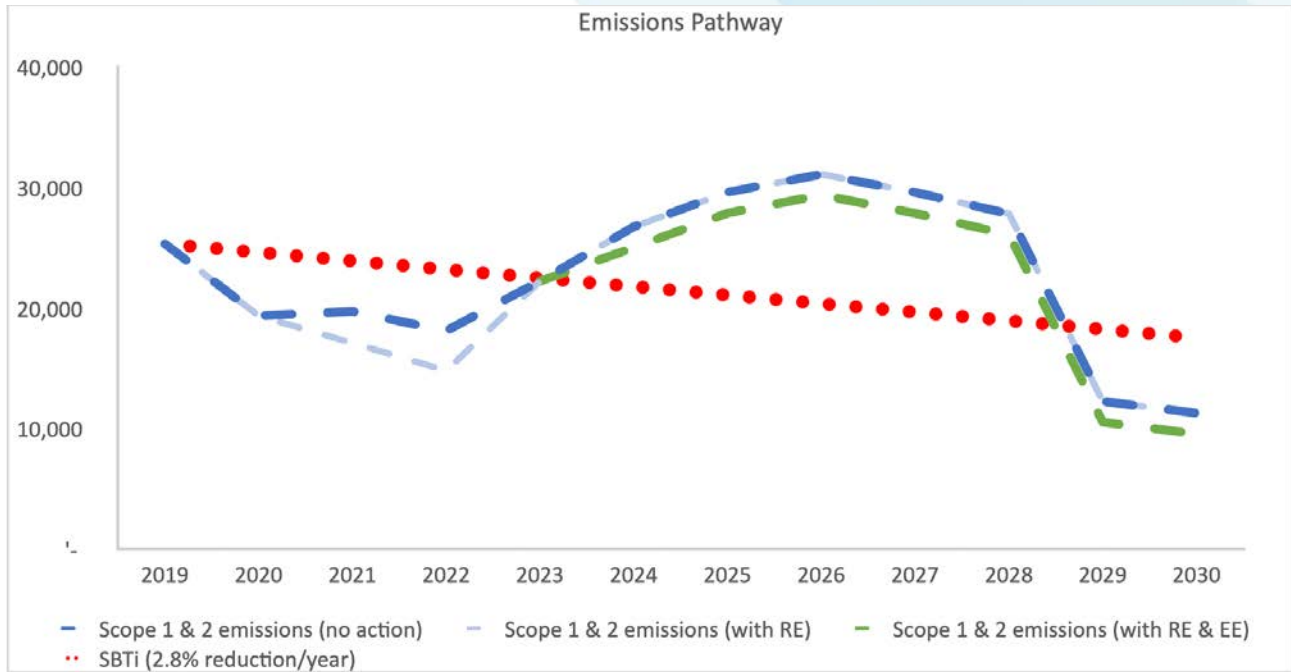


Figure 2: Scope 1&2 Emissions Pathway for Nematik TURKEY

To achieve its emissions reduction targets, Nematik TURKEY has identified energy efficiency and renewable energy initiatives to be executed in the coming years.

## Emissions, Effluents and Waste

### Emissions to Air at Nematik TURKEY

In addition to GHG emissions, Nematik TURKEY diligently monitors other air emissions as part of its comprehensive environmental management strategy. Recognizing the importance of maintaining air quality standards, both at the regulatory and community levels, the company remains steadfast in its commitment to mitigating potential environmental impacts. By closely monitoring these emissions and implementing proactive measures, Nematik TURKEY endeavors to ensure compliance with legal regulations and safeguard the well-being of both the environment and surrounding communities.



The table below includes an extract of the most relevant air emissions.

GRI 302-7

OTHER EMISSIONS IN TONS		2023
NOx Emissions		6,7
SOx Emissions		16,3
Particulate matter (PM) Emissions		Under legal limit

To minimize the exposure to and impacts from Emissions to Air, following measures are in place:

- ✓ Cold box core production area amine scrubber extraction system,
- ✓ Gravity production area, phenol scrubber extraction system
- ✓ KMA systems are extracting injection casting smoke
- ✓ All CNC machines with lubricant oil extraction system.

**Water Management**

At Nemak TURKEY, water is used for Cooling Towers, Heat Treatment, Machining. The following table breaks down the water withdrawal and discharges for Nemak TURKEY in 2023.

GRI 303-3/4

DETAILS ON WATER WITHDRAWAL AND DISCHARGE IN 2023 IN MEGALITERS		2023
<b>Water withdrawal total</b>		<b>101,08</b>
surface water		0
groundwater		0
seawater		0
produced water		0
third party withdrawal		101,08
<b>Water discharge total</b>		<b>90,97</b>
<b>Water consumption total</b>		<b>101,08</b>

**Discharges to Water**

The discharge water analysis is described in the following table.

LIMIT	INDICATOR	UNIT	MEASUREMENT RESULTS 16.04.2024
2500	chemical oxygen demand	COD mg/L	109
500	suspended solids	AKM mg/L	5
6 - 10	pH	pH	7,25



To minimize the exposure to and impacts from Discharge to Water, Nemak TURKEY has biological and chemical water treatment systems. All waste water coming from process is treated on chemical treatment and then biological treatment facilities. Regular checks are ongoing to keep parameters under limits.

### **Assessment and Management of Water**

The Company performs a water risk assessment by using the I, developed by the World Resources Institute, to identify water stressed zones where the Company has operations. In the reporting year, the water risk at Nemak TURKEY has been identified as high (see Figure below).

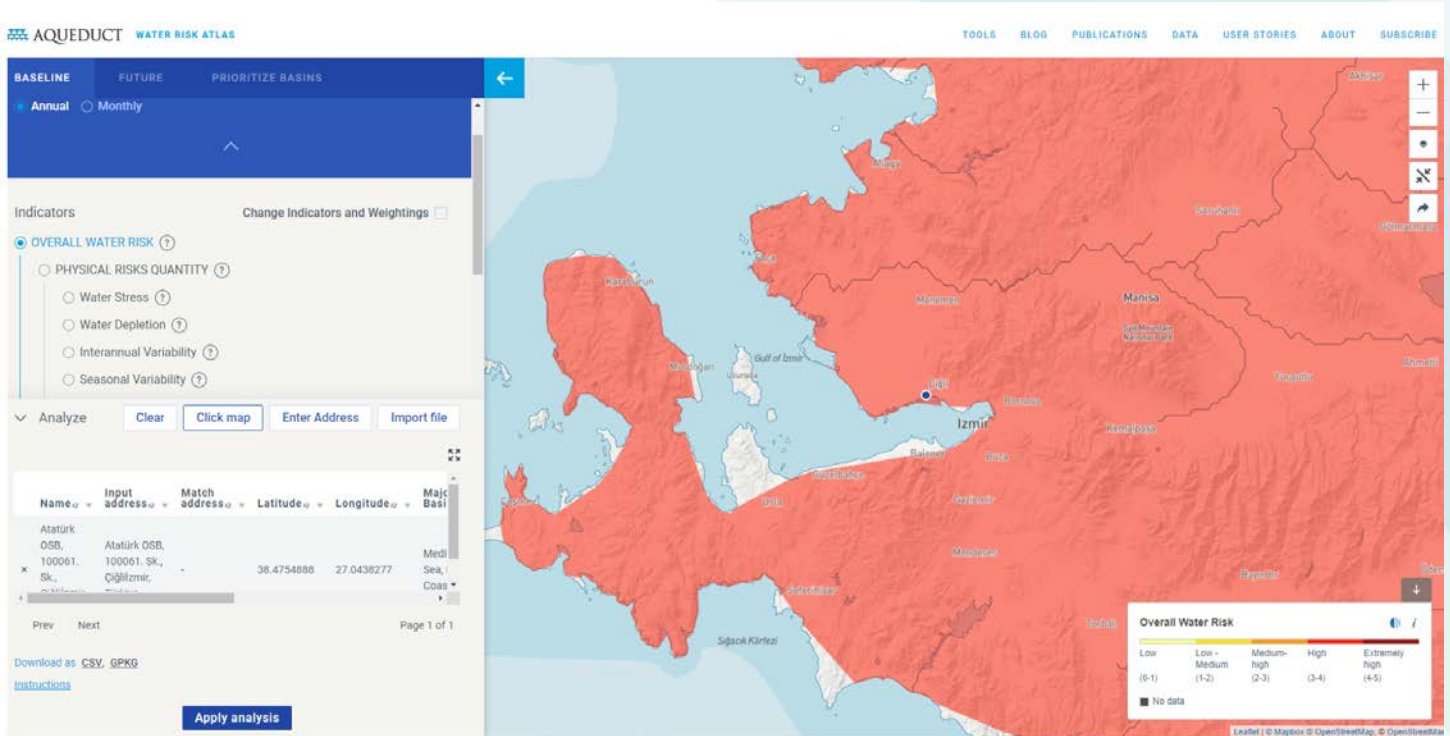


Figure 3: Aqueduct Water Risk Map for Nemak TURKEY

Nemak TURKEY has defined a target to reduce its water consumption by 2% annually. To reduce water consumption Nemak TURKEY

- ✓ Water Management Program will be implemented.
- ✓ Lubricant Waste Treatment project will be implemented.

### **Assessment and Management of Spills and Leakage**

Nemak TURKEY has Preventive Maintenance plans to prevent any leaks on machines. Additionally, to prevent, detect and remediate Spills and Leakages measures are in place such as: Blind spots, secondary containments, ground isolation are used to prevent any contamination caused by spills or leaks; in addition to on-site audits for detection and controlling of leaks.

Since June 2023, Nemak TURKEY did not have any material spill or leakage incident.

## Waste Management

As a responsible steward, Nematik strives to minimize the environmental impact of its products and maximize material efficiency. In alignment with the Company's Standard for Waste Management, Nematik TURKEY recovers, recycles, and/or reuses aluminum and sand, wherever possible. The site continuously works on minimizing waste disposal and finding opportunities to reuse and recycle resources.

The generated waste at Nematik TURKEY is summarized in the table below:

### GRI 306-5/5

WASTE GENERATED IN TONS			
	total	onsite	offsite
<b>Waste diverted from disposal</b>			
<b>thereof non-hazardous materials</b>			
prepared for reuse	28684		28684
prepared for recycling	1683,712		1683,712
other recovery options			
<b>thereof hazardous materials</b>			
prepared for reuse	16,34		16,34
prepared for recycling	969,85		969,85
other recovery options			
<b>Waste directed to disposal</b>			
<b>thereof non-hazardous materials</b>			
directed to incineration   with energy recovery			
directed to incineration   without energy recovery			
directed to landfilling			
other disposal methods			
<b>thereof hazardous materials</b>			
directed to incineration   with energy recovery	1378,15		1378,15
directed to incineration   without energy recovery	20,86		20,86
directed to landfilling	69,2		69,2
other disposal methods			

# Biodiversity

## Biodiversity management

Nemak is committed to conserving and promoting biodiversity across all sites. A Global Biodiversity Policy is in force since 2023 and meets the requirements of international standards for biodiversity, including Global Reporting Initiative (GRI) disclosure 304. A supporting Biodiversity Procedure is in place to facilitate the assessment of operations, analysis of risks, development of action plans to mitigate risks, and reporting the results of conservation and preservation efforts.

In 2023, Nemak TURKEY conducted a Biodiversity assessment covering the scope of direct operations. The analysis was conducted using Integrated Biodiversity Assessment Tool (IBAT) and Species Threat Abatement and Restoration (STAR) methodologies.

The results indicated that Nemak TURKEY has no significant impacts related to key biodiversity or protected areas. Local laws regarding biodiversity protection were taken into consideration for the analysis of the IBAT results. Nemak TURKEY is not directly dependent on Ecosystem Services, although it relies on the availability of natural resources such as minerals, bauxite etc.

### **Protected Areas**

Based on the proximity assessment using IBAT, the following Protected Area and Key Biodiversity Area are found within 5 km of the area of interest:

- Gediz Delta
- Yamanlar Mountain

On the other hand, the generated Species Threat Abatement and Restoration (STAR) indicates a Very Low Abatement score (0.21) and a Very Low Restoration score (0.36):

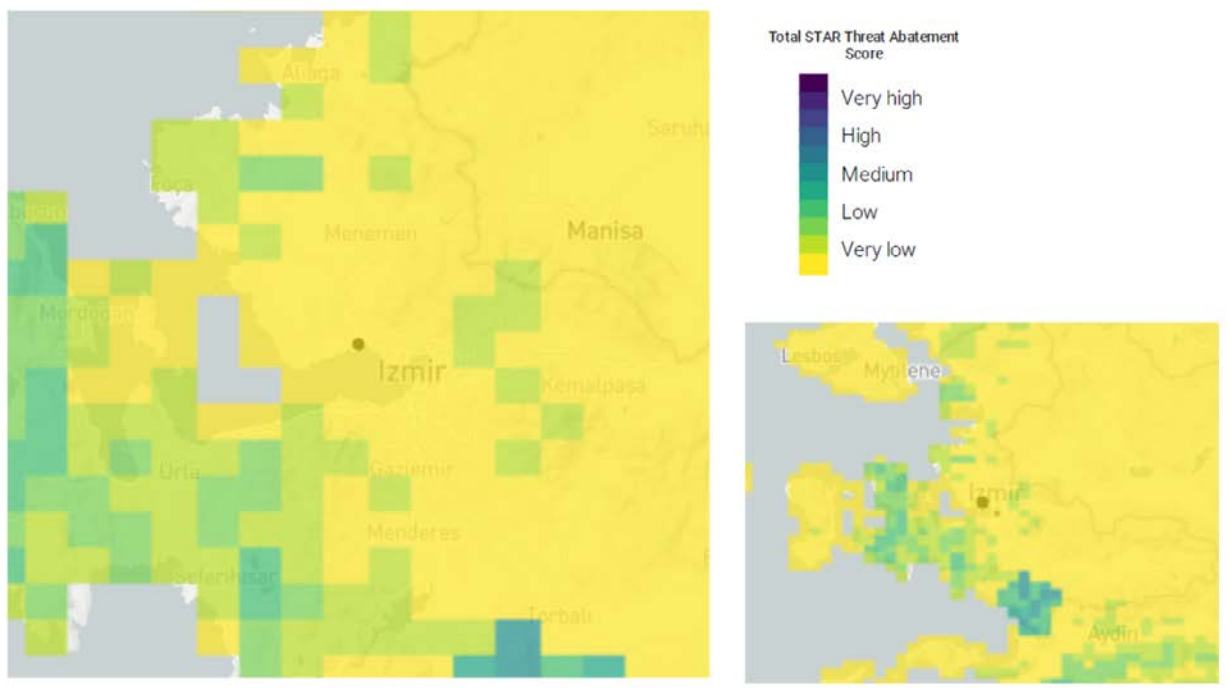


Figure 4: STAR Threat Abatement map for Area of Interest. Grid cell score categories range from Very Low to Very High. Grid cells are at a 5 km resolution.

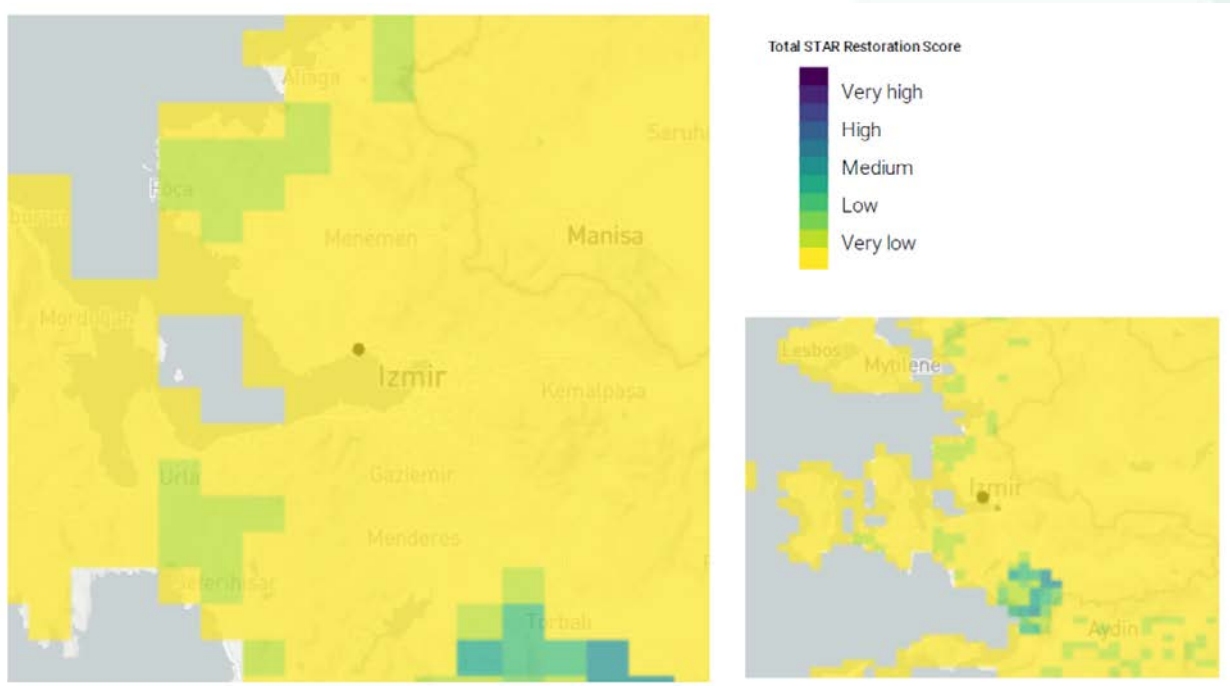


Figure 5: STAR Restoration map for Area of Interest. Grid cell score categories range from Very Low to Very High. Grid cells are at a 5 km resolution.



## Occupational Health & Safety

The Company measures its safety performance using the Total Recordable Incident Rate (TRIR), which specifies the frequency of injuries requiring medical treatment beyond first aid for every 100 employees. Each location sets annual targets, which should not exceed the previous year's TRIR, Lost Time Case Rate (LTC) and Days Away, Restricted or Transferred (DART). The latter metric refers to injuries that result in days away from work, job restrictions or job transfers. At a company-wide level, Nematik also strives to deliver year-over-year improvements.

The OH&S indicators at Nematik TURKEY are summarized in the table below:

### GRI

Health and safety metrics		
Lagging KPIs	2023	2022
<b>Total recordable incidents</b>	<b>21</b>	<b>17</b>
Accidents with serious consequences*	0	0
Accidents with lost time	20	16
Fatalities*	0	0
Total recordable incidents rate*	2,92	2,57
Lost time case rate	2,66	2,42
Leading KPIs		
Preventive health care – Total examinations carried out (% of workforce)	100%	100%
OH&S Initial Trainings Participants (% of workforce)	100%	100%
OH&S Specialized Trainings Participants (% of workforce)	100%	100%

### Comparative Analysis

Nematik conducted a comparative analysis of its Occupational Health & Safety (OH&S) data to foster a culture of workplace safety and well-being. By scrutinizing incident rates, near-misses, and adherence to safety protocols, Nematik strives to identify trends, areas for improvement, and best practices. This commitment underscores the company's dedication to prioritizing the health and safety of its employees across all operational facets.

For comparative analysis, the table aligns key Occupational Health & Safety (OH&S) metrics, from the year 2022, at a global level, compared to peer businesses within the Aluminum market:

HEALTH AND SAFETY METRICS		
	Average Peer Businesses**	Nemak (global)
<b>Total recordable incidents</b>	<b>305</b>	<b>301</b>
Fatalities	0	2
Total recordable incidents rate*	1.09	1.26
Lost time case rate	0.31	0.50
* Total recordable incidents per 100 employees.		
** Based on benchmarking with Peer businesses based on public data from 2022.		