



**BAZAN GROUP**

*Committed to a Sustainable Future*

# Sustainability

## ESG Report Bazan Group 2023

# Report 2023



”

כָּל יִשְׂרָאֵל עֲרֻבִים זֶה בְּזֶה

*All of Israel are responsible  
for each other.*

“

Chazal (sages of the Mishna and the Talmud)

# A Message from the Chairman and from the CEO



**Asaf Almagor**  
CEO



**Moshe Kaplinsky**  
Chairman of the Board of Directors

**The term 'national responsibility' has gained further significance and even a new meaning since the beginning of the war. Many private entities, including Bazan Group, have faced significant challenges and dilemmas since that Saturday, on October 7th.**

First and foremost, Bazan Group is a critical national infrastructure in Israel, with a national responsibility to supply its products to the economy, the defense forces, and its customers. The reality in which foreign ships are unable to enter the country's borders, and in some cases, even friendly nations prevent the entry of goods during the war, has placed a heavy responsibility on Bazan Group—to ensure the Israeli economy functions during these uncertain times.

Furthermore, in our managerial and ethical approach, the term 'national responsibility' carries an additional, broader meaning of mutual responsibility. We have witnessed an unbearable reality, which has imposed a moral obligation on us to intervene and assist to the best of our ability.

Bazan Group, with all its 1,500 employees, has mobilized fully on all fronts. In addition to all these efforts, we continued to deepen our engagement with innovation and develop additional tools to improve environmental and

operational performance. The report you are about to read attempts to provide a reflection of all our activities over the past year.

Our "story," as well as our sustainability report, highlights above all the group's commitment to the goals and objectives it has defined. We have maintained the energy independence of the State of Israel, provided for the needs of the security forces, supported the home front, as well as invested resources in reducing our carbon footprint and implementing a sustainability-based strategy, simultaneously.

On both a global level and within our local arena, a dual narrative exists—how we continue to provide energy independence while striving to meet the increasing demands for energy, alongside ongoing investment and development of transition capabilities to renewable energy and reducing our carbon footprint. The combination of the need for energy independence, the rising demand for fossil fuels, and investments in renewable energy will dictate future developments in the energy market, both here in Israel as well as globally. We will continue to invest resources to improve in all areas of sustainability reviewed in this report.

From the general to the specific, here are some key points to take from this report:

- Our dedicated work force has devoted over 900 hours to volunteer work
- We are particularly proud that women constitute 40% of the group's senior management.
- We continued to implement our sustainability strategy launched in 2021, which defines a vision for transitioning to a sustainable and innovative industry. We have significantly reduced pollutant emissions, increased the use of renewable sources, and adopted circular economy principles in the fields of polymers and waste. We take a proactive approach, setting measurable and ambitious long-term goals, and continue to invest in the development of advanced technologies to reduce environmental impacts and enhance operational synergy.

- In 2023, we marked a significant milestone in the production of recycled, biodegradable, and bio-based polymers: we completed preparations for the production of polypropylene and polyethylene from used cooking oil, which allows for a reduction in the use of crude oil, a transformation of biological waste into a resource, and a minimization of the climatic impact of the plastic production process. By 2024, we already produced a commercial quantity of the product. These steps represent a direct and natural continuation of our preparations for green diesel production at the group's facilities.
- In the field of waste management, we have set a goal to reduce the waste generated in production processes and, instead, shift towards material recycling. We are investing efforts in implementing advanced concepts of a circular economy and finding technological solutions for waste reuse. As a result, we recorded a 26% decrease in total hazardous waste compared to 2022 (and a 52% decrease compared to 2016).
- We have adopted the TCFD framework reporting principles of climate risks. In line with our commitment, we are publishing in this report the main objectives established under our climate program.

Our partners on this journey in the last two years have not been ordinary, and the Bazan Group is not an ordinary company. Our strength and significance have resonated profoundly, creating ripples and waves of impact far beyond our geographic location in Haifa Bay. We hope you will continue to accompany us on this challenging path and invite you to read this report in depth to witness and understand the complexities involved, and the determination with which we approach the execution of our tasks.

We invite you to read the report and maintain an open and important dialogue moving forward, so that we can continue to improve and challenge ourselves.

**Asaf Almagor**  
CEO

**Moshe Kaplinsky**  
Chairman of the Board of Directors

# Committed to ESG Principles

## See under: Mutual Responsibility

This was the finest hour of the people on the ground: the finest hour of the employees, the managers, the directors – the entire spectrum of the business sector; the finest hour of the third (non-profit) sector. This was their enforced moment of truth – and they faced it successfully.

All at once, the approach of 'single-mindedly focusing on making profits' was undermined and it was replaced by the idea of mutual responsibility.

In a period dominated by environmental and climate-related regulatory requirements, the 'S' in ESG suddenly took center stage.

On October 7, 2023, an unprecedentedly savage and large-scale terrorist attack shook the State of Israel, and indeed the entire world. Consequently, the region was drawn

into a protracted war, which is still ongoing as at the report publication date. In an unprecedented drive, overnight, CEOs, employees, along with business companies from all sectors – put their daily work on hold and came to assist and support wherever needed.

All at once, the approach of 'single-mindedly focusing on making profits' was undermined and it was replaced by the idea of mutual responsibility. In a period dominated by environmental and climate related regulatory requirements, the 'S' in ESG suddenly took center stage here in Israel and in many communities around the world too.

The Bazan Group wasted no time, and already during the initial 48 hours after the attack of October 7th it mobilized to provide support – standing on the front-line of social care, it offered extensive aid to the victims of the attack, addressing the needs on the ground and providing aid to those communities that had been evacuated from their homes.

About one week later, the Group's Board of Directors passed a resolution to increase its community donations fund to a sum of NIS 30 million. 1,400 Bazan employees and the unions went out in the field to work around the clock; providing support in the form of financial donations, engaging in physical work and providing encouragement and moral support.

Alongside the considerable activity to provide support to those in need on the ground, helping the first responders and the evacuees, we also adopted the community of Kibbutz Nahal Oz. This dear, 400-strong community, lost 15 of its members; 8 members of the community were taken hostage, 2 of them are still in captivity held by Hamas in the Gaza Strip as at the report publication date. We passed a resolution to adopt the community and to do so based on an all-encompassing 360-degree approach, and we firmly regard the connection that has been created as a source of pride and a sacred mission.

Mutual responsibility was a value that was placed at the top of Bazan's social values even prior to October – when in early 2023 we defined our social investments policy. This involved the formulation of our social strategy based on the UN's Sustainable Development Goals (SDGs). Quality Education, Gender Equality and Good Health and Well-Being have been defined as objectives that the Group seeks to support; alongside these, in conjunction with Bazan employees and management, we have also defined an objective that incorporates the Group's DNA: mutual responsibility.

## 2023 – Continued activity in the focus areas

2023 was characterized by intensive activity in many additional fields and gaining progress in accordance with the sustainability strategy, as well as the focus areas that had been defined for the purpose of instilling the ESG principles in the organization.

**In the field of environment**, we continued with the trend of improvement that has been maintained for more than a decade: the volume of waste created was reduced by 26% in comparison with the previous reporting year – in addition to a 12% reduction in the use of water compared with 2016; a double-digit reduction in pollutant emissions for more than a decade, as well as meeting the objective that was set in this field in the previous reports.

We regard the climate crisis as an extremely important issue and we operate accordingly: this year we are defining **additional objectives for the reduction of carbon emissions** for our activity in Israel and in Europe too. The targets are tailored to the European Union guidelines for the activity in Europe, and an additional objective was set also for the domestic activity, despite the lack of any binding regulatory requirements in this field as at the report publication date.

We are proud in having attained a **40% representation rate of women** among senior management one year prior to the date that was defined as the target year, and concomitantly we have been working to promote gender equality also outside the Group – via support for various initiatives in this field.

We completed the merger of Carmel Eco (formerly VPM) into the Group's overall activity. We are vigorously working towards the target of **30% recycled, biodegradable and biopolymers** by 2030. By doing so, we grant an additional cycle of life to the plastic and promote a circular economy in synergy with our operating segments.

In terms of **safety**, we are advancing a 'Safety Climate' program throughout the organization, according to methodology developed by academic experts and to be implemented in Bazan, based on the understanding that the organizational culture is the main driving force to improve safety-related habits. We place emphasis on the meticulous adherence to regulations and continuous improvement by investing considerable resources in training, monitoring and developing processes to ensure a safer work environment.

In terms of **ESG Governance**, the ESG Steering Committee, which is represented by managers from all the organization's units, was established during the previous reporting year and has entered into ongoing activity. The committee convenes on a quarterly basis and its members are leading dedicated working teams and setting in motion organizational-wide processes in various fields, including:



digitization, climate, community outreach, procurement policy and environmental issues.

As far as **our impact on and work in the community** are concerned, the groundwork laid down during the previous reporting years has enabled us to act efficiently and in real time when faced with the needs that arose following October 7 – and this continues to develop and thrive. In addition to an accumulated contribution of approx. NIS 17 million during this reporting year, we implemented a Company policy encouraging our employees to volunteer in the community all year round and we have linked them up with various NGOs and organizations working in the field – with a view to contributing to the long-term development of diverse communities.

We engage in the evaluation and updating of **ESG policy** documents; the social investments policy and suppliers policy were completed already in the course of the reporting year; during 2024 we entered into a process of updating the Code of Ethics to reflect the standards and values to which the Group is committed. The Bazan Group has recently become a signatory to the UNGC (United Nations Global Compact) initiative on issues of sustainability and human rights, alongside thousands of companies worldwide.

This year too, the reports have been prepared pursuant to the GRI and SASB global standards, and the Climate Chapter has been tailored to the spirit of the TCFD reporting framework; the report's data were audited by a leading global advisory firm.

At this current time of national emergency, just as is the case during routine peacetime and throughout the year, we operate based on a sense of responsibility to the energy sector, ensuring energy continuity, we work to advance the implementation of the strategy, we attain the objectives, continue with our intensive operations – and are seeing the results of these efforts in the field.

### And we have only just begun.

We are open to your thoughts and ideas, and we thank you, our partners along the way.

We hope for better days ahead and pray for the safe return of the hostages and for all Israelis to return to their homes.

**Hagit Genish Gill**  
Head of ESG



**Hagit Genish Gill**  
Head of ESG



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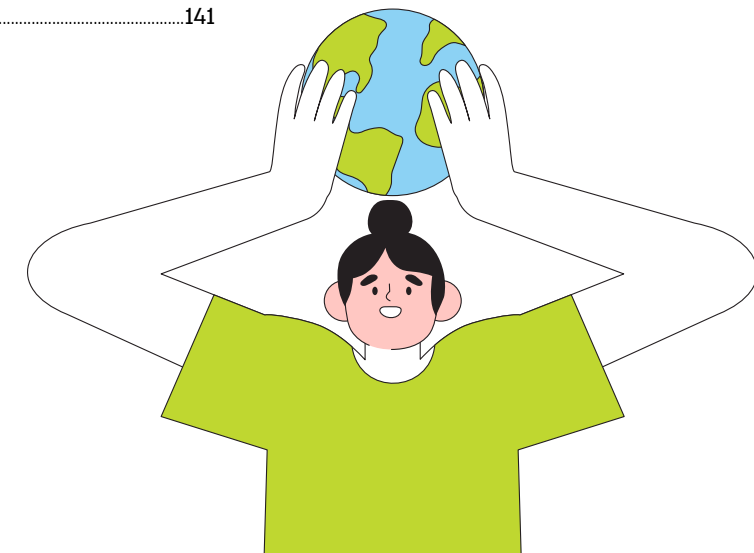
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# ABOUT

BAZAN GROUP

About

Committed to a Sustainable Future



# Introducing Bazan

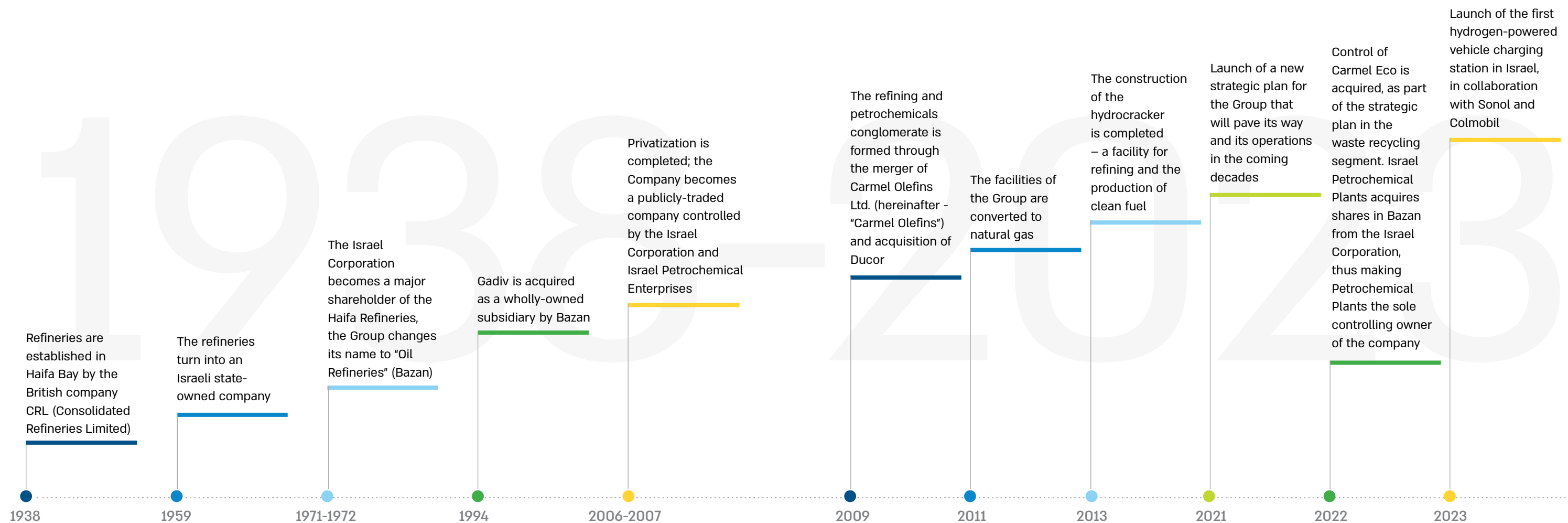
**Bazan (Oil Refineries Ltd.), one of the largest and most complex energy groups in Israel, owns and operates the leading refining and petrochemical conglomerate in Israel.**

This serves a variety of crucial needs in industry, transportation, agriculture, infrastructure and domestic consumption. In addition to its wide range of fuel products, Bazan is a leader in the production of downstream products, among others: polymers for the plastics industry, as well as aromatics, which constitute intermediate products for manufacturing clothing, packaging, pharmaceuticals, and paints.

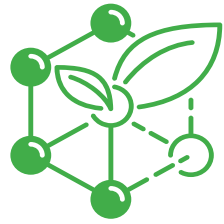
Bazan is traded on the Tel Aviv Stock Exchange and as of the end of 2023, it has approx. 1,500 direct employees – at

sites located in Israel and The Netherlands. In Israel, its plants are located in Haifa Bay and at the Carmel Eco (formerly VPM) company site in the Western Galilee. An additional arm of the Group is Ducor Petrochemicals B.V. (hereinafter: Ducor), which owns a polymer production plant in the port of Rotterdam in The Netherlands.

The Bazan Group is active on both the domestic and global markets and the broad variety of its products contribute to the Israeli economy, promoting the presence of 'blue and white' products around the world.

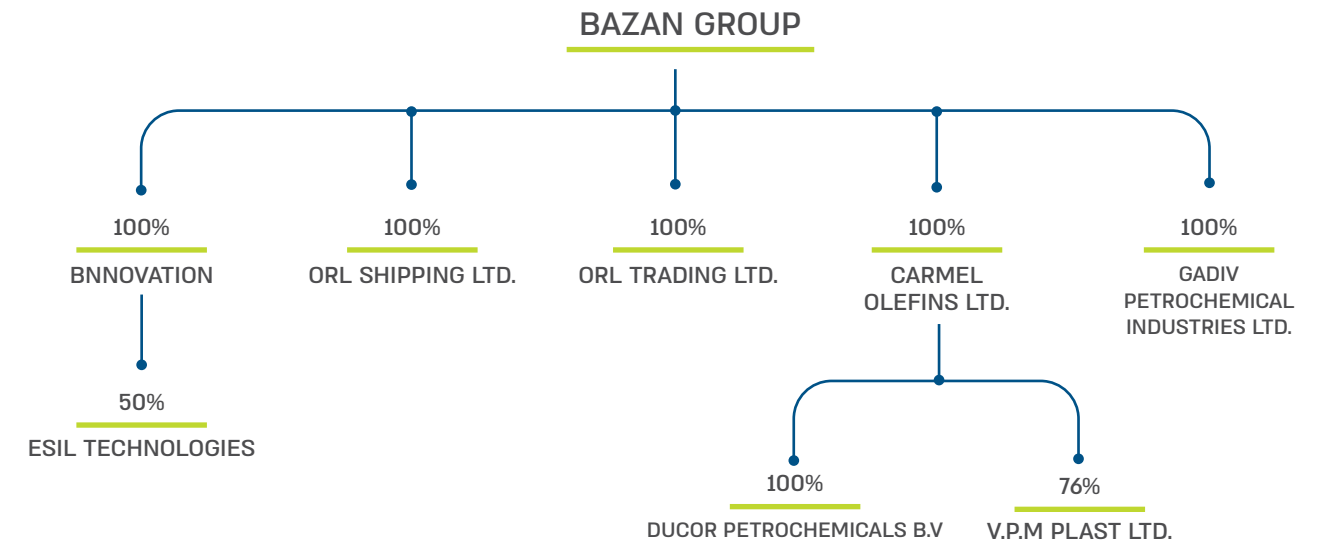


# Over 80 Years of Leadership



The three key operating segments in the Group are **refining**, via Bazan, **aromatics** via Gadiv and **polymers**, via Carmel Olefins, Carmel Eco and Ducor.

## The Group's holding structure



**10 million**  
Tons per annum –  
petroleum refining capacity



**2 geographic areas**  
Israel and The Netherlands



**Exports**  
To dozens of destinations  
worldwide



Approx. **NIS 8.1 billion**  
Total contribution to Israel's GNP in 2023\*  
(constituting 0.43% of the GDP in Israel)



Approx. **15,800**  
Employees – direct and indirect contribution to  
employment in Israel\*  
  
and Approx. **1,500**  
Employees as of late 2023 at locations in  
Israel and The Netherlands.



**Index score: 11**  
Nelson Complexity Index score: 11.1,  
for the activity of the refinery and the  
aromatics facilities



an **8.3% increase**  
In the direct added value of Bazan GDP  
compared with 2022



More than **20%**  
Of the electricity consumed by Bazan is self-  
produced



# The Company's Areas of Activity



## The Refineries

Bazan refines, separates, and processes crude oil into finished petroleum products and raw materials used to manufacture other products. The refined products have a wide range of vital applications relevant to meeting people's needs and making the modern way of life possible, in industry, consumer goods, transportation, and agriculture.



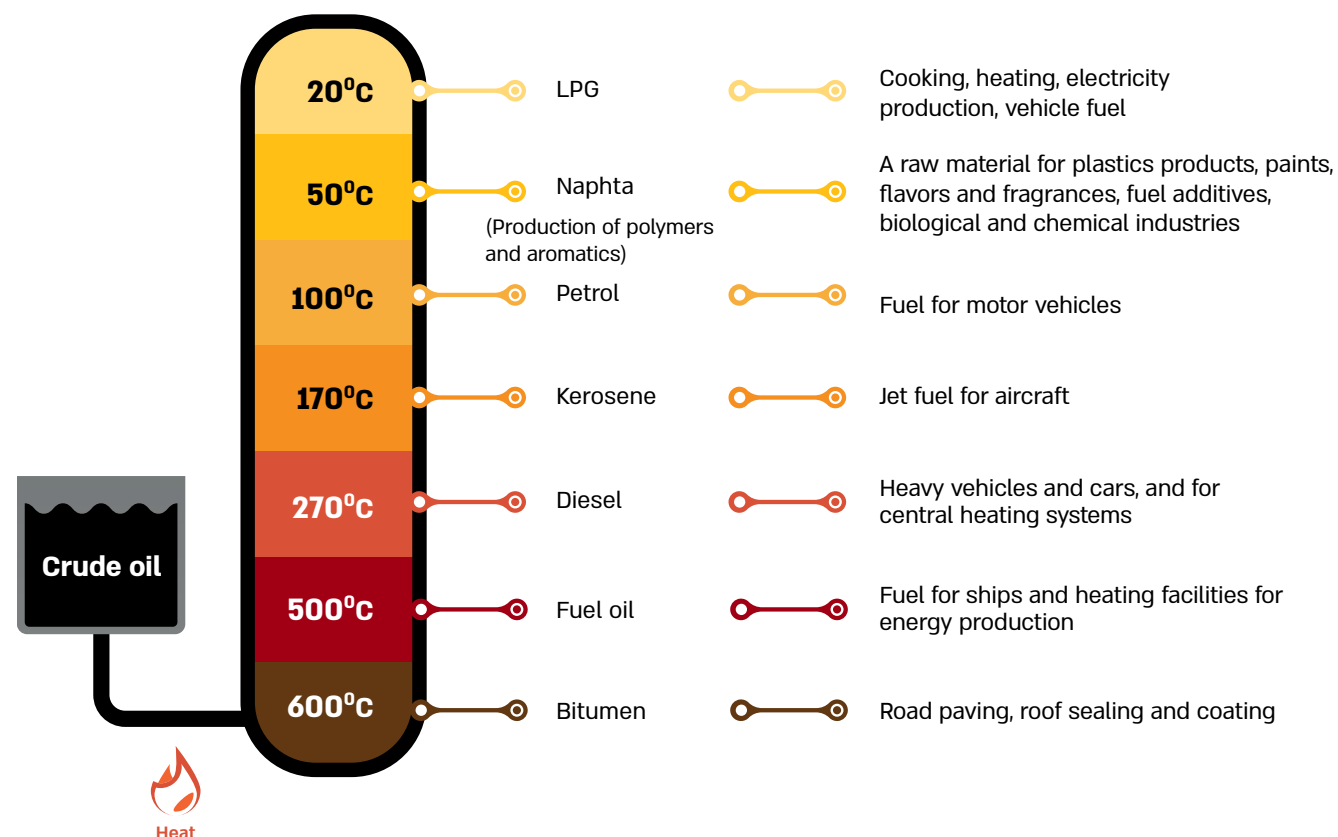
### Did you know?

Crude oil reaches the refinery via tankers, from various global sources. The refining process separates the various components of crude oil, transforming them into useful products. The refining process is carried out at high temperature of approx. 400°C. The products are differentiated by their respective boiling points. The unrefined residue remaining is used to produce asphalt and fuel oil. It undergoes a process of visbreaking, such that the fuel oil is able to flow through the pipes at ambient temperature. The products undergo finishing-off processes for the purpose of decontamination and cleansing, and to improve product attributes, such as by reducing sulfur content. In the final stage, the products undergo finishing processes in order to meet the requisite specifications.

## Refining outputs



Refining temperature



## Polymers

Bazan manufactures polypropylene and polyethylene – the main raw materials used in the plastics industry. Production is carried out at Carmel Olefins, a privately-held company wholly owned by the Group, and through Ducor, a privately-held company under the ownership of Carmel Olefins, registered and operating in the Netherlands.

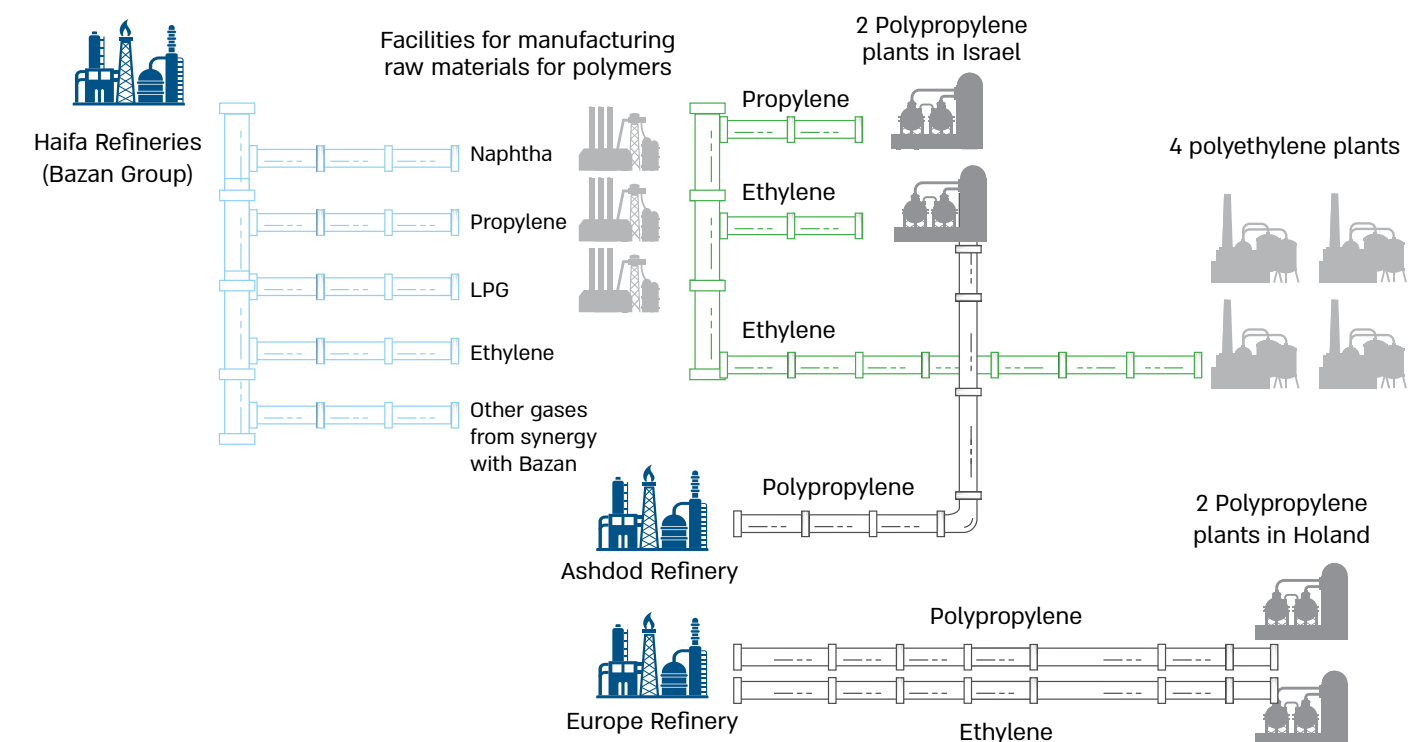
Ducor manufactures polypropylene from propylene, a raw material used in the plastics industry.



### Did you know?

Carmel Olefins production facilities in Israel operate as a single concern, with interdependency among three main clusters of plants: the monomer plants cluster (the naphtha and LPG cracker facility, for ethylene and propylene production, and the OCU facility, which manufactures propylene); the polypropylene plants cluster; and the polyethylene plants cluster. The facilities are directly interconnected via a pipeline network. The facilities receive shared services such as the supply of electricity, steam, water, storage and other services from a central service system, partially backed by the Group's service mechanism. Manufacturing processes are performed at a wide range of temperatures, from -165°C to approx. 900°C.

## Access to a variety of raw materials







## Aromatics

The Bazan Group, via Gadiv, is engaged in the production and marketing of aromatic products that constitute intermediate products or the assembly of raw materials for the production of other products. Gadiv is the only company in Israel engaged in the production and marketing of aromatic products. It was founded in 1974 and has been wholly owned by the Bazan Group since 1994.

The main aromatic products produced by Gadiv are benzene, toluene, xylene, paraxylene, orthoxylene, phthalic anhydride and solvents. These are aromatics used as raw materials in the manufacturing processes of various end products.



### Did you know?

Aromatic materials are chemical substances with an aromatic molecular structure. These chemical compounds contain benzene rings or carbon rings and their electron structure is special, giving rise to chemical stability and resilience to extreme conditions.

These materials constitute the basis for the manufacture of a variety of products: clothing, packaging, pharmaceuticals, cosmetics, computers, and more.



## Synergy as a basis for improved operational and energy efficiency

The Group's unique structure, with the majority of the facilities concentrated in one geographic location, enables the maximum utilization of the raw materials while reducing the byproducts in the process. In such a structure, the byproducts of one are used as the raw material for another – as is the case too with the energy and the intermediate materials that are transferred from one plant to the other. A good example of this is the plastic waste that Carmel Olefins produces, which is used as a raw material for Carmel Eco's polymer products.

The Group companies work jointly to maximize the added value derived from their collaboration. For example, production planning is performed by the Optimization Unit; inputs (natural gas, electricity, etc.) are purchased jointly; and headquarters provides services to all of the Group companies and integrates their needs with maximum efficiency.





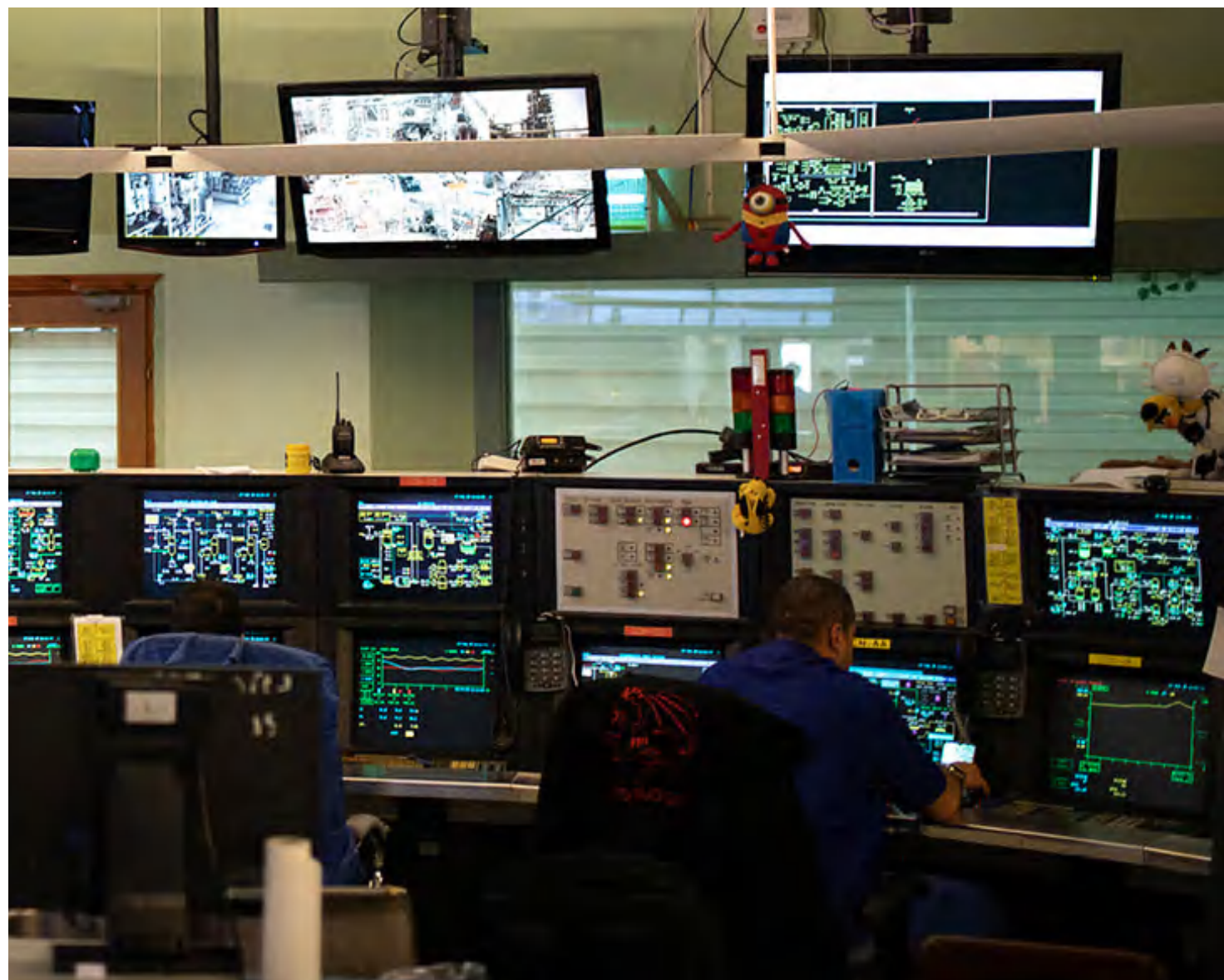
# Iron Swords War

## Energy continuity during the War

On the morning of Saturday, October 7, 2023, the residents of the State of Israel woke up to an extensive terror attack, which plunged the entire country into a protracted state of war along both Israel's southern and northern fronts.

Bazan's critical function as a supplier of energy to the Israeli economy was put to the test right on that very morning, and the Group entered into activity in a state of emergency, to ensure operational and energy continuity to the economy and the State of Israel as a whole.

During the initial days of the war, the main thrust of these efforts was focused on the supply of diesel fuel to the Israel Electric Corporation, which serves as a backup and replacement to the natural gas used in the power plants. This is in addition to 98-octane gasoline and diesel fuel for the Ministry of Defense and and liquefied petroleum gas (LPG) for the local economy.



**The Group's real time preparations were manifested on two separate levels:**

# 1.

The group works to ensure the continuity of energy supply for the energy sector and to provide products to petrochemical customers, while also caring for the stakeholders of the Bazan Group.



Due to the state of war, and under the directive of the Minister of Energy and Infrastructure, dated October 12, 2023, regarding the need to ensure the continuous supply of energy, the periodic maintenance work that had been scheduled to take place at its refining facility was postponed and was carried out during the second quarter of 2024.

# 2.

**Mobilizing staff in an effort to support the social front** – ensuring a presence on the ground alongside an increased budget for donations reaching NIS 30 million (further details are available below in the Chapter on Social Commitment).





# Iron Swords War - Bazan on the Social Front

**On the morning of October 7 we woke up to a completely new reality, which forced all of us to re-adapt in real time**

A week after the outbreak of the war, the Group Board of Directors passed a resolution to significantly and immediately increase the amount of community outreach and support to NIS 30 million.

Right away, on October 9, Bazan responded to the overall effort to provide support and was one of the first companies to be present on the social front – giving support to those involved in providing mental health services and contending with post-trauma; finding solutions to provide accommodation for the residents of the Gaza border communities before an orderly solution was found for them; helping evacuees from all over the country; in donations, equipment, work in the field and the provision of a solution for the immediate needs arising in real time.

During October, we adopted the community of Kibbutz Nahal Oz, which suffered extremely severe damage as a result of the brutal terrorist attack, and whose residents were evacuated from their homes and have not returned there as at the report publication date. Adopting the community encompasses a broad range of walks of life and involves support in the form of finding solutions for the immediate term, as well as aid with the long-term rehabilitation process.

Laying extensive groundwork during the previous reporting year, including the appointment of a Donations & Support Committee, updating the internal donations procedure; formulating a social investment strategy in accordance with the UN Sustainable Development Goals (SDGs) – along with an additional goal of mutual responsibility, which was defined by the Company employees; building a platform for collaboration with the employees and the unions; as well as updating the support budget – all these enabled us to act rapidly, to lead meaningful action in conjunction with the employees and the unions and to create a significant impact on the ground.

## NIS 30 million

The donations fund was expanded following a Board of Directors resolution from **NIS 10 million to NIS 30 million.**

## NIS 11.6 million

Were donated between October and December 2023 due to the War



A flag display was erected at the entrance to Bazan in solidarity with the hostages' families. The number of flags matched the number of hostages.



## NIS 11.6 million were donated providing direct aid to approx. 300,000 people

Support and assistance efforts were directed to non-profit organizations specializing in the defined areas, alongside presence in the field and the creation of collaborations.



### Mental resilience and coping with PTSD

Approx. NIS 750,000

Approx. 26,000 people



### Accommodation solutions for evacuees

Approx. NIS 1.2 million

Approx. 600 people



### Support for evacuees throughout the country

Approx. NIS 3.4 million

Approx. 200,000 people



### Support for the security and rescue forces and field units

Approx. NIS 3.9 million

Approx. 66,000 people



### Adoption of the Kibbutz Nahal Oz community

Approx. NIS 2.3 million

Approx. 400 people





## Adoption of the Kibbutz Nahal Oz community



Kibbutz Nahal Oz was severely hit during the murderous terrorist attack of October 7. The community suffered severely – 14 of its members were murdered and six were abducted and taken to the Gaza Strip. Following the attack, the members of the community were evacuated to northern Israel, and they have yet to return home.

The resolution to adopt the community was passed back in October – an all-encompassing 360-degree approach, as a long-term strategic project. We established a warm, direct connection with the members of the evacuated kibbutz and we provide them with comprehensive support, commencing from the moment the adoption was put into place and with a long-term view ahead too.

Alongside this, community members have actively participated in events and meetings organized by the group over the past year. The support includes the provision of a response to immediate and logistic needs, besides strategic thinking that focuses on the return home of the community to the kibbutz from which it was evacuated on October 7, as a key issue. We regard this connection with the Nahal Oz community as both a moral duty and a genuine honor. Furthermore, the group accompanies the families of the abducted Omri Miran and Tzachi Idan, who are members of the community, in their efforts to bring them home.



A meeting with members of the community at Bazan



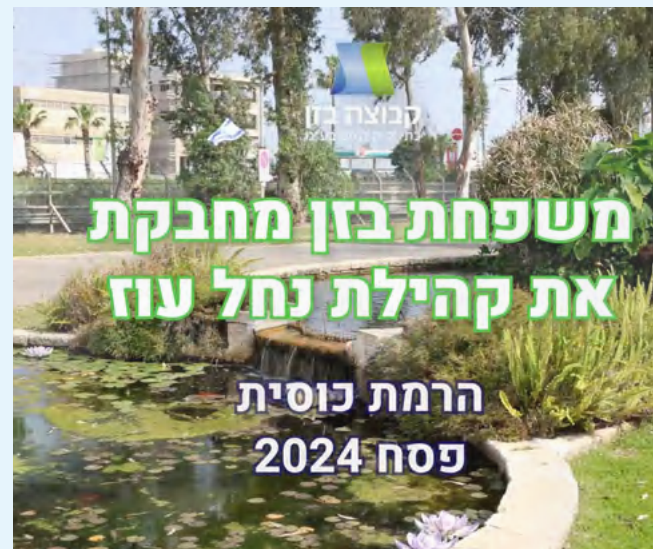
Bazan Chairman, Moshe Kaplinsky, and Bazan CEO, Asaf Almagor, in conversation with community members.



A professional meeting on mental resilience led by the NATAL (Israel Trauma and Resiliency Center) NGO and the Sha'ar HaNegev Mental Resilience Center



A meeting with members of the community at Bazan



A visit by members of the Nahal Oz community and a talk with Bazan employees, on Passover Eve, 2024



Members of the community of Kibbutz Nahal Oz during a visit to the Bazan complex





## Employee volunteering

Following the outbreak of the War, many of the Group's employees turned to volunteering throughout Israel and took part in the initiatives and activities to help the evacuees, to raise resources and collect equipment, and also participated in agricultural work in order to save a considerable volume of agricultural crops and food, which otherwise would have gone to waste.

Approx. **900**

Volunteer hours of Bazan Group employees during the months of October, November and December 2023



Members of the Group volunteering at a harvest on a moshav in northern Israel



Members of the Group volunteering at a harvest on a moshav in northern Israel



**Did you know?**

During the last quarter, a resolution was passed enabling the Group's employees to volunteer two days a year at the Company's expense – and in parallel, an employee volunteering model was built. The Steering Committee also leads a dedicated team to engage in community outreach and work on the social front, in conjunction with the HR unit.



The steering committee leads a team dedicated to the social field and community involvement



A donation of wooden pallets to IDF units in northern Israel to prevent flooding of tents during rainy days



Purchasing of flowers from nurseries in areas evacuated in northern Israel



The Bazan hydrogen truck with clothes to be donated at a collection point in central Israel





# Our Impact - ESG - Key Figures



## UNGC

Joining as a Signatory to the United Nations initiative on sustainability and human rights.



## 12%

Use of water decreased by 12% between 2016 and 2023



## 26%

Quantity of hazardous waste generated was reduced by 26% compared with 2022



## 10%

Decrease in the amount of non-hazardous waste sent for landfill compared to 2022



## Monitoring and reporting

of GHG emissions -  
Scopes 1, 2 and 3



Approx. **NIS 17M**  
in community outreach  
during 2023



Approx. **900**  
Volunteer hours of Group  
employees during 2023



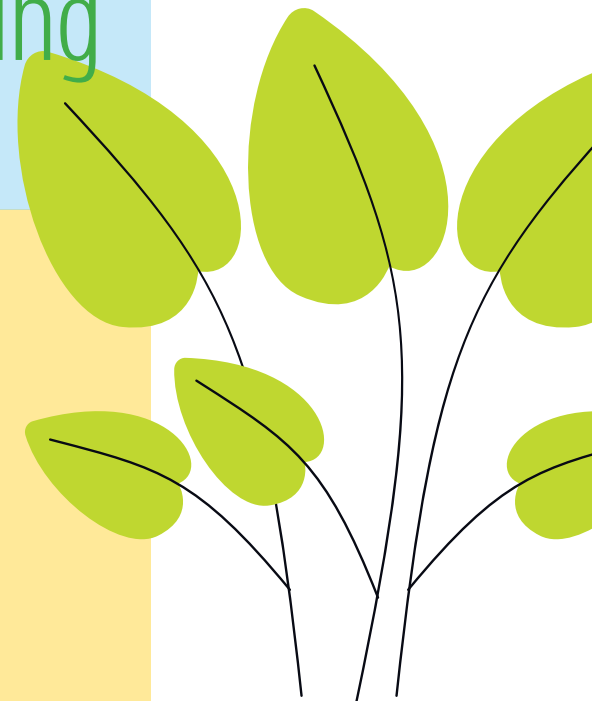
**Upgrade**  
To platinum level Maala's  
2024 ESG ranking



**40%**  
women in senior  
management in 2023



**The value  
chain**  
Implementation of the  
Suppliers' Conduct Annex



# The Group's Products Are Used in All Walks of Life

## Transportation



### Land transportation

Output: gasoline and diesel fuel  
Production: Refineries



### Jet fuel

Output: kerosene  
Production: Refineries



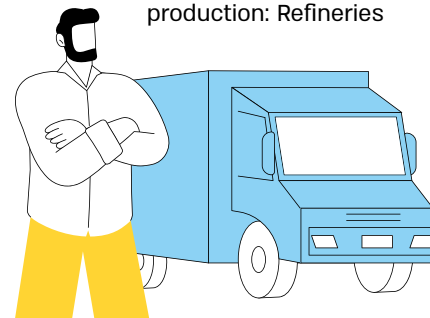
### Asphalt for roads

Output: Bitumen  
Production: Refineries



### Ship fuel (low-sulfur fuel oil)

Output: bitumen;  
production: Refineries



## Manufacturing



### Energy and raw materials for manufacturing

Output: Fuel oil and additional Products  
Production: Refineries



### Paints

Output: Paraxylene  
Production: Gadiv



### Sealing products

Output: Bitumen  
Production: Refineries



### Vehicle components

Output: Polymers  
Production: Carmel Olefins, Ducor



### Pipelines

Output: polymers  
Production: Carmel Olefins, Ducor



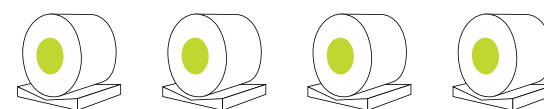
### Insulation products

Output: Bitumen  
Production: Refineries



### Cooling system additives

Output: Aromatics  
Production: Gadiv



## Agriculture



### Pesticides

Output: Ssolgad  
Production: Gadiv



### Pharmaceuticals

Output: Toluene  
Production: Gadiv



### Sheets for agriculture

Output: Polymers  
Production: Carmel Olefins, Ducor

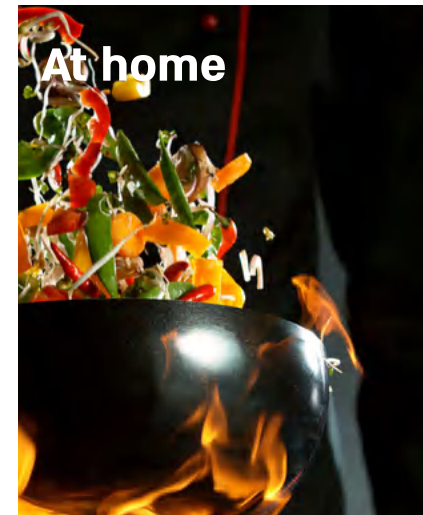


### Pesticides

Output: Orthoxylene  
Production: Gadiv



## At home



### Household cooking gas

Output: Liquefied petroleum gas (LPG)  
Production: Refineries



### Home and garden furniture

Output: Polymers  
Production: Carmel Olefins, Ducor



### Fibers (for carpet production)

Output: Polymers  
Production: Carmel Olefins, Ducor



### Household goods

Output: Polymers  
Production: Ducor



### Textiles

Output: Polymers  
Production: Ducor

## Consumer goods



### Medical protective equipment

Output: Polymers  
Production: Carmel Olefins, Ducor



### Cosmetics

Output: Aromatics  
Production: Gadiv



### Cosmetics packaging

Output: Polymers  
Production: Ducor



### Diapers

Output: Polymers  
Production: Carmel Olefins



### Toys

Output: Polymers  
Production: Carmel Olefins, Ducor



### Bottles

Output: Polymers  
Production: Carmel Olefins, Ducor



### Toolboxes

Output: Polymers  
Production: Carmel Olefins, Ducor



### Packaging

Output: Fuels  
Production: Refineries



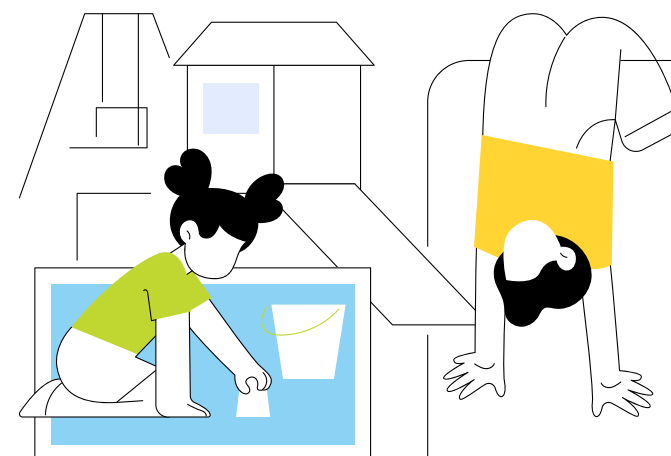
### Appliances

Output: Polymers  
Production: Ducor











### Clothing

Output: Polymers  
Production: Carmel Olefins





# The Bazan Group – Quantitative Objectives











Category	Topic	Targets	Target year	Status 2023
Environmental protection	Benzene reduction	Reduction of benzene emissions by 66% compared to 2018, from 2.2 tons to 0.75 tons	2024	Objective attained and even beyond that: emissions reduced by 84% compared with base years, to 0.35 tons – one of the lowest emission rates in the global industry 
	Pollutant emissions	Improve the Company's positioning from the 15th to the 10th percentile of companies with the lowest environmental impact, based on the European reference document (BREF*)	2024	Achieved 
Improved efficiency in the use of water resources	Increased wastewater recycling	Recycling of up to 500,000 m³ of wastewater per annum, resulting in increased Group synergy	2025	New goal 
Employee safety	Lost Time Incident Rate - LTIR**	LTIR = 0.5	2025	In process. To date, a reduction of up to 0.84 LTIR has been attained 
	Safety climate***	A safety climate rating of 4.5	2026	New goal. Based on a dedicated methodology that was developed in academic institutions 
Ethics and supply chain	Contractual Conduct with Suppliers Annex	Implementing an appendix in the process of contracting material suppliers	2023	Achieved 
	Sustainability due diligence check	Formulation and initial integration of suppliers' questionnaire	2025	New goal 
Circular economy	Recycled, biodegradables and biopolymers	Integration of approx. 30% recycled, biodegradable and biopolymers by 2030 in the product mix****	2030	In-process *** 

\* BREF - Refining of Mineral Oil and Gas

\*\* Weighted number of accidents per 200,000 hours of work.

\*\*\* For more information on the topic of safety climate methodology, see p. 108

\*\*\*\* For further details, see the subchapter entitled 'Circular Economy', in the Environment Chapter

Category	Topic	Targets	Target year	Status 2023
Climate Change	Climate action and GHG (greenhouse-gas) emissions	Formulating a long-term plan to reduce carbon emissions	2024	Achieved. 
		Take actions to reduce emissions by 25,000 tons	2024	Achieved 
		A desire to attain a 19% reduction in carbon emissions in the Group's operations in Israel compared with the base year of 2015	2030	New goal 
		A desire to attain a 55% reduction in carbon emissions in the Group's operations in the Netherlands compared with the base year of 2015	2030	New goal 
Diversity and inclusion	Women in senior management	40% representation in senior management (reporting to the CEO)	2023	Achieved 
	Women in mid-level management	An increase in the number* of mid- to low-level management compared with the previous year	An ongoing target	New goal 
	People with special needs	An increase in the number** of employees with special needs compared with the previous year	2025	Updated goal 
Society and the Community	Community support and donations	Formulation of community support and donations policy in accordance with the SDGs	2025	Achieved 
		Adapting the amount of donations to the global benchmark	2025	Achieved 
	Social outreach	Definition of the community outreach and volunteering policy	2025	New goal 

\* An increase of 2 female managers/engineers compared to the previous year

\*\* An increase of 2 employees compared to the previous reporting year

# Our Strategy

At the beginning of the reporting year, Bazan conducted a Strategy Review, following which it prioritized some of the directions of the strategy the Company formulated in July 2021. The current strategy is focused on sustainability and is based on the Group's vision:

**"The Bazan Group will serve as an essential bridge to the future of the transportation energy sector in Israel, and lead a transformation focused on sustainability and innovation in the fuel and polymer business".**

1.



## Refining and renewable fuels

**The Bazan Group will continue to conduct refining operations, to evolving market needs, while applying innovative technologies and reducing its environmental footprint.**

Bazan will continue to provide the needs of the Israeli economy both on a routine basis and in times of emergency and shall maintain energy continuity for the State of Israel. It will endeavor to do this by engaging in ongoing investment in refining operations and flexibly diversifying its product mix in congruence with changing market needs, and also by leveraging opportunities.

Bazan shall continue to lead the transportation fuel market in Israel through digitization, embedding advanced technologies in production and logistics, innovation and the continued reduction of the environmental impacts of the Group's operations. It shall do all this while continuing to adapt to market changes and collaborating on pilot projects in a range of innovative technologies, with the aim of improving routine functioning and maximizing its operations.

2.



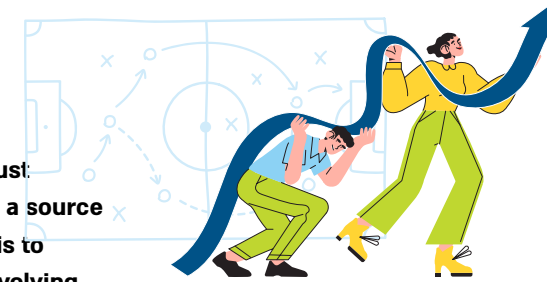
## Recycled, biodegradables and biopolymers

**The Bazan Group is preparing for future challenges in the polymers segment.**

These are manifested, in addition to the demand for traditional polymers, in the development of a market that also includes polymers as part of a circular economy - that are manufactured from recycled input materials, biopolymers, etc. The combination of skilled professional human capital with advanced manufacturing technologies enables Bazan to lead the transition to recycled polymers, biodegradables and biopolymers, and thus drive the shift to a low-carbon economy. In this context, Bazan has set an ambitious target: to integrate recycled polymers at a rate of 30% of the Group's total polymer sales by 2030.

## The pillars of the strategic plan

**The strategy includes expansion of the activity in core segments, while the robust business and financial basis that these operating segments provide constitutes a source for the gradual development of and investment in new growth engines. All this is to be achieved in tandem with gradual adjustment to market trends, to meet the evolving market needs and in line with the ESG principles.**



3.



## Hydrogen and alternative fuels

**The Bazan Group will be a leading player in Israel's hydrogen sector.**

Its products and capabilities will be the harbingers and enablers of the essential transformation in the domestic energy market.

The Group has set the goal of leading the market in hydrogen for transportation and manufacturing in Israel. It aims to do so by supplying alternative fuels to the market in tandem with investing in innovation and entrepreneurship in this field.

The activity includes collaboration on joint ventures with industry leaders for commercial production and delivery of gray hydrogen for industry and transportation, together with laying the foundation for the development of the hydrogen market in Israel and the production of green hydrogen.

In 2023, **Bazan launched the first hydrogen-powered fueling station in Israel for fuel and heavy transportation.** This project is the result of collaboration with Sonol and Colmobil. In addition to hydrogen-driven trucks, operated by Bazan and its partners, the Group is in the advanced stages of operating the first hydrogen-powered buses in Israel, which are scheduled to arrive in Israel once the relevant regulatory standard-setting work on this field has been completed. Concurrently, the Group has also begun to initiate and advance projects for the commercial supply of hydrogen fuel.

4.



## ESG and Sustainability - Environmental, Social and Corporate Governance

**The Bazan Group is committed to sustainability principles and is working to embed these principles in its operations, creating environmental and social value for all of its stakeholders.**

The Group is working to implement and embed the principles of sustainability throughout all its routine operating segments. Milestones and focus areas have been defined as part of a dedicated strategy for this, and a multi-annual work plan has been derived from it, which is based on working in synergy with the various Group units.

The ESG activity serves the purpose of fulfilling the Group's vision, values, and organizational and business strategy, by implementing leading practices in this field, and preparing to respond to evolving market trends.

# Implementation of The Strategic Plan

1



## Fuels and infrastructures

### Objectives

- A diversified product offering, prioritizing environmental needs and adapted to evolving market needs
- Implementation of advanced technologies in production
- Improving core activity performance while reducing carbon footprint
- Enhancing distribution and storage capabilities
- Advanced logistical infrastructures and trade capabilities, to ensure the continuity of supply to the Israeli market

### Execution

- Digitization via simulators and advanced control systems, enabling improvement of both energy and economic efficiency
- Utilization of feeds generated in the process and which in the past were part of the byproduct materials that the Company removed, in order to create products.
- Contracting with technology companies specializing in big data analysis and AI solutions in order to forecast production malfunctions, as well as upgrading timing and optimization capabilities in accordance with global cutting-edge technologies

2



## Recycled and biodegradable polymers and biopolymers

### Objectives

- Leading the transformation in recycling plastics and the use of polymers with a reduced carbon footprint, while expanding these activities in the polymer market in Israel and Western Europe.

### Execution

- Examining investments, mergers, acquisitions, and collaborations to expand the product mix and improve the value proposition for customers;
- Integrating Carmel Eco, which specializes in the recycling of industrial plastic scraps and recycles up to approx. 10,000 tons of waste per year.
- Expansion of the investment in Melodea (biopolymers), and signing a commercial agreement for joint distribution and development
- Development of recycled products in accordance with customer needs
- Examination of investments in mechanical and chemical recycling companies
- Examining leading technologies for chemical recycling and their implementation in Israel

3



## Hydrogen and alternative fuels

### Objectives

- Leading the market in hydrogen for transportation and industry in Israel; production, marketing, and distribution of gray and green hydrogen
- Positioning the Company as a significant producer and supplier of alternative fuels on the market
- Leading innovation and entrepreneurship in the local business and professional environment, developing the market and regulation

### Execution

- The Group established infrastructure for the compression and transport of hydrogen for use in transportation and has even begun to market it
- Opening the first hydrogen-powered fuel station in Israel, at Kibbutz Yagur, in collaboration with Sonol and Colmobil
- Promoting agreements and collaborations to establish pilot projects and facilities for green hydrogen production; working with the Israel Standards Institution to formulate a standard for hydrogen in transportation
- Acquisition of and initial routine work with a hydrogen-powered truck
- Signing of binding agreements for the acquisition of hydrogen-powered trucks
- Promoting collaboration with key consumers on the market for the development of additional channels of hydrogen-driven transportation
- Developing green diesel fuel produced from used cooking oil at the Group's facilities, and receiving ISCC (International Sustainability and Carbon Certification) certification
- Joining the SAF (Sustainable Aviation Fuels) Consortium led by Boeing to promote the synthetic aviation fuels industry. Partners in this consortium include academic institutions, business companies and government entities.

4



## ESG and Sustainability - Environmental, Social and Corporate Governance

### Objectives

- Responding to both domestic and global developing trends
- Embedding ESG principles in the business operations and organizational activity, in line with the Group's strategy
- Setting goals based on sustainability to support for the business strategy
- Establishing the appropriate organizational infrastructures to promote the Company's objectives, in accordance with its vision and strategy
- Increasing transparency and strengthening relationships with stakeholders

### Execution

- Appointing a dedicated Board of Directors committee to oversee the management of this field
- Establishment of an ESG department in the Group, working through well-established interfaces with the various departments
- Mapping of ESG risks in accordance with global standards
- Reports and ratings: annual ESG reporting in accordance with global standards and material topics
- Climate: formulating a long-term Group plan to reduce carbon emissions;
- Mapping ESG risks, particularly climate risks, based on accepted methodologies
- Social and community investment activity aligned with the UN's Sustainable Development Goals (SDGs)
- Increase of the total amount of donations to NIS 30 Million and efforts undertaken by the Group and its employees to provide support for the victims of the October 7 terrorist attack



# Material Topics Reviewed in the Report

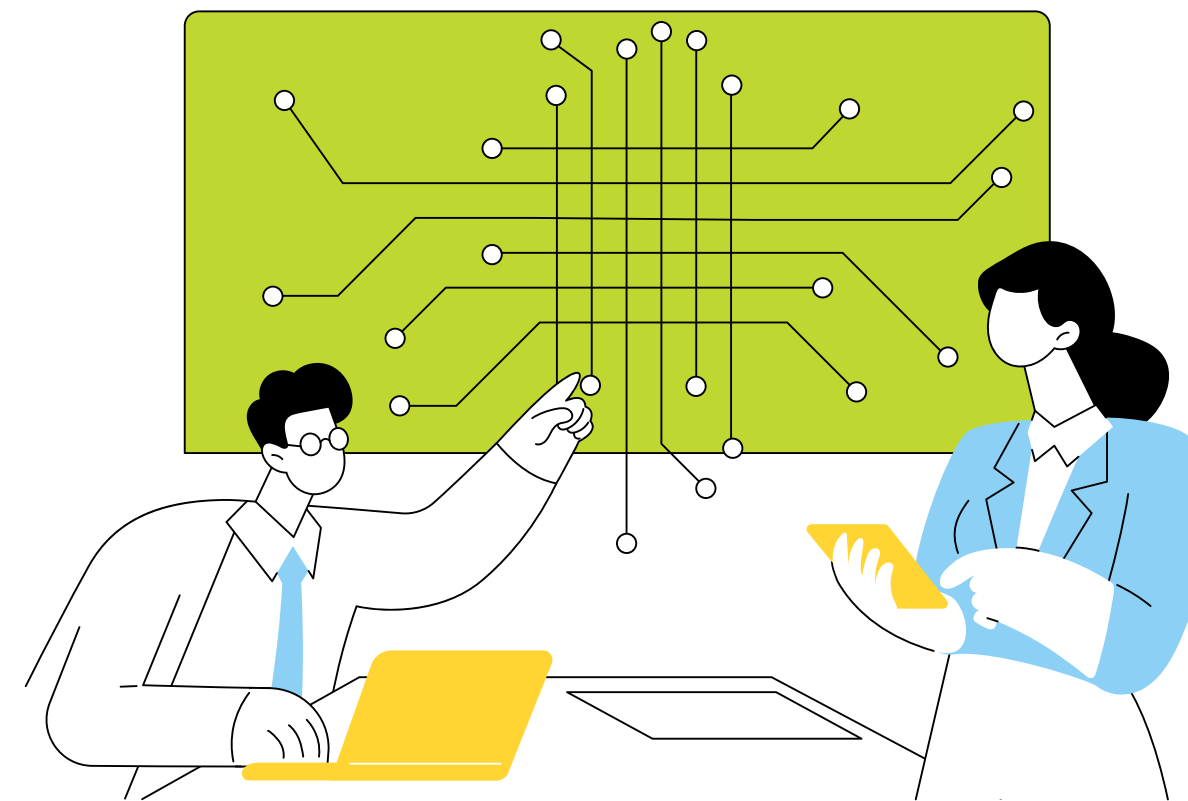
The topics reviewed in this report emerged as being material to the activity of the Group as part of a materiality analysis that began in 2022 and was completed during the current reporting year, conducted in collaboration with internal and external stakeholders.

This process was accompanied by a team from a global consulting firm specializing in ESG issues, and it included a review of the topics reported in the previous report; a methodological examination of the topics was carried out and a reevaluation was conducted together with the stakeholders; prioritization and rating were also performed to identify the material topics for the Group, from a broad perspective.

Identifying the topics encompassed, among other things: external reference points based on sector-specific and general industry players; mapping of intra-organizational and external stakeholders and dialogue with them to rank identified topics; as well as rating based on the information elicited from the stakeholders.

Stakeholders who took part in the process include managers and employees in the Group; representatives of the business, industrial and financial sectors and members of the Group's value chain. The extensive participation in the process enabled us to gain a deeper understanding of the material topics and helped us focus the content in this report. However, the scope of this report goes beyond the list of material topics, to create as broad a platform as possible for sharing and reporting.

## Bazan materiality matrix



Environment



Social



Governance

Number	Topic
1	Air pollution and emission of pollutants
2	Compliance with the law
3	Occupational Health and Safety
4	GHG and energy efficiency
5	Risk and crisis management
6	Ethics, transparency, and communicating
7	Human capital

Number	Topic
8	Human Rights
9	Energy security
10	Waste Management
11	Sustainable Procurement
12	Adaptation and resilience to climate change
13	Circular economy
14	Diversity and inclusion



# UN Sustainable Development Goals (SDGs)

Bazan works to further UN Sustainable Development Goals. The main goals that we supported during the reporting year:



## Gender Equality

**Act to ensure gender equality in the business sector and in the community**

Bazan takes pride in the significant presence of women across the Group's management ranks, and the representation of women in its various departments and in diverse managerial roles, including in the areas of manufacturing, innovation and R&D. As of 2023, 6 of 15 members of management at Bazan are women.

The Company set a goal of 40% representation of women in senior management by 2024 and has met it as early as 2022. In the current reporting year, an additional goal was set for the representation of women at mid-level management – an increase of two positions compared with the previous year. This goal is an ongoing goal to be revalidated on an annual basis.



## Clean Water and Sanitation

**Ensure availability and sustainable management of water and sanitation**

Over the last few years, we have worked to reduce water consumption at the Bazan Group, optimize water quality, and reclaim significant quantities of wastewater, leading to savings in the use of potable water in the State of Israel. As part of these efforts, commencing in 2018, a pilot project was conducted in Bazan together with Aqwise, for removing nitrogen compounds from wastewater using MBBR (Moving Bed Reactor Biofilm) technologies.

In recent years, Bazan has implemented a significant process of transition to massive use of reclaimed wastewater, reducing the usage of potable water.

The industrial effluent reclamation facility led to savings of approx. 2.5 million cubic meters of water per year in the Israeli water system (equivalent to consumption by approx. 40,000 residents\*).

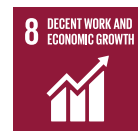
From 2016 to 2023, the Group's overall water consumption decreased by approx. 12%.



## Affordable and Clean Energy

**Promote the availability of sustainable energy sources**

Encouraging the use of hydrogen-based energy, with the development of hydrogen-based solutions, is one of the four elements of the Group's strategic plan. Bazan has assumed a pioneering role in the hydrogen industry in Israel, and in May 2023, in collaboration with Sonol and Colmobil, Bazan inaugurated the first hydrogen-powered fueling station in Israel. In addition to this, in terms of the circular economy: cracking used cooking oil for the production of green monomers (propylene and ethylene) at the refinery, in conjunction with Fandango.



## Decent Work and Economic Growth

**Promoting economic growth and creating a safe and productive work environment**

Fair business conduct – The Group operates according to a code of ethics aimed at ensuring fairness in business and adherence to ethical principles. In the reporting year, the integration was completed of a Suppliers Conduct Annex for contractual engagement processes with material suppliers, emphasizing topics such as human rights, employment terms, and more. In doing so, the Group attained the goal it had defined for itself during the previous year to this reporting year. Moreover: during the reporting year the Group began an enterprise-wide process of updating the Code of Ethics. This process has been conducted under the leadership of the Group's ethics officer and in consultation with the ESG Steering Committee, the employee unions and the management.

Impact on economic growth – Bazan's overall contribution to the Israeli economy in 2023 is estimated at approx. NIS 8.1 billion, or approx. 0.43% of GDP. In terms of direct contribution, the Group accounts for approx. 2% of the industrial product in Israel, approx. 18% of the industrial product in the district of Haifa, and approx. 61% in the city of Haifa. Bazan directly employs approx. 1,400 men and women in Israel, and its overall contribution is estimated at approx. 15,800 jobs, mostly in northern Israel.



## Industry, Innovation, and Infrastructure

**Build resilient infrastructure, promote inclusive industrialization, and foster innovation**

**innovation**

Bazan's leadership in the transportation fuel market in Israel, which forms part of its group strategy, is reinforced by digitization, embedding advanced technologies in production, innovation, and continued reduction of the environmental impacts, while continually adapting to market changes and upgrading and expanding advanced logistical infrastructures and trade capabilities in order to ensure the continuity of supply for the Israeli economy.



## Responsible Consumption and Production

**Manage business systems with responsibility towards natural resources**

The Group is committed to being part of the comprehensive solution to the problem of waste in Israel, with an emphasis on plastic waste. Extensive resources are devoted to research and development in this field, including the production of polymers with a lower environmental impact, through the R&D Unit at Carmel Olefins.

In this context, the Group has set a target for the sale of recycled polymers, biopolymers and biodegradables, at a rate of 15% of its total polymer sales by 2025, and a rate of 30% by 2030. As part of the promotion of the strategic plan in this field, in 2022 the Group acquired control of VPM – currently Carmel Eco – and also promoted collaboration with an additional company to build a waste sorting, washing, and crushing plant. These actions serve to advance the transition to recyclable and biodegradable polymers in Israel, while integrating innovation, digitization and advanced technology in manufacturing processes in order to reduce the carbon footprint of our products.

As far as energy efficiency is concerned – the Group's method of operation facilitates synergy among its facilities, and consequently the optimal utilization of raw materials and byproducts, as well as operational efficiency.



## Climate Change

**Taking action to combat climate change and its impacts**

The Group has set a goal of forming a long-term climate plan focusing on reducing GHG emissions. To date, a process has been set in motion of mapping climate risks and the monitoring of Scope 1, 2, and 3 emissions was completed to provide a baseline for long-term targets. The monitoring was carried out by global experts DNV, based on data for 2021, and pursuant to the international protocol on greenhouse gases and ISO 14067 relating to carbon footprint of products.

Bazan invests in the development of technologies for the reduction of GHGs. As part of its activity via its innovation arm, Bnnovation, the Group invests in startup companies such as H2Pro, which is developing innovative technology for the production of green hydrogen via electrolysis. The Haifa Bay Refinery boasts one of the lowest scope of emissions in Europe for a refinery of this type.

**In 2023, the Group formulated a policy of community outreach and support in accordance with the UN SDGs, as part of a comprehensive process involving representatives from across all the Group's units, representatives of employee unions and the Group's management. For more information, see the Chapter entitled "Committed to Society and the Community".**

# PLANET

*Planet*  
**COMMITTED TO  
THE ENVIRONMENT**

*Committed to a Sustainable Future*

Hydrogen-fueled power plant launched –  
first of its kind in Israel

Circular economy – preparations  
completed for the production of  
polypropylene and polyethylene using  
recycled cooking oil

Water use reduced – 12% decrease in  
2016-2023

Quantity of hazardous waste generated  
was reduced by 26% compared with 2022



# Leading the Hydrogen Revolution in Israel

Hydrogen gas is considered a clean energy source with significant potential to replace polluting fuel sources, particularly in the area of heavy transportation. Bazan is proud to be at the forefront of innovation in the field of hydrogen in Israel and to promote the use of green fuels in transportation and industry.

Energy generated from hydrogen can be divided into three categories: gray hydrogen, derived from natural gas; blue hydrogen, also derived from natural gas, with carbon dioxide captured during the production process; and green hydrogen, derived from water using renewable energies, which has the lowest carbon footprint.

At this stage, the hydrogen is generated using natural gas (gray hydrogen); later, the plan is to switch to green hydrogen derived using renewable energies. This form of hydrogen production is based on electrolysis – separation of water into hydrogen and oxygen without the emission of greenhouse gases, with 30% higher energy efficiency than other methods. As part of the promotion of this process, Bazan invested in H2Pro, a company developing innovative green hydrogen production technology.

## The station opened in 2023 is Israel's first hydrogen-powered truck refueling station.

A collaboration between Bazan, Sonol, and Colmobil, the station has the capacity to refuel up to 20 trucks a day.

Hydrogen-fueled trucks are just the beginning; hydrogen-fueled buses have been ordered to Israel, and are expected to be refueled at Bazan as soon as the European standard is completed. One of the buses was purchased by the Group, and will be used to transport its employees in northern Israel. A forklift supplier is currently being sought, and talks are underway with municipalities regarding hydrogen-fueled garbage trucks. An examination of the use of hydrogen-fueled train engines at Israel Railways has been restarted, and a collaboration in this area is under consideration. In '21-'22, the Group was awarded a number of grants by the Office of the Chief Scientist in the Ministry of Energy and Infrastructures for the purpose of building a compression system for the transportation of



**Did you know?**

Hydrogen power is considered less polluting than electrical power. In terms of emissions, the only byproduct of the engines is a small quantity of water droplets released into the air.



Bazan's hydrogen-powered truck

hydrogen used in transport, and the purchase of hydrogen-powered vehicles. These grants have been utilized and the compression system was established. We see the hydrogen industry as the future of the energy market.



## The first and only hydrogen laboratory in Israel, established at Bazan in 2023

The Group has embarked on a strategic effort to develop hydrogen-based solutions and promote technologies to make hydrogen an accessible, user-friendly energy source for various needs. The laboratory is supplied with the best devices and equipment in the field, and has obtained all of the certifications necessary for its activities.

## Continued investment in hydrogen

Bazan intends to invest \$50 million in hydrogen-based solutions by 2030. Bazan has surplus production and delivery capabilities that enable it to adjust production volumes to the needs of the economy and to the plan to bring hydrogen-fueled vehicles to Israel.



# Reduction of GHG Emissions

As a key player in the Israeli energy market, Bazan is aware of its important role in climate and environment issues, and its capacity to stimulate large-scale change in its business environment. The Group's activities are oriented to sustainability and the pursuit of innovation and technological solutions promoting its goals. This strategy is based on four pillars: hydrogen; recycled and biodegradable polymers and biopolymers; fuels and infrastructures; and ESG.

As part of our commitment to quality reporting and transparency, and the effort to apply best practices in this area, we aspire to adopt the reporting framework of the TCFD (Task Force on Climate-Related Financial Disclosures), which provides a consistent structure for evaluation of climate impacts and changes. In the current reporting year, as in the preceding year, we focused on expanding our reporting on GHG emissions (Scopes 1, 2, and 3) and setting long-term targets for the reduction of Scope 1 and 2 emissions in the future.

Further to the undertakings in our ESG report for 2022, this report presents the key targets set within our climate plan for the reduction of carbon emissions in our operations in Israel and Europe. This is in addition to our rigorous reporting on greenhouse-gas emission data to the Ministry of Environmental Protection, since 2010, beyond regulatory requirements, based on our proactive approach to the effort to cut back greenhouse-gas emissions.

Greenhouse-gas emissions were mapped and calculated by DNV, a global company with expertise in this field. The assessment is based on data for 2021, in line with the international GHG Protocol and ISO 14067 on product carbon footprint. The carbon footprint of all products of the Company was calculated as part of this process.

In the reporting year, Bazan signed a power purchase agreement (PPA), for a ten-year period beginning in July 2023. Under the agreement, the energy company OPC will supply the Bazan Group with electricity from renewable sources, at a capacity of approx. 50 megawatts, in phases beginning January 2025. Further details can be found later in this report.

Concurrently, the Group is working to formulate a climate plan for the reduction of carbon emissions, as noted, from a long-term perspective. The plan sets



## Did you know?

**Scope 1** - Direct emissions of the organization resulting from its activity.

**Scope 2** - refers to emissions originating from the production of energy used by the organization.

**Scope 3** - Overall emissions caused by the organization's supply chain.

realistic goals formulated in the context of the existing regulatory situation in Israel and Europe, according to the circumstances at each of the sites of the Company's operations.

## Scope 1 emissions

Scope 1 emissions account for approx. 25% of the Group's emissions. These emissions result from the production of energy needed for heating, production processes, steam production, electricity produced for internal consumption via cogeneration, and catalytic reformer processes. **From 2022 to 2023, emissions in this scope decreased by approx. 1%.**

## Scope 2 emissions

Scope 2 emissions account for approx. 4% of total emissions. These emissions originate with the use of electricity, mostly generated from natural gas through OPC. This electricity is used primarily to power motors, process-related compressors, air compressors, air coolers, and other process-related equipment. **This segment grew by approx. 4% between 2022 and 2023, due to a periodic renovation at Carmel Olefins.**

## Scope 3 emissions

Scope 3 emissions account for approx. 70% of total emissions. In 2022, for the first time, we measured emissions upstream supply-chain emissions for the first time, well to gate. 98.8% of the Scope 3 emissions originate with the production of crude oil used in manufacturing processes, and the rest derives from purchasing of chemicals and natural gas, waste removal, etc. **Total Scope 3 emissions increased by 3% compared to 2022.**





## Expanded report – on course for a comprehensive reduction plan

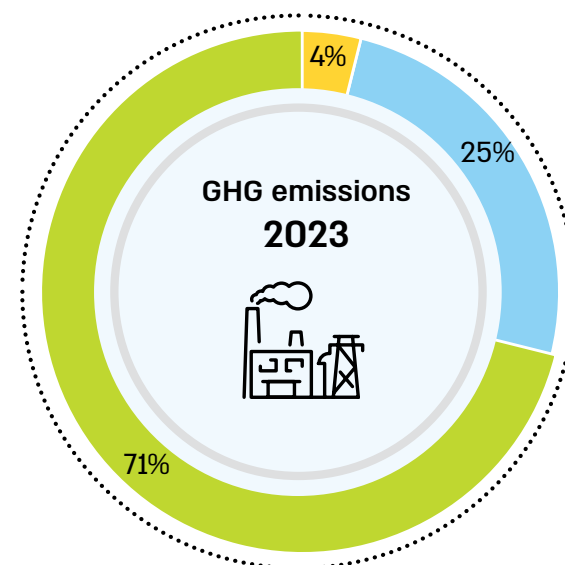
The Bazan Group has rigorously reported data on Scope 1 and 2 emissions, voluntarily, to the Ministry of Environmental Protection since 2010. In the preceding reporting year, further to comprehensive work performed by DNV, a company with a global reputation in this field, to map Scope 1, 2, and 3 emissions, Scope 3 emissions data were reported for the first time. A similar process was performed at Ducor and Carmel Eco in 2023.

Expansion of the report to Scope 3 is an important step towards comprehensive reduction of greenhouse-gas emissions, in two ways: for the Group, mapping of the full extent of emissions is a significant milestone in relation to the value chain, in that the first step towards work plans and targets is monitoring and management. And for our customers, the measurement allows better mapping of the full range of activities that pertain to the use of Bazan products, particularly polymers. As of 2022, we offer life-cycle assessments of product groups on demand. Customers can now expand their emission measurements and make informed decisions about their use of raw materials.

In this context, note that the methodology for calculation of emissions at Bazan has been improved recently, through transition to a more accurate calculation method based on measurement of the chemical composition of gases, rather than emission coefficients. Bazan monitors and analyzes the quantity of its emissions on a daily basis; transparency is maintained as a guideline. Annual data are released through the voluntary mechanism of the Ministry of Environmental Protection.

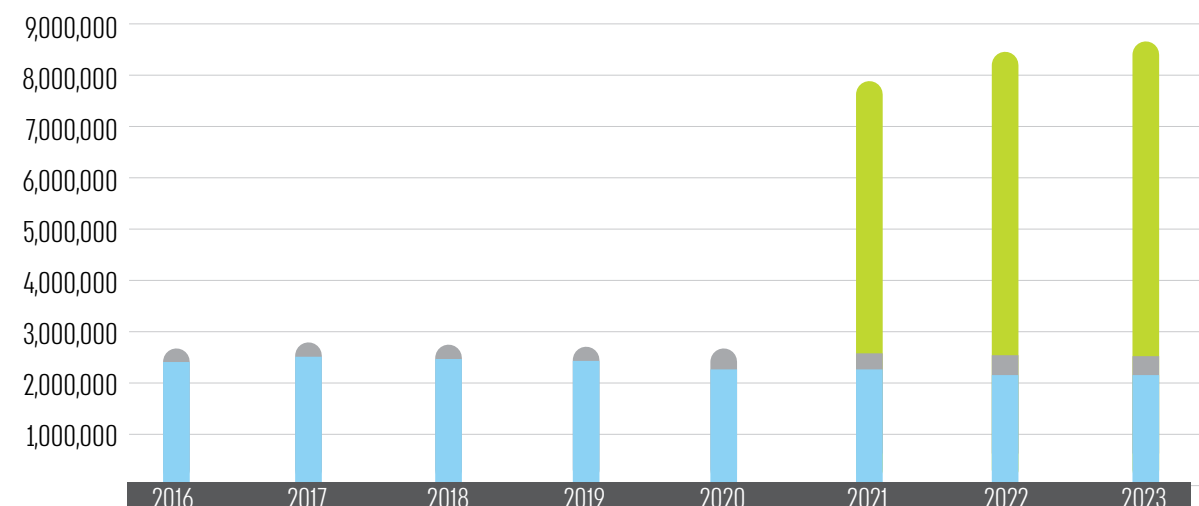
### GHG emissions – 2023

- Total - Scope 1
- Total - Scope 2
- Total - Scope 3



### GHG emissions – Scopes 1,2 and 3 (tons CO<sub>2</sub>e)

- Scope 1
- Scope 2
- Scope 3



## Climate objectives and indicators

### Plan to reduce GHG emissions

Over the last year, we worked to formulate a plan to reduce greenhouse-gas emissions at the Group's sites in Israel and Europe. We embarked on a long journey, with the help of leading global climate experts, to conduct an in-depth examination of the reductions already effected, potential further reductions, and the status at every one of the sites where the Group operates. Elements examined include accessible technologies, existing reduction means, the economic feasibility of each of the means of reduction, and the government policies and current incentives for the adoption of technologies and implementation of a reduction policy. At the conclusion of this process, we set goals for the reduction of greenhouse-gas emissions at the Group's sites in Israel and Europe.

**We accord great importance to setting attainable goals for each of the sites, in recognition of the extent of responsibility that accompanies the commitments and objectives undertaken by the Group. We are proud of our work, which has already yielded results – the outcomes of monetary investments and extensive labor over the last decade – and the efforts still ahead as we work towards our goals for the future.**

Beyond compliance with the Fit for 55 guidelines of the European Union at the subsidiary Ducor, we are leading a policy of reducing greenhouse-gas emissions in the Group's operations in Israel as well, in recognition of the importance of this issue in a changing climate reality. To emphasize, this policy of the Group has been established and approved beyond current compliance aspects, in the absence of binding local regulation or state infrastructures.

**In Europe**, we are setting greenhouse-gas reduction targets for the subsidiary Ducor aligned with the guidelines of the European Union under the Green Deal. As of the reporting year, Ducor's carbon emissions have been reduced by **more than 30%**; we are targeting a reduction of approx. 55% in Scope 1 and 2 emissions relative to 1990, the baseline year established by the European Union. At the same time, we aspire to a reduction of approx. 55% in carbon emissions by 2030, in line with the Group's reduction policy and the overall EU targets.

An initial goal for greenhouse-gas emissions in **Israel** was set in the report released for the reporting year 2022: a commitment to act to reduce carbon emissions by 25,000





tons by 2024. We aspire to a combined reduction of 19% in Scope 1 and 2 carbon emissions by 2030, compared with the level of emissions in 2015.\*

Emission reduction will focus on Scope 2, through the purchase of green electricity and certificates.

In terms of activity in Israel, greenhouse-gas emissions in Scopes 1 and 2 have been reduced by approx. 10%, from 2015 to the date of publication of this report, through a combination of efficiency measures and improved energy efficiency. These measures were part of the cumulative investments of approx. USD 545 million between 2009 and 2022 in efficiency and improvement of the Group's environmental performance.

Measures already taken that have assisted in reducing emissions: refurbishment of furnaces; installation of new burners allowing optimal combustion in furnaces and tanks, while reducing environmental emissions; efficient energy management and certification under ISO 5001; improved efficiency of steam tanks; insulation of pipelines to prevent heat loss and emissions; and more, along with overall improvements in efficiency on an everyday basis.

Over the last year, an initial assessment of options for further reduction of Scope 1 and 2 emissions in domestic operations was performed, with the aid of leading global climate and environment experts. The findings of this comprehensive examination indicate that it is possible to aspire to an additional reduction of emissions, up to a total rate of approx. 50% in Scopes 1 and 2 by 2040, compared with 2015 levels. The options being examined include green hydrogen, bio-methane, electrification, and carbon capture

and storage (CCS); however, all of these possibilities require the development of technologies, as well as the development of regulatory requirements and supportive policies, to become technically and economically feasible. In view of the above, and in the absence of these conditions at the time of publication of this report, this matter will be reexamined near the end of this decade.

## Investment in technologies to reduce greenhouse-gas emissions

The Bazan Group is already investing in innovative technologies to benefit operational efficiency and emission reduction. Among other matters, it accomplishes this as a member of a global partnership – the Environmental Sustainability Innovation Lab (ESIL), which invests in startup companies – where partners include the French group EDF Renewables and the British group Johnson Matthey. With these partners, Bazan has invested in startup companies in a range of fields, including carbon capture and hydrogen storage.

Thus, through its activity with ESIL, the Group has invested in the startup company RepAir, which is developing modular technology for capturing CO<sub>2</sub> from the air. The RepAir electrochemical cell operates at ambient temperature and uses only electrical energy, significantly lowering the required energy cost compared with current solutions.



\* 2015 has been set as the baseline year, in the spirit of the climate law currently being formulated in Israel.





## Energy management

Striving for energy efficiency has a key role in the Group's production and logistics activities. We promote an advanced energy management policy, which has led in recent years to a significant reduction in the consumption of energy from polluting sources. The Group has set significant targets for reducing consumption, including through the examination of its performance based on the Solomon methodology. This method allows comparative analysis of performance relative to refineries around the world. Our energy management system encompasses all of the activities of the Group's plants.

### Dedicated to energy efficiency

#### Energy management policy based on ISO 50001

The Bazan Group was accredited under the ISO 50001 standard in late 2016, in a process designed to integrate globally prevalent energy management work methods. The Group was reaccredited in 2022, for three additional years, under the new guidelines for the standard.

The following are some of the notable processes underway in this area:



- **Transition to natural gas** to mitigate environmental impacts, natural gas is used for burning. During periods of natural-gas shortages, liquefied petroleum gas (LPG) and synergy gases are used.



- **Synergy gases** are process gases originating with the refining process – a byproduct used by Carmel Olefins to feed its facilities as part of the synergy between the plants. The gases lead to reduced consumption of fuel and feeding of crude oil to the refineries. This gas is used as much as possible, to save natural gas and raw materials.



- **Recovery of hydrogen** from process gases: the recovery of hydrogen generated as a byproduct of refining processes leads to savings on natural gas fed into the hydrogen production facility, energy savings, and reduced atmospheric emissions (particularly of carbon dioxide).



- **Steam:** The steam production process consumes significant amounts of energy. A daily optimization process is therefore performed to determine the financial precedence for production between steam consumers and electricity consumers within the Group. In addition, optimization is applied to steam production among the Company's steam production facilities (power plants, residual heat tanks, etc.), which even helps reduce emissions and improve the plant's overall energy efficiency. This process involves the various facilities and business units – fuels, polyolefins, and aromatics. In essence, the principle is maximum production of steam through cogeneration at the power plant and from residual heat tanks.



- **Electricity:** A contract with a supplier to purchase electricity generated using natural gas, and in the future from renewable sources.

In 2022, the Group performed a measurement, in collaboration with the global consulting firm Solomon, indicating that its EII (Energy Intensity Index), a global measure of energy efficiency in refining, totaled approx. 100. This constitutes a marked decrease from the EII score of 112 in 2008, reflecting a consistent trend of improving energy efficiency at the Group over the last decade. In comparison to the most recent measurement performed in 2018, the score increased by two points, as a result of the renovation of substantial facilities, which led to a decrease in overall efficiency, and therefore a decrease in energy efficiency. Solomon recommended several actions to improve this index, currently being implemented by the Group, such as process optimizations, including of furnaces and steam tanks.

### Energy measurement at the Group

Consumption remained similar to the preceding year, despite the increase in the volume of production.

#### This is explained by improvement in the consumption of natural gas, due to renovations over the last year.

The renovation included system cleaning, treatment, and repairs, which contributed to reducing the energy consumed by devices – heat transformers, air coolers, cooling towers, and gas compressors – and improving the insulation of pipes and steam tanks.

Bazan is determined to reduce and improve the efficiency of energy consumption at its facilities, as part of the Group's strategy.

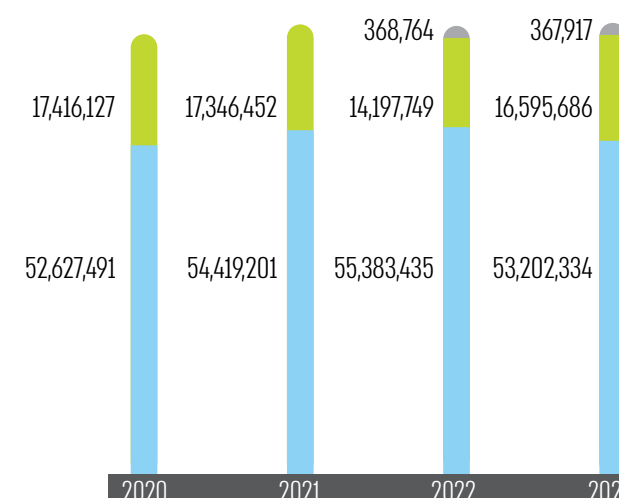
### Purchasing green electricity

In May 2023, Bazan signed an agreement with OPC Energy for the purchase of energy, for up to 10 years beginning in July 2023, at a maximum volume of 125 MWh. Starting in January 2025, Bazan will gradually receive electricity at a capacity of approx. 25 MW from renewable energy sources during sunlight hours, up to 50 MWh, as well as I-RECs (International Renewable Energy Certificates) compliant with international standards. Accordingly, approx. 40% of Bazan's estimated average electricity consumption under the agreement will come from green electricity and green certificates.

The green electricity supply will enable the Group to attain its targets, in stages: in the first phase, beginning in 2025, Bazan will be able to cut back at least 12.5 thousand tons of CO2 emissions. In the second phase, from 2026, the Company will be able to cut back up to 140 thousand tons, based on a supply from renewable energy sources in Israel.

### Energy consumption by activity (GJ)

■ Fuel & Ducor ■ Carmel Olefins ■ Ducor



# Reduction of Pollutant Emissions

Bazan has achieved the goal set in its last report: to be in the top 10th percentile of refineries with the lowest environmental impact in Europe (based on the European reference document on environmental regulation of the refining industry – the BREF for Refining of Mineral Oil and Gas).

## Our Approach

Reducing emissions of pollutants is a key goal at Bazan. To comply with strict standards and the requirements of the permits, and in order to be able to warn of malfunctions in real time, Bazan operates an advanced monitoring system at the chimneys of its plants and on fences, as well as advanced processing systems at its production facilities, which it ensures are routinely maintained.

In 2023, as part of periodic preventive maintenance, Carmel Olefins facilities were renovated. A year earlier, an extensive renovation was carried out at one of the refining facilities, and devices were upgraded to new technologies.

Volumes of the principal pollutants were reduced at double-digit rates from 2016 to 2023.

**Air quality in the vicinity of the refineries is monitored in accordance with the specific standards for the various substances:**

- Benzene (C<sub>6</sub>H<sub>6</sub>)
- Sulfur oxides (SO<sub>x</sub>)
- Nitrogen oxides (NO<sub>x</sub>)
- Suspended particulate matter (SPM)
- Non-methane volatile organic compounds (NMVOCs)

## Benzene (C<sub>6</sub>H<sub>6</sub>)

**Benzene emissions cut back by over 90% from 2016 to 2023**

Benzene arrives at the Bazan refinery as a part of crude oil, and is also generated by various production processes, including in the continuous catalytic reformer, the naphtha cracker facility for ethylene production, and Gadiv's facilities. This organic compound is a basic and important ingredient in manufacturing processes of pharmaceuticals, plastics, synthetic fibers, cleaning detergents, and pesticides. However, exposure to a high concentration of the substance may be harmful to human health.

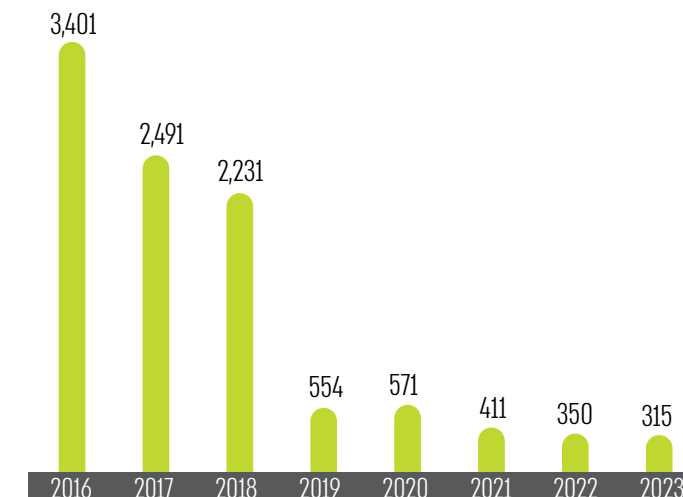
Bazan has set a key target of reducing benzene emissions in its production process. In the report it issued in 2018, the

Group set a target of reducing the emissions from approx. 2,200 kg to approx. 750 kg by 2024. This target was actually achieved as early as 2019.

In the reporting year, emissions were reduced even further, to a total of 315 kg, a decrease of approx. 10% relative to the benzene emissions documented in 2022, and a decrease of approx. 91% from 3,400 kg in 2016.

This is the direct result of continuous, intensive measures taken by the Group, grounded in its deep commitment to responsible environmental conduct.

**Benzene in Kg/year (C<sub>6</sub>H<sub>6</sub>)**



### Did you know?

The standard for the concentration of benzene in gasoline is up to 1% in terms of volume. However, the gasoline produced at Bazan has concentration levels significantly lower than the standard. This is primarily due to optimization of the production process with Gadiv, where the benzene component is separated and sold as a chemical. Thus, the annual average concentration of benzene has dropped to 0.55%. The environmental effect contributed by this change is a reduction in emissions of end users of the gasoline, primarily in transportation.

## Measures we took to reduce benzene emissions

### Switching to equipment components with higher impermeability

- Proactive replacement of equipment components, including replacement of old taps with new low-emission or ultra-low-emission taps
- Proactive replacement of controller valves
- Diffuse leak detection and repair (LDAR) activities.

### Activity pertaining to storage containers

- Installation of means of reducing emissions into the air from storage containers, such as secondary and tertiary seals, guide pillar seals, and sealing devices for container roof legs
- Installation of domes for storage containers with an external floating roof, to reduce the effect of hydrocarbon drift due to wind
- Upgrade of container draining systems to closed systems.

### Addition of secondary environmental systems to treat emissions

- TO facilities for the reduction of emissions from ecological treatment systems
- VRU for the reduction of emission during loading of tankers
- RTO for the reduction of emissions from a bitumen facility
- CTO at Carmel Olefins for the reduction of emissions from storage tanks.

### Additional measures

- Operational changes to reduce the quantity of stored Pygas – a mixture of gases, half of which is benzene, generated in the production process at Carmel Olefins. As part of the synergy between the plants, the mixture is sent to Gadiv to be used as feedstock, while the benzene is separated and sold as a product, with the remaining components reused by the refinery.

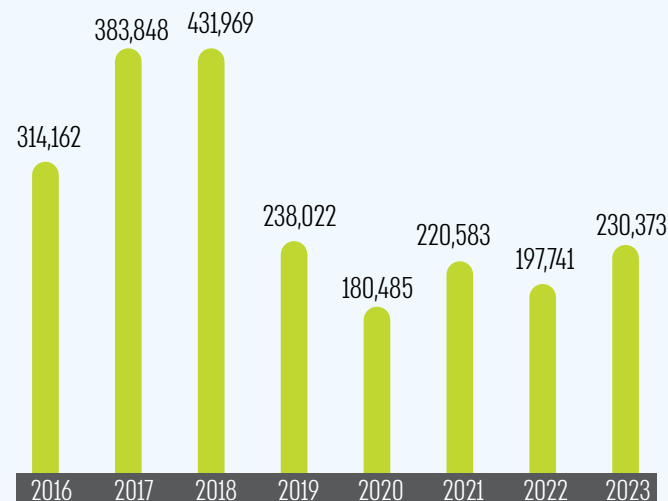


## Sulfur oxides (SOx)

The volume of emissions **increased by 17%** compared to 2022

In the reporting year, the volume of emissions increased by 17%. However, from a multi-year perspective, a decrease of 27% has occurred since 2016, and we expect the downward trend to continue in the coming years.

**Sulfur oxides (SOx) in Kg/year**



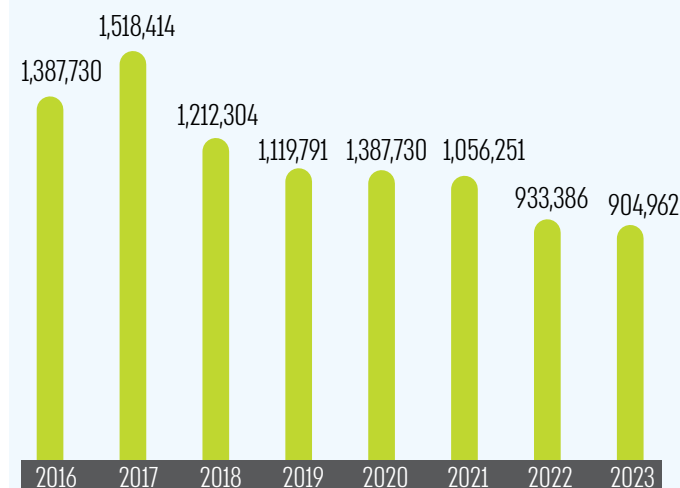
## Nitrogen oxides (NOx)

**3% decrease** in emissions compared to 2022

In the reporting year, the trend towards reduction of nitrogen-oxide emissions continued, with a 3% decrease in emissions compared to 2022, and a total decrease of 35% compared to 2016 at the Group's facilities in Israel. The reduction resulted from a series of measures:

1. Installation of flue gas recirculation (FGR) systems to reduce emissions of nitrogen oxides in steam vats.
2. Replacement of burner systems with ultra-low NOx burner.
3. Establishment of a dedicated team to calibrate burners, in order to maintain combustion conditions that reduce emissions.

**Nitrogen oxides (NOx) in Kg/year**



## Non-methane volatile organic compounds (NMVOCs)

**Decreased by 25%** compared to the preceding year; since 2016

In the reporting year, emissions of these pollutants at the Group's facilities in Israel decreased by 25% compared to the preceding year; since 2016, despite the increase in production, emissions have decreased by 68%. We expect the downward trend to be maintained in the future.

The reduction in 2023 resulted from the completion of a renovation carried out in 2022, which had caused an increase in emissions. Over the years, the reduction trend has been achieved through regular monitoring by a team of experts with dedicated equipment for the detection of minuscule leaks and immediate repair, as well as the installation of means for treating emissions from storage tanks (seals, socks, a guide pillar seal, and more) and a bituminous coal treatment system (the coal filter was replaced by an RTO device in '22).

**Non-methane volatile organic compounds (NMVOCs) in Kg/year**



## 24/7 Fence-Top Monitoring – Engaging with the Public

The UV-DOAS system continuously monitors the concentration of BTEX (benzene, toluene, ethylbenzene, and xylene) in the air, in four different zones: the northeastern face of the container farm fence, the northwestern face of the Gadiv plant fence, the southwestern face along the ecology area, and the additional area along the northwestern fence.

Bazan's system is the first in the world to be certified under the ISO 17025 standard. The system is designed to provide maximum precision in monitoring emissions and allow real-time response. Its main advantage is its location in close proximity to the plants. The system operates at all hours, generating data available to the public in real time, with full transparency.

For further information regarding the monitoring system and its capabilities, visit our [website](#).

## Environmental hotline 24/7

The hotline, launched several years ago, invites the public to contact us regarding events with an environmental impact, or to inquire about and understand the environmental impacts of our activity. Every complaint received at the hotline is conveyed to the person on call, and subsequently to decision makers. When necessary, according to the nature of the request, a mobile unit with testing equipment is dispatched to the field.

You can also contact us through the group's website in the page dedicated for that, linked here:

<https://www.bazan.co.il/contact>

## Releasing information on exceptional events

Immediately when an exceptional event occurs, we make sure to provide and, real-time information on our website and Facebook page and in reports to the media.

# Circular Economy

A circular economy relies on the reduction, reuse, and recycling of resources; the leading principle is giving products another round of life after they are used.

Bazan invests extensive resources in research and development in this field, both upstream in the supply chain, by developing alternative raw materials from waste, plant-based, and renewable sources, and downstream, by striving to produce fully recyclable polymers that can contain high quantities of recycled polymer with no damage to the properties of the completed product.

The implementation of a circular economy in our operations reflects our commitment to environmental management and environmental responsibility.

As a leading company in the fuel and polymer industry in Israel, Bazan sees the adoption of a circular economy model as an opening for broad opportunities, from the reduction of its environmental footprint by cutting back emissions and waste, to conservation of resources and significant cost savings, and to the encouragement of innovation and creation of new revenue streams leading to sustainable growth. Accordingly, the field of recycled and biodegradable polymers and biopolymers – one of the four pillars of the Group's strategy – has gained significant strategic importance.



# Research and development in the polymer industry

The R&D department at Carmel Olefins is leading the development of solutions in this area. With the Israel Innovation Authority and partners in academia and industry, Carmel Olefins is also leading the BIO+ consortium for treating waste and environmental pollution in the form of nonrecyclable single-use plastic products by instilling the property of biodegradability under natural conditions or in compost (more about the activity of the consortium below).

The R&D Department at Carmel Olefins consists of 15 researchers, engineers, and technicians, focused on the development of processes and technologies for the production of advanced products using innovative laboratory equipment. The department is highly important to the plant, as, among other matters, most of the Company's polypropylene and polyethylene products were developed there. Several patents have also been registered, for unique compositions of polymers with added value.

Carmel Olefins' innovation in recycling and biopolymers is based on three axes:

- **Mechanical recycling** – mechanical processing of plastic waste that preserves the qualities of the material.
- **Chemical recycling** – usually through pyrolysis, where the raw material is plastic and the output is pyrolytic oil. Pyrolytic oil can be fed into cracking facilities for monomer production; later in the process, polymers can be manufactured from recycled plastic waste, at prime product quality.



- **Biopolymer** – plastic from plant-based and renewable sources.

These three axes encompass a range of activities, involving working with the Group's customers and strategic clients in the local and international markets; developments aligned with evolving requirements in the various markets; and Innovation Authority aggregators working via close collaboration between businesses and academia.

## Packaging sacks from recycled materials

In 2022, we started to establish the use of sacks consisting of 30% recycled plastic to package and ship plastic particles made by Carmel Olefins. We have also reduced the quantity of ink printed on the sacks such that they are better designed for recycling. This was another step in making our supply chain more sustainable



**100%** of Carmel Olefins' products are recyclable



## From plastic to plastic: polymers made of recycled materials

In view of the environmental challenges, regulatory trends, and expected demand, the Group has added a strategic objective: to make progress towards a circular economy and achieve 30% recycled polymers, biopolymers, and biodegradable polymers, of the total polymers marketed by Carmel Olefins, by 2030. Towards that end, Bazan has acquired majority ownership of VPM, now Carmel Eco, from Kibbutz Yas'ur, and absorbed it as a subsidiary within the Group.

Since the acquisition, the R&D department at Carmel Olefins has been working with Carmel Eco to help it optimize its products, by embedding innovation and technological tools and knowledge developed by Carmel Olefins over the years, along with its accumulated experience and expertise. As part of this process, a new product quality control laboratory has been established at Carmel Eco, and recycled materials (PP, LDPE) at a high level of cleanliness and with various hues have been developed. Along with the technical and technological improvements, a business plan has been completed for the establishment of a sorting, washing, and crushing plant for unseparated municipal plastic waste, in collaboration with other companies.

In the reporting year, progress on the absorption of Carmel Eco into Bazan continued, with an emphasis on synergies between the components of the Group – where one company's waste is another's raw material. Thus, Carmel Eco recycles the plastic waste generated by Carmel Olefins, in a pragmatic expression of the circular economy vision.

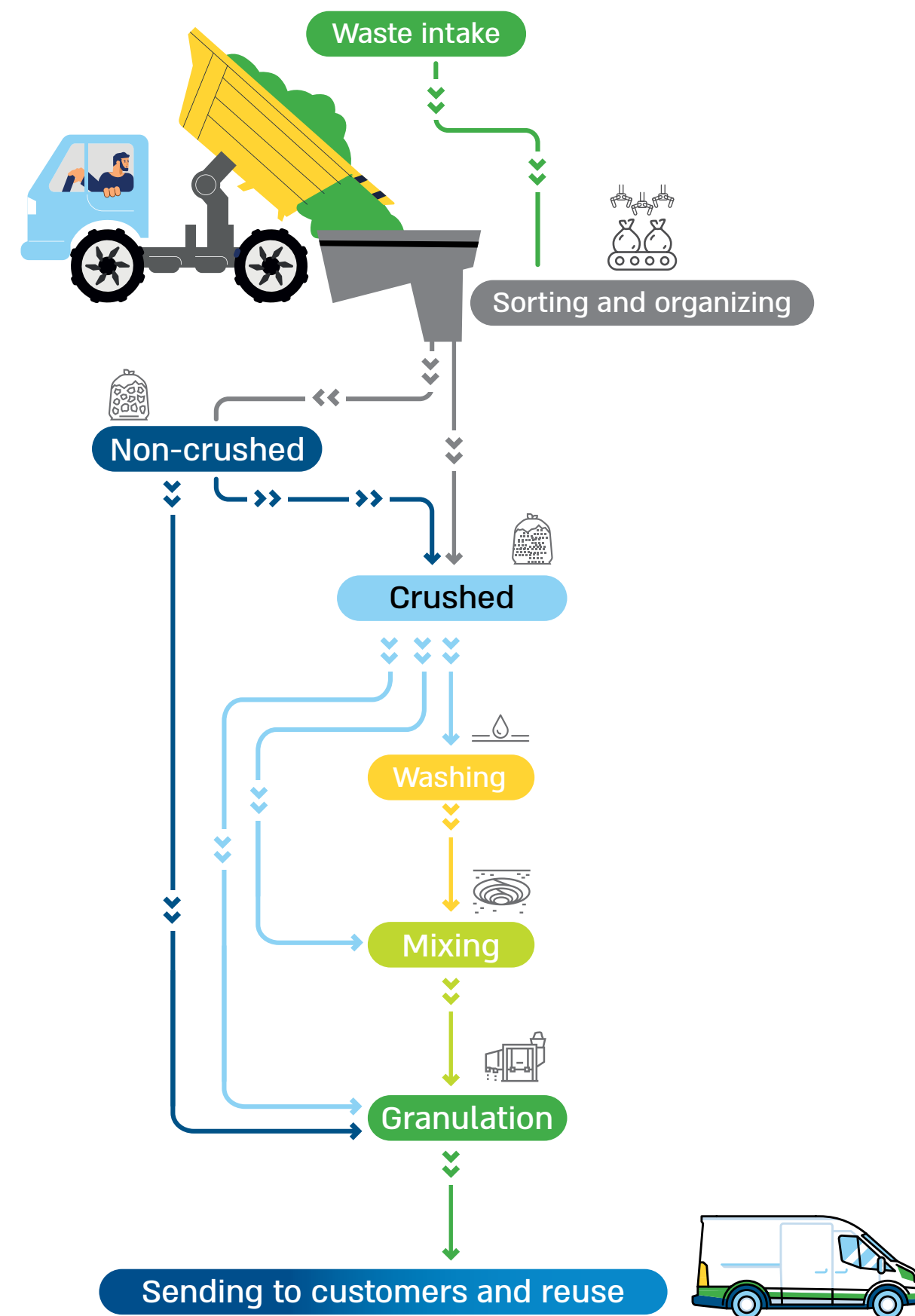
In 2023, the absorption of Carmel Eco into the Bazan Group was also evident in the area of safety, as it adjusts to the strict standards in this field. The process included training, visits, and tours to study this topic closely, as well as the acquisition and development of dedicated safety means.

In the area of human resources, employment terms were adjusted to meet the high standards prevalent in the Group.

A similar process was applied in mapping environmental impacts. After completion of the acquisition, as part of the standard set by the Group for transparency towards all of its stakeholders, the environmental protection unit at Bazan began to measure the carbon footprint of the polymers manufactured by Carmel Eco. The analysis was performed by a European company specializing in this field, based on the ISO 14067 standard, and examined the climate effects of the manufacturing of the recycled polymers, from the initial stage to the gates of the plant. The findings of this analysis indicated that the recycled polymers manufactured at Carmel Eco have a carbon footprint 80% lower than nonrecycled polymers. This has made it possible to distribute the products to a broader audience of domestic and global customers, through the Carmel Olefins marketing department, in response to evolving European regulation.

Another important development in 2023 is the RecyClass accreditation earned by Carmel Eco as a recycling enterprise, a standard that also reflects the principle of reporting and transparency promoted by the Group at its facilities and in the full range of its operations.

Carmel Eco products can potentially save landfilling of approx. 10 thousand tons of industrial plastic waste per year





## Proactive on the circular economy in Europe

Another arm of the Group promoting a circular economy is Ducor Petrochemicals, an active player in the business community in the region of Rotterdam Port in the Netherlands. Ducor is involved in various environmental and climate initiatives.

In 2020, Ducor joined the European initiative Operation Clean Sweep, a global program to raise awareness and reduce the loss of plastic particles by manufacturers, transporters, and others, to protect marine environments and biodiversity. Ducor has signed the organization's charter and is promoting measures aligned with its mission to prevent plastic particles from leaking into the ocean (more on the subject, on p. 35).

In 2022, Ducor joined Plastics Europe, an organization for plastic manufacturers in Europe aimed at instilling circular-economy principles and collaborating on environmental solutions. Ducor is also involved in initiatives to promote dialogue among stakeholders in the Rotterdam industrial district, aimed at creating shared discourse on climate and environmental issues. In 2023, polymers manufactured by Ducor were accredited under ISCC Plus, an international sustainability standard (for more about the attainment of this standard, see details above).

DuMore products by Ducor are made of a set of polypropylene compounds combined with post-consumer waste, cleaned and sorted by color. In this product line, Ducor is developing a range of polypropylene compounds with 30-100 percent recycled waste content. Technological improvements have led to better quality and rigidity of the products, allowing expanded use.

Also as part of this activity, a joint venture has been launched by Ducor and Morein, in Western Europe, to supply special compounds based on recycled materials.



## Collaborations to promote a circular economy

### ■ Investment in Melodea

Melodea, a company located in Rehovot, develops coating materials for packages made from cellulose, sourced from trees, with unique biopolymer qualities. The material is designed to replace comparable materials derived from oil, or to be integrated with such materials as a coating layer for flexible packages,

such as those intended for laundry powder or pet food. The Group is investing in Melodea to develop a new product in the field of polymers, and to support the marketing of products that can replace nondegradable or nonrecyclable materials.

## Industry-wide collaborations: the MAGNET Consortiums program

We believe that collaboration and knowledge are the foundation for the development and advancement of solutions in a wide range of fields, and in the environmental field in particular. MAGNET Consortiums is a program for collaboration among industrial companies and research institutions for the joint development of technologies, financed by the Israel Innovation Authority.

In this context, Bazan is attentive to the needs of the markets, developments in regulation, and challenges requiring the development of special polymers, and endeavors to provide solutions through research and development on the integration of innovative materials.

### Our relationships with our partners are a key source of patent development, including:

- **CIRCLE** – A development initiated in 2019 in response to two challenges in plastic recycling: first, treating scrap multilayer plastic sheets, which are complicated to recycle due to their heterogeneous composition and the difficulty of separating the layers. Secondly, increasing the quantity of recycled material in plastic products, which have inferior qualities relative to new material, while maintaining or improving final plastic quality.
- **SMART** – Development of technologies to protect agricultural produce from hazards such as viruses, pests, molds, and fungi, using active plastic sheets.

This solution originated with the recognition of the difficulties experienced by farmers in solving these problems due to regulatory restrictions in the area of pesticide safety.

- **Various technologies** developed within the consortium utilize plastics already used in agriculture to reduce the loss of produce. Collaborations with various academic groups led to the development of plastic sheets, composed of active particles manufactured by Carmel Olefins, which repel pests and prevent the development of mold and fungi. The particles are made of polymers embedded with essential oils using various technologies. These developments, which have earned registered patents, provide an optimal solution to the problem of agricultural produce loss.



## Carmel Eco and Reducing Carbon Footprint: recycled polymers, biopolymers, and biodegradable polymers

The development of products with lower carbon footprints is an important part of the Group's environmental strategy. 2023 marked an important milestone in recycled, biodegradable, and biopolymer production: we completed preparations for the production of polypropylene and polyethylene from used cooking oil, reducing the use of crude oil, turning waste from a biological source into a resource, and mitigating the impact of the plastic production process on the climate. These measures are a natural continuation of the preparations to produce green diesel fuel (B7) at the Group's facilities in 2022.

The production process illustrates the synergies among the Group's plants: cracking of cooking oil used for green monomers (propylene and ethylene) at the refinery, and conversion to a green polymer (bio-circular polyethylene/polypropylene) at Carmel Olefins.

For this pioneering process, approx. 300 tons of green propylene for the polymer were produced at the refinery, in collaboration with Fandango, a company leading the revolution in collection of used oil from kitchens in Israel.

During the reporting year, the facilities involved began the process of certification under ISCC Plus, the prevailing standard in Europe for the production of products and chemicals from renewable sources. The accreditation, received in 2024, ensures compliance with strict standards in the process of generating energy from biomass. This is an expansion of the ISCC (International Sustainability and Carbon Certification), adapted for broad markets such as food and chemicals, with voluntary additions pertaining to wider aspects of the supply chain. The purpose is to ensure that environmental principles are applied, from raw material to end product.

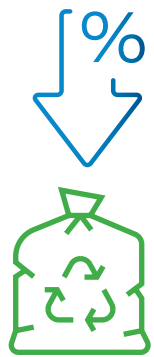
Beginning in 2023, Ducor, which specializes in the production of polypropylene, is also [accredited under this standard](#) and can supply green polymer based on renewable or recycled raw materials (using the mass balance method).





# Waste Management at the Group

Bazan has set a goal of maximum reduction of waste generated in production processes, instead reusing materials. To this end, the Group invests great effort in instilling advanced circular economy perspectives and finding technological solutions for the reuse of wastes.



As a result, total landfilled waste decreased by 59% in the reporting year compared with 2016.



The quantity of waste removed for recycling increased by 186% compared with 2016.

## Hazardous waste

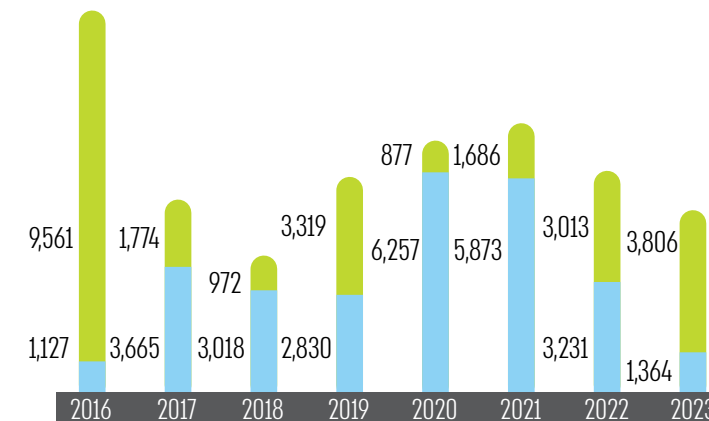
Total hazardous waste **decreased by 26%** in the reporting year, as compared with 2022, **and by 52% compared** with 2016.

## Reducing emissions and landfilled waste – notable examples of the implementation of circular-economy principles

- **Benzoic acid** is a residue of refining that contains organic materials from the solids facility. In recent years, Bazan has exported these residues in the form of cubes, at a volume of approx. 1 cubic meter and a weight of approx. 1 ton, to countries that burn the material to generate energy. A flocculation facility was completed at Gadiv in 2023, such that the benzoic acid cubes will be replaced with flocs. This change will make it possible to package the material in sacks and sell it as a product, due to its high caloric value. This will lead to reductions in emissions of odors and gases, transport problems, safety and hygiene problems, and waste treatment costs.
- Another example of successful implementation of the circular-economy model is the **treatment of isododecane waste** generated at Carmel Olefins. Until 2022, this waste was placed in the care of recycling companies, at an annual volume of approx. 1,000 tons for reuse outside of the group's facilities; however, since then it has started to be used as a raw material for the refineries as of 2023 all isododecane waste generated at Carmel Olefins is transferred to the refineries for reuse.

### Hazardous waste in tons/year

■ Treated waste ■ Landfilled wasted



\* In Dokor zero hazardous waste was sent to landfill

## Non-hazardous waste

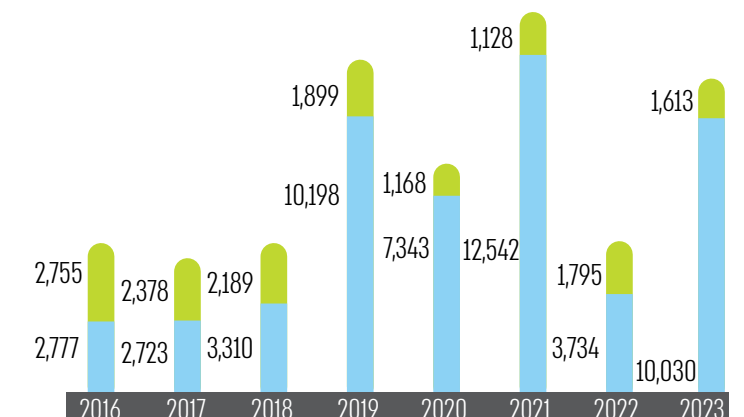
The quantity of landfilled non-hazardous waste **decreased by 10%** this year, and **by 42%** compared with 2016, as a result of the Group's efforts in this area.

In general, the quantity of non-hazardous waste generated at the Group increased in the reporting year as compared to 2022, due to the renovation of facilities, according to regulatory requirements.

Methods of treating non-hazardous waste at the Group have improved significantly in recent years, with the transition from sending waste to landfills to waste separation on the premises of the plants. Types of waste separated include metals, construction waste, spent soil, etc.

### Non-hazardous waste in tons/year

■ Treated waste ■ Landfilled wasted





## Preventing leaks of plastic particles into the marine environment

Particle spills, which are harmful to the marine environment, can be prevented through improvements and regular monitoring at production sites, implementation of innovative technologies, high involvement of employees, and keeping spaces clean of particles, to allow rapid detection and treatment of spills. Internal tests by a certified team and training programs also allow continual improvement in this area. Particles collected from spills are repurposed through recycling.

The global program Operation Clean Sweep (OCS) is aimed at raising awareness of the harmful impacts of this issue and promoting preventive measures by manufacturers, transporters, and others. Ducor joined this initiative in 2020, and took a series of steps to meet the program's objectives. In September 2023, the Company held a week dedicated to this topic, to raise awareness among employees, provide training on the new spill procedure, and clean the plant of particles. All employees and contractors were invited to an event and divided into groups to participate in training sessions and cleanup activities. During this process, the main areas where plastic particles accumulate were identified and the most effective cleanup methods were studied.

In the absence of official representation in Israel, within its proactive approach, Carmel Olefins has undertaken measures in the spirit of the OCS program, including the prevention of plastic particle loss from production facilities through improvements to production sites, and through rapid detection, treatment, and containment of particle spills.



## Water and Wastewater Treatment

Bazan consistently works to reduce its consumption of water, a vital resource on the national and global levels. We are working to optimize water quality and reclaim significant quantities of wastewater.

Most water consumption at the Group's plants is designated for the production of steam used in hydrogen production processes, and for cooling of production facilities, to ensure continuity in production processes. In recent years, Bazan has implemented a significant process of transition to massive use of reclaimed wastewater, reducing the usage of potable water (grid water).



Source	Uses
<b>Mei Carmel (Mekorot)</b>	Feeding water for the RO facility (a reverse osmosis facility that takes in water and emits highly clean water used to produce steam and hydrogen) is used by the Fuels Unit, and for cooling towers, fire safety, drinking water, and sanitation at all of the business units.
<b>Brackish water wells of Bazan</b>	Feeding water for the RO facility at the power plant (for steam production, and feeding water for the hydrogen production facility) in the Fuels Unit
<b>Wastewater reclamation facility (in collaboration with GES)</b>	Feeding water for steam production, feeding water for the RO facility at the Fuels Unit, and an option for supplemental water for cooling towers for the Fuels Unit and Carmel Olefins
<b>Revivim (fertilizers)</b>	Feeding water for steam production, used primarily by Carmel Olefins, but also in steam production at the power plant and at Gadiv's facilities

## Water consumption – management and reduction

Bazan attributes great importance to the treatment of industrial wastewater. Most wastewater generated in the course of production operations are treated at a wastewater treatment plant, and further treated at an industrial effluent reclamation facility. Some of the treated wastewater is discharged to the cooling towers and used as cooling water in processes. If the industrial effluent reclamation facility is unable to take in additional treated wastewater, the latter is continuously monitored for water quality, and when the appropriate quality is attained the water is discharged into the Kishon River. Approx. 60% of effluents are reclaimed for use; the significant increase has contributed to a double-digit percentage decrease in the use of potable water.



**Did you know?**

**Potable water** is high-quality water suitable for drinking.

**Brackish water** has a salinity level higher than freshwater, but lower than seawater. It is not suitable for drinking, but can be used in industry.

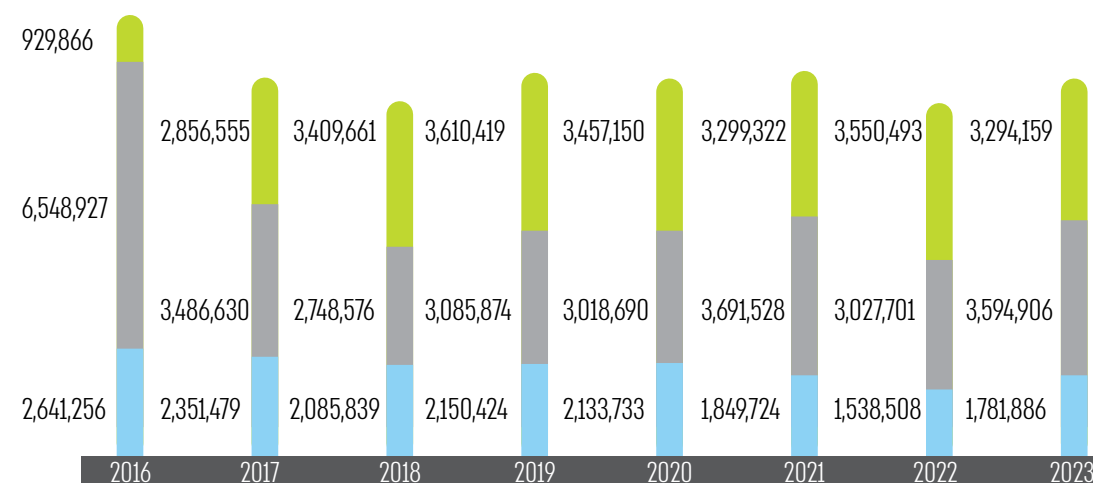
**Effluents** are wastewater that has undergone decontamination processes for reuse. In Israel, this water is mainly used for agricultural purposes; Bazan reuses it for industrial purposes, in producing steam.

### Rates of change in water consumption, by type, compared with the preceding year and the baseline year 2016:

	Reporting year compared to 2022	Reporting year compared to 2016
Use of potable water	19% increase	45% decrease
Use of brackish water	16% increase	32% decrease
Use of reclaimed wastewater	7% decrease	254% increase
Total water consumption at the Group	7% increase	12% decrease

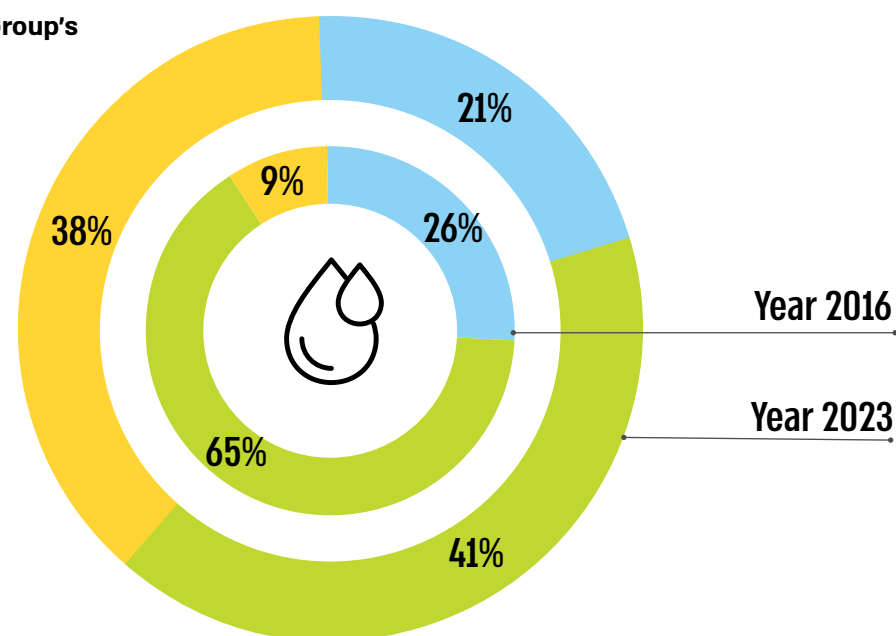
### Mix of water consumption at the Group's facilities in Israel (m³/year)

■ Reclaimed water ■ Potable water ■ Brackish water



### Mix of water consumption at the Group's facilities in Israel

■ Brackish water ■ Potable water  
■ Reclaimed wastewater



## The industrial wastewater treatment system at Bazan

Wastewater at the refineries contain oils (hydrocarbons), solids, salts, and additional substances that require thorough treatment. These can be divided into two types:

- **Process wastewater** – The use of water or steam in production processes leads to the formation of mixtures of water and hydrocarbons derived from crude oil and products thereof.
- **Oil-free brines** – Concentrate water originating with the process of preparing salt-free water for the production of steam, which is used to generate heat in production processes and in electricity production for self-consumption and in the cooling towers.

Wastewater treatment at the refineries requires operation of multiple facilities, including separators, physicochemical treatment, intensive biological treatment, sand filtration, ultra-filtration and desalination. The facilities operate sequentially, treating wastewater and bringing it to the threshold condition of the Ministry of Environmental Protection for discharge into the Kishon River.

### Carmel Olefins has two wastewater treatment facilities:

- **Wastewater from polymerization facilities** – polymer wastewater treatment includes pumping stations, storage tanks, separation and sedimentation facilities

for the separation of oils and polymer grains, a sand filtration system, and sludge treatment systems. The treated wastewater is discharged into the Kishon River under continuous monitoring, in accordance with the threshold conditions of the Ministry of Environmental Protection.

- **Wastewater from the monomer facilities** – the monomer wastewater treatment facility includes pumping stations, storage tanks, and a coal filter system. The treated wastewater is discharged into the wastewater treatment system of the fuel unit for further treatment.

Since 2018, a pilot project has been underway at Bazan for biological treatment of wastewater using MMBR (moving bed biofilm reactor) technology by Aqwise. This innovative device has uniquely structured carriers, to which microorganisms attach that can biologically dismantle the nitrogen compounds in wastewater. The carriers are made of recycled plastic. The process removes the nitrogen from wastewater with 2 to 6 times greater efficacy compared to existing technologies. The innovative technology thus results in optimal nitrogen removal and significant energy savings.

In 2023, biological treatment at the wastewater purification plant was significantly expanded, with capacity increased by **up to 9 times** relative to the pilot project initiated in 2018. Almost **NIS 2.5 million** was invested in the system.





## Protecting water quality in the Kishon River

Total organic carbon (TOC) and mineral oil discharged into the river has decreased significantly in recent years, thanks to a broad effort to improve efficiency in the area of industrial wastewater, which are regularly transferred to wastewater treatment facilities, other than in exceptional cases or precipitation.

Wastewater removed from the plant facility meets the quality standard that permits it to be discharged into the river, according to a permit from the Ministry of Environmental Protection. In the removal of concentrate water from the desalination stage (treated wastewater), all of the parameters required to be monitored continuously pursuant to the permit are monitored online. The values established are consistent with the Public Health Regulations and the Inbar Standard for discharging into the river. Bazan thereby converts industrial wastewater into a resource that is reused in the production process, significantly reducing its environmental impact on the sea and river.

Monitoring of wastewater discharges indicates that from 2016 to 2023, discharging of mineral oil into the river decreased, falling below the threshold values set by the Ministry of Environmental Protection (less than 500 kg). This was largely due to the use of wastewater treatment facilities that increase the ability to reuse mineral oil by 74%.

A similar trend was observed with regard to TOC discharged into the Kishon River. Although the volume of reclamation using the wastewater treatment facilities remained similar in 2016-2023, discharging of wastewater into the Kishon River decreased by 91%. In addition, total discharges into the river decreased by approx. 84% during this period.

In general, a significant reduction of the volume of discharges from Bazan plants into the Kishon River is expected.



Total discharges into the river  
**decreased by approx. 84%**  
during this 2016-2023



## Wastewater reclamation

Industrial wastewater reclamation has two main benefits: first, the quality of the concentrate water in the reclamation facility is improved to a level suitable for discharging into the Kishon River, leading to a lower level of nitrates in the river; second, a maximum quantity of the effluents generated at Bazan and Carmel Olefins are reclaimed as excellent-quality process water, saving consumption of 2.5 million cubic meters of potable water per year (equivalent to water consumption by approx. 40,000 residents).

### Wastewater reclamation facility

Bazan invests extensive resources in improving the quality and efficiency of processes involving the use of water. An industrial effluent reclamation facility began operating on Bazan premises in 2017, in collaboration with GES, to treat wastewater from the refineries and Carmel Olefins and reclaim water for reuse.

The facility is one of the most advanced of its kind; in 2018, it won the Green Chemistry Industry award from the Israel Chemical Society.

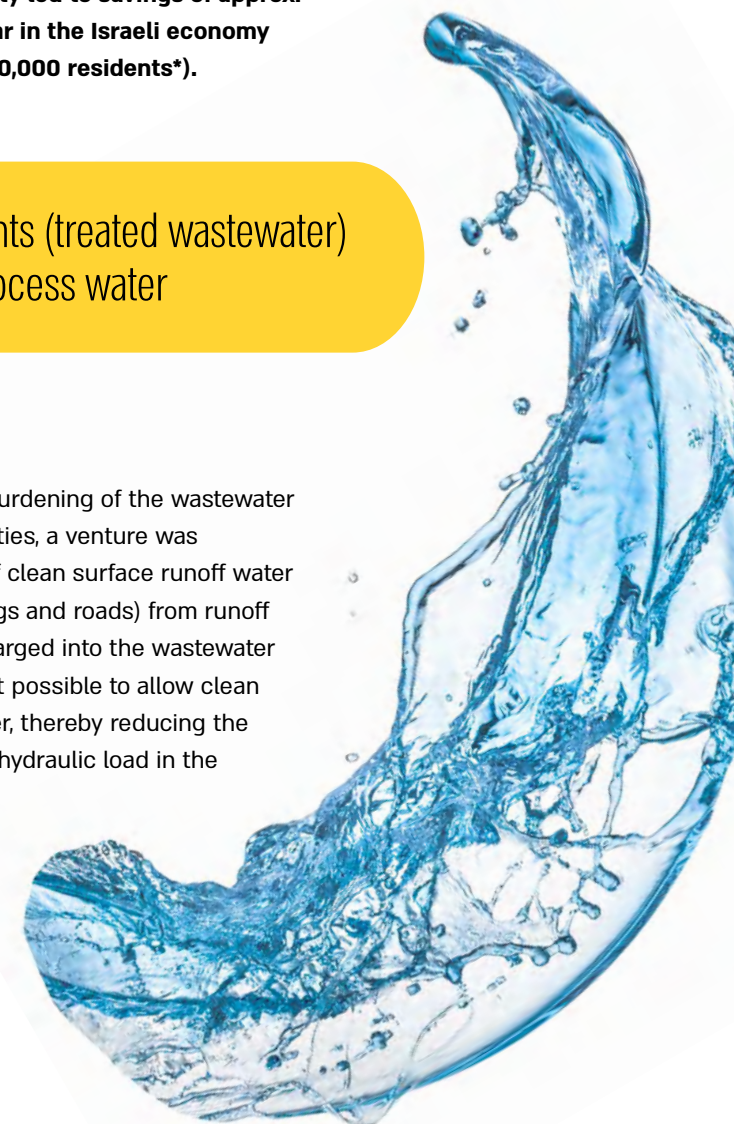
**The industrial effluent reclamation facility led to savings of approx. 2.5 million cubic meters of water per year in the Israeli economy (equivalent to consumption by approx. 40,000 residents\*).**

**Approx. 60%** of the effluents (treated wastewater) is reclaimed for reuse as process water

## Runoff water initiative

To prevent pollution of runoff water and burdening of the wastewater treatment system within the Group's facilities, a venture was established in 2018-2020 for separation of clean surface runoff water (which pools in the areas of office buildings and roads) from runoff water in operational areas, which is discharged into the wastewater treatment system. The separation makes it possible to allow clean surface runoff to flow directly into the river, thereby reducing the potential for pollution of clean runoff and hydraulic load in the wastewater treatment system.

\* Calculated based on average consumption of approx. 170 liters per person per day.





## bnnovation **Innovation in Service of the Environment**

Bazan is committed to investment in innovation, including finding alternative solutions for its core products and solutions to improve its activities, provide value, and contribute to the conservation of natural resources and the environment.

Bnnovation, the Group's innovation platform, runs unique programs for business ventures in Bazan's core fields and in related and adjacent fields. The program is designed for startups in the areas of energy, renewable energies, energy storage, innovative materials, and more.

### BLAB

A channel for activity within the plant. Its activity includes Bteams, teams composed of approx. 40 Group employees who guide and support innovation in addition to their routine work. The teams are divided into four groups, each responsible for a different area: plastics, advanced fuels, energy efficiency, and Industry 4.0. This activity is focused

on external innovation and on promoting collaborations, with an emphasis on pilot projects on the premises of the plant, collaborations with laboratories in the Group, and investments in ventures outside the organization that are aligned with the Group's innovation strategy.

## Promoting start-up companies

The Group's direct activities with start-up companies, entrepreneurs, and researchers supports the creation of a business environment that promotes, develops, and accelerates innovative solutions in the areas of traditional and renewable energies, using an open innovation model.

Focus areas, in accordance with the Group's strategy, are improving energy efficiency, energy storage, environmental technologies, fuel substitutes, process digitization, machine learning, and artificial intelligence. From an industry perspective, the aspects in question pertain to hydrogen energy; sustainable plastic; biopolymers; treatment of water, sludge, and contaminated soil; plastic recycling; and cybersecurity.

Over the last two years, pilot projects and proof of concept (PoC) tests have been conducted at Bazan with start-up companies for the identification of anomalies, preventive maintenance, optimization of production, monitoring and control, and more. The Group invests comprehensive efforts in finding start-up companies aligned with the Group's strategy. Alongside its central direct channel, the Group operates through two additional channels: Quantum Hub and ESIL.

### Quantum Hub

In 2022, Bazan joined a platform formed through a collaboration with the companies Taavura, VDL, Talcar, and Hyundai. The platform is open to Israeli startups in the fields of energy, advanced industry, automotive industry, and

logistics. Companies admitted to the platform participate in a 13-week program designed to generate and accelerate PoC processes and joint projects by participants.



## ESIL (Environmental Sustainability Innovation Lab)



The Bazan Group has partnered with EDF Renewables, of the French energy group EDF, and the British chemicals corporation Johnson Matthey to found ESIL. The laboratory is sponsored by the Israel Innovation Authority and the Ministry of Environmental Protection. In addition to direct financial investment, it offers start-ups the opportunity to run pilot projects at a range of sites around the world, benefit from close professional mentoring by experts, and connect with potential customers in various countries.

Despite the War, during the fourth quarter, 2023 was a peak year for this activity, with investments in six companies.

To date, ESIL has invested in more than 10 start-ups from various fields, including: pollutant identification, cooling systems, carbon capture, hydrogen storage, energy storage, robotics, and solar paint. One of these is the Israeli company RepAir Carbon, which has developed a groundbreaking technology for capturing CO2 from the air. Since ESIL's investment the company has completed an additional funding round of USD 10 million from prominent local and global investors.

For further information about the program, see the [ESIL website](#)



## Unique collaborations through Bnnovation

Bazan is working to formulate advanced solutions and expand its capabilities in the Industry 4.0 era, including through deeper collaborations with AI and IoT companies, such as the following:

### Augury – using sensors to improve preventive maintenance

Augury specializes in predictive maintenance solutions using sensors based on AI and vibration connected to machines on production lines. Using AI based vibration sensors can provide alerts of predicted malfunctions in specific machine parts and give recommendations for action. This allows Bazan to save on high repair costs, avoid prolonged shutdowns and loss of output, and improve the machines' efficiency and availability. In 2023, a decision was made to expand the scope of the project to hundreds of equipment units. Pilot projects are also being conducted with Seebo, which has merged into Augury, and which optimizes production processes through artificial intelligence. This technology is being implemented at Carmel Olefins in order to streamline processes. Another pilot project for optimization of a refinery unit began in late 2023. This is the first pilot project run by Augury in the area of oil and gas industry optimization.

### Feelit – detecting operational malfunctions through “sensing” ink stickers

The company offers multi-sensing monitoring capabilities for the detection of operational malfunctions through stickers with “sensing” ink. This groundbreaking development from the Technion has been implemented onsite in several of the Group's locations, in close collaboration with the Group's engineers. Following several successful pilot projects, Bazan decided to participate in the company's latest round of funding. Approx. 10 pilot projects are currently underway with Feelit on the Company's premises, for the development of sensing products such as steam traps, heat exchangers, safety valves, and more.

### Percepto – monitoring systems using drones

Percepto monitors systems by gathering data using a dedicated drone, analyzing images, and providing alerts.

The drone leaves the docking station to perform specified tasks and transmits data to a dedicated system. So far, two successful pilot projects have been conducted on the Group's premises.

### Greazly – automated greasing system

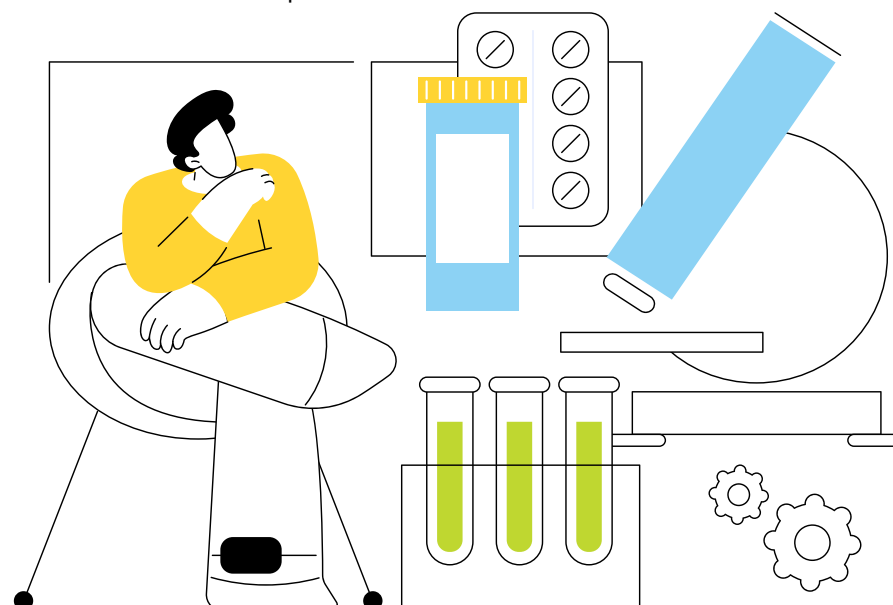
Greazly has developed an automated greasing system integrated with alert and control capabilities, to prevent facilities from shutting down due to failures in oiling/ greasing. The company has conducted a pilot project at Group facilities and has started the process of examining the economic feasibility of the product.

### Enwize – app for knowledge retention and operational savings through 3D simulation

Two pilot projects were conducted at Carmel Olefins. The company's product is currently being expanded ahead of implementation, in parallel to other pilot projects.

### Aperio – detecting anomalies

This company specializes in detecting operational anomalies in order to improve data quality and identify cybersecurity incidents. In 2023, following a pilot project, Bazan decided to join an investment round in Aperio.



## Pilot projects during the War

At the outbreak of the Iron Swords War, as part of the Group's supportive efforts, the innovation unit mobilized to step up its collaborations with Israeli companies. Within a brief period, alongside the other pilot projects underway at the Group's premises (with Augury and Feelit), agreements for pilot projects were signed with four additional companies:

- **KORRA** – A company developing a project in the field of GenAI for intra-organizational use, designed to connect the vast quantities of information at organizations with specific problems and usages.
- **Metabim** – The company has developed technology to assist with information control and management at industrial facilities with multiple systems. Using a platform that aggregates digital models (outputs of laser scans), process documents (P&ID), and additional engineering information, the data is linked to a digital twin of the plant.

- **Treedis** – The system developed by the company allows the creation of a digital twin of a facility through a relatively short and simple laser scan procedure. Following the scan, a remote platform can be used to tour the virtual facility, and all of the components of the facility can be mapped. Concurrently, a mobile platform can be used during facility tours to document malfunctions in real time, enter coordinated records, give or receive instructions for various components, and build a training file for maintenance staff.
- **Solight** – An efficient, energy saving solar panel which supplies natural sunlight. The product has two key advantages: electricity savings through utilization of sunlight (reduced carbon footprint) and a more pleasant work environment. The pilot project was performed as a collaboration between the innovation and ESG units.





## IT and Digital

As part of the realization of and support for Bazan's strategic plan, the Group is implementing a master plan in the area of IT. This includes digitization, automation, and improved efficiency of work processes, using robots (RPA), AI-based predictive technology, and advanced BI systems to manage, monitor, and report data (from human resources to safety and environmental data).

The operating model for the IT/OT unit has been adapted to the management of the master plan. The two types of units, Operational Technology and Information Technology, have been merged into a fully integrated unit, and closer work interfaces have been established between the IT/OT unit and the business and operational units.

Projects in various areas have been implemented within the master plan, including the following:

- **Realization of a broad cloud-based data strategy** – allowing immense resource savings, prevention of human errors, and allocation of greater resources to data analysis and to detecting and addressing anomalies.
- **Process efficiency** – approx. 40 processes were automated in 2023, including organization and method analysis of manual work processes and ordered automated implementation of the processes using robotics tools (RPA), and optical character recognition (OCR) for more efficient routine work and paper savings.
- **ENVIS system implementation** – an environmental system that imports, documents, and provides accessible views of chimney sampling data.
- **Maintenance** – use of technologies for a massive transition from breakage maintenance to preventive

and predictive maintenance, with two-way interfaces with the SAP system, allowing automated work orders.

- **Fuel timing management system** – allows efficient management of the timing of fuels at the site.
- **Logistics** – significant reduction of the use of paper (paperless warehouse) and time savings through the digitization of work processes, including inventory counts using RFID technology, with results reviewed and transferred directly to the organizational SAP. The system also allows rapid search for items in the warehouse for distribution. Item tagging and SAP updates were embedded as an integral part of the warehouse intake process.
- **Operations, maintenance, and safety** – implementation of a leak detection system; increased use of technological means in field tours; integration of IoT (Internet of Things) systems and technologies for the

detection and prediction of failures in critical equipment units as well as preventive treatment; predictive maintenance based on advanced models, etc.

- **Staffing and shift management** – automation of work processes in operations at Bazan by creating a uniform standard for shift management methods and transfer of information between shifts, while reducing the use of paper.
- **Cybersecurity** – intensive activity to comply with the requirements of the Israel National Cyber Directorate for critical IT infrastructures, in both the administrative and operational networks. This process included the implementation of various systems for information security management and information security risk management, and the integration of these systems with the Group's overall risk management.





# PEOPLE

## People COMMITTED TO SOCIETY AND THE COMMUNITY

Impact - a fund of donations and emergency aid in the scope of NIS 30 million

Gender equality - 40% women in senior management

Diversity and inclusion – setting goals for the inclusion of people with disabilities at the Group

Society and community – adjusting the donation budget to the global industry benchmark

# Economic and Social Impact

The Bazan Group is a key player in the energy sector in Israel and in the Israeli economy in general; it is considered a major employer in northern Israel. A report by global consulting firm BDO for 2023\* describes the scope of its direct and indirect economic impacts:

Contribution to GDP as of 2023:

**Approx. NIS 8.1 billion**

Bazan's overall contribution to the Israeli economy is estimated at

approx. **0.43%**  
of Israel's GDP

**Approx. NIS 3.6 billion**

Bazan's direct contribution to Israel's economy reflects an increase of

approx. **9%**  
compared with 2022.

\*the report does not include Docur's activity



Contribution to employment:

Approx. **1,400**  
direct employees at  
Bazan

Approx. **15,800**  
people employed  
directly and indirectly

**Bazan accounts for**

Approx. **2%**  
of the industrial  
product in Israel

& Approx. **61%**  
of the industrial product  
in the city of Haifa



# Our Collaborations

Bazan sees collaborations as an important foundation for the promotion of its ESG approach and the implementation of the United Nations' Sustainable Development Goals (SDGs), in line with the Group's sustainability strategy. The expansion of our spheres of influence makes it possible to create power multipliers, to the benefit of these goals, and enables us to create a more substantial positive impact on our immediate surroundings and the broader environment in which we operate.

We are proud of our collaborations with various organizations and our shared work to promote these goals.

## Bazan's collaborations in Israel



### Manufacturers' Association of Israel

Representative organization of the industrial sectors in Israel. [Link](#)

**Relevance to Bazan:** Bazan and its subsidiaries are part of the Manufacturers Association of Israel, and representatives of the Group lead and participate in various professional forums of the association.



### The Israel Institute of Energy and Environment

The Institute works to promote and enhance the technological knowhow pertaining to oil and oil products, electricity, natural gas, the energy industries and the environmental treatment processes in Israel. [Link](#)

**Relevance to Bazan:** Bazan maintains an active representation on the forum as well as a dedicated group dealing with sustainability.



### EnergyCom.IL

The Energy Innovation Community's vision is to position the State of Israel at the forefront of innovation in the energy markets by expanding the research on this field, creating jobs, sharing knowhow and enhancing the energy markets in Israel. [Link](#)

**Relevance to Bazan:** There is ongoing cooperation with the organization.



### Ignite The Spark

A community dedicated to the advancement of innovation in the energy sector, focusing on renewable energy sources, energy storage, energy efficiency, hydrogen technologies, etc., to be attained via collaboration within the industry. [Link](#)

**Relevance to Bazan:** There is ongoing cooperation with the organization.



### Quantum Hub

A global platform for the promotion of collaborations between industrial companies and startups. Quantum was founded by Taavura, with partners including Israeli and international companies: Livnat, Talcar (importer of Kia), VDL, Hyundai, and Bazan.

Quantum serves as another venue for exposure both for the startups and for projects with business feasibility, and contributes to connections with the ecosystem and business partners. [Link](#)

**Relevance to Bazan:** Bazan is a partner in this platform.



### Boeing

A consortium led by Boeing to promote the synthetic aviation fuel industry. [Link](#)

**Relevance to Bazan:** The collaboration with the consortium encompasses leading business firms, academic institutions, and government agencies.



### Eilat-Eilat

The Eilat-Eilat Renewable Energy Company is a public benefit company, owned by the kibbutzim in the Arava region, the Jewish National Fund and various industrial, development and academic institutions in Israel. The company was founded due to a common interest in the development of local sustainable energy, and following identification of the need for the use of local resources. Eilat-Eilat aspires to turn the Arava region into an international center for renewable energy production technology R&D. [Link](#)

**Relevance to Bazan:** There is ongoing cooperation with the organization.



### Technion Israel Institute of Technology

Approx. 14,500 students study at the Technion for bachelors, masters and more advanced degrees across 18 faculties and engineering & scientific research units. A total of 52 research centers and institutions operate within the Technion in a broad variety of fields. [Link](#)

**Relevance to Bazan:** Bazan is involved in a broad spectrum of collaboration with the organization, including special days of exposure to the Chemical Engineering section, job fairs, visits of Technion students to Bazan, as well as scholarships awarded to students and paid for by Bazan.



### The Israel-America Chamber of Commerce (AmCham-Israel) Sustainability Forum

A dedicated forum for discussing and promoting joint ventures on sustainability-related issues, with the participation of the Chamber's member companies. [Link](#)

**Relevance to Bazan:** Bazan joined as an active member of the AmCham-Israel Sustainability Forum.



### Maala

An umbrella organization of approx. 120 leading companies in the Israeli economy, working to pursue issues of corporate social responsibility (CSR) and the development of responsible management standards in Israel. The organization offers sessions devoted to study and the development of knowhow, professional support and personal development for CSR managers, and also leads the Maala Index – a comprehensive questionnaire for measuring sustainability and ESG values in businesses. [Link](#)

**Relevance to Bazan:** Bazan has been part of the ESG ratings by Maala for seven years, and attained Platinum status for the first time in 2023. The Group also collaborates with the organization on an ongoing basis throughout the year.



### The Association of Engineers, Architects and Graduates in Technological Sciences in Israel (AEAI)

An umbrella organization with the aim of fostering and furthering the field of engineering and technology in Israel. [Link](#)

**Relevance to Bazan:** The Group's representative is the Chairman of the Hazardous Substances and Process Safety Unit.



## Bazan's collaborations in the Netherlands



### Plastic Europe

An organization incorporating the European plastic manufacturers in order to reduce the adverse environmental effects of plastic, while furthering the circular economy and relating to the broader issue of plastic waste. [Link](#)

**Relevance to Bazan:** Ducor became a member of the organization in 2022.



### Deltalinqs

An umbrella organization for the companies operating in the Rotterdam port, with more than 700 members – 95% of the users of the port. The organization constitutes a representative body for the member companies and acts to further sustainable growth, fair competition, appropriate conditions, the development of infrastructure and the promotion of environmental and sustainability values. [Link](#)

**Relevance to Bazan:** Ducor is a member of the organization.



### Burengesprek Botlek Europort

An initiative to further dialogue among the various stakeholders in the vicinity of Rotterdam's airport and industrial zones. The organization enables a variety of civil organizations, government entities and industrial companies to discuss, share problems and find solutions by working together. [Link](#)

**Relevance to Bazan:** This partnership began in 2023 and Ducor representatives take part in forums four times a year.



### Operation Clean Sweep

A volunteer program with the aim of fighting against the phenomenon of plastic pellet spillage into the ocean. The program focuses on enhancing working methods and providing guidance and tools to support plastics value chain companies to prevent plastic pellet spillage into water sources. [Link](#)

**Relevance to Bazan:** Ducor is a signatory to the OCS pledge and applies the measures agreed upon in the pledge for the prevention of plastic pellet spillage into the ocean.



### Taskforce Clean Sweep Rotterdam

A number of companies have joined forces with the Port of Rotterdam Authority, the Netherlands Environmental Protection Agency and additional organizations in order to set up a task force to combat plastic granule pollution in the port of Rotterdam. The team is associated with the Operation Clean Sweep pledge. [Link](#)

**Relevance to Bazan:** Ducor is one of the founder companies of the task force and since 2022 has served as the organization's chair.



# Social Investments and Community Engagement

We regard involvement in society and community outreach to be an important virtue. These activities are afforded a high priority within our organizational culture and form an integral part of the daily discourse on the factory floor. Bazan employees, the large majority of whom live and reside in northern Israel, act based upon a sense of family and constant belonging to the community.

## Promoting goals and creating impact

We believe that there are no shortcuts. In order to ensure that our support for the community creates a tangible impact and contributes to its empowerment, we engaged in a structured process to focus the Group's social investments.

**The Bazan social investment strategy is based on the SDGs, focusing on five of the goals selected through a structured process at the Group in 2023. The process, conducted with the members of the ESG steering committee, representatives of all of the employee unions, and management representatives, included professional workshops, shared discussions, and the formulation of recommendations, which were adopted by Company management.**

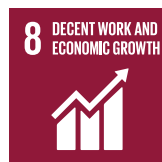
The goals to be pursued are **education, economic growth, health and well-being**, gender equality, and providing assistance to communities in peripheral regions and to disadvantaged populations. In addition to these goals, with the Company's employees, unions, and management, we set a goal rooted in the DNA of the Bazan Group: mutual responsibility. As a 'Blue and White' (Israeli) company of considerable significance to the Israeli economy, we aspire to create a positive, long-term impact on a broad range of communities in accordance with the important principle.



## THE GLOBAL GOALS For Sustainable Development



+



## Realization of the social investment strategy

Our social investment strategy is put into practice in two main ways:



### Financial donations

The Bazan Group donates to the leading NGOs involved in social projects, with the aim of creating a positive and significant influence on those communities and fields to which it donates. Beginning in 2023, we have been donating in accordance with the global benchmark, 0.5% of profit before tax.

An update of the donation budget has been approved by the board of directors of the Group, in view of the importance of this issue and as part of the realization of the Group's ESG strategy.

In October 2023, the donation budget was increased to NIS 30 million, to allow us to provide extensive support in real time, in response to emerging needs, as well as from a long-term perspective. The support takes the form of monetary donations along with presence on the ground.

For more about Bazan on the social front after the events of October 2023, see p. [13](#).



### Social outreach

We regard involvement in the community as an important virtue and it constitutes an important part of the organizational culture. We believe that this involvement generates a considerably significant impact and we firmly encourage this.

A policy on principles for employee volunteering in the community was approved at Bazan in 2023. Employees of the Group have the option to volunteer with our partner non-profits for two days a year, during their work hours.

In 2024, we introduced a social engagement model in which Group units hold volunteering activities with various organizations throughout the year. Adopting a non-profit for a full year makes it possible to build a stable, meaningful relationship over time, creating familiarity on both sides and contributing to genuine impact in the field.

Bazan's social investment policy is available for all stakeholders on the Group's [website](#).

## Donations by categories of support



### Health and well-being approx. 3,000 beneficiaries

this year, our support focused on leisure and well-being activities uniquely for people with disabilities, through these NGOs: Etgarim, Kfar Tikva, Krembo Wings, and more.



### Blue & White efforts and mutual responsibility Approx. 2,000 beneficiaries

We supported a range of non-profits working to aid Holocaust survivors and IDF soldiers, such as Brothers in Yoga, the Association for Israel's Soldiers, and others.



### At-risk youth Approx. 2,200 beneficiaries

We adopted Shanti House and the non-profit Nirim, each of which operates in its own field to provide a warm home for adolescents in need.



### Assistance for peripheral regions and underserved population groups

We provided immediate aid for end populations with basic needs such as food packages, renovation of buildings, and more, through the non-profit organizations Tenufa Bakehila, Pitchon Lev, Yad Ezer Lahaver, and others.



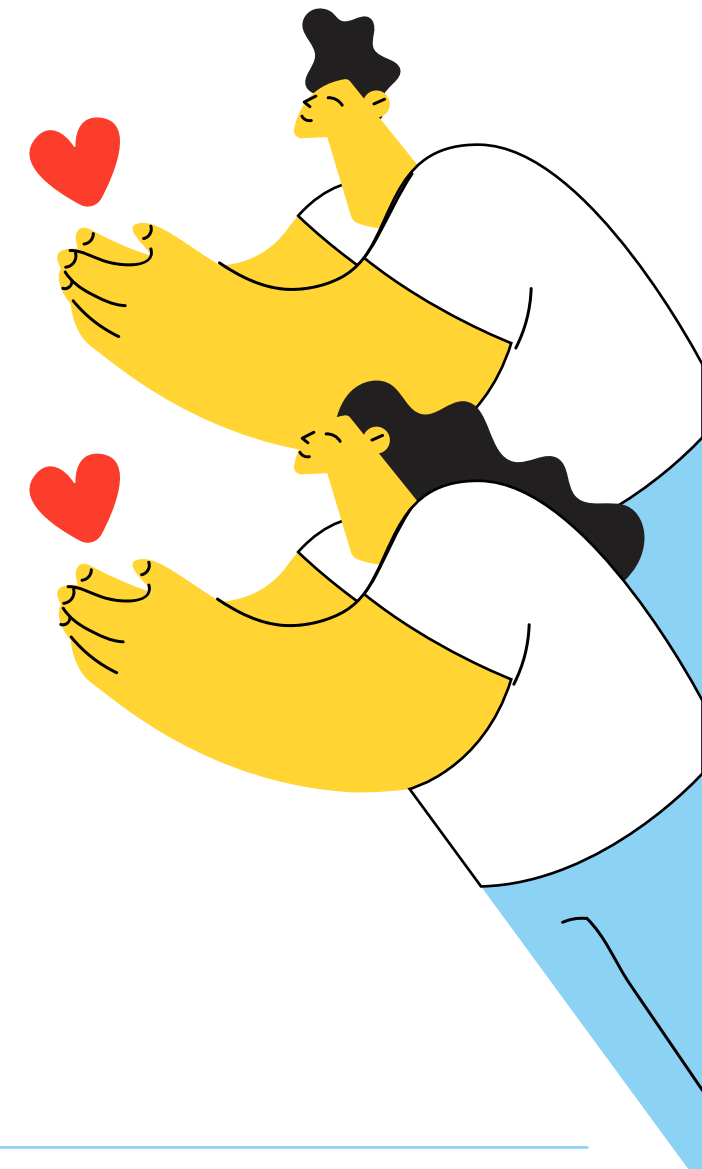
### Education

We provided support for students and scholarships for outstanding students in the exact sciences at the Technion, Bar Ilan University, the Haifa University, and more.



### Gender equality

We promote gender equal opportunity in Israel through support for the non-profit organization Shavot and the girls' basketball team of Isfiya.



## Our partners in social outreach





## Corporate governance supports social outreach

**Executing the Group's social investment policy, according to the focus areas selected, requires a joint effort by the entire organization.**

Over the last two years, we have built a range of capabilities enabling us to meet rigorous standards and apply leading practices in this field to create impact.

Some of the measures we have promoted in the areas of social and impact investments:

- An **expanded outreach committee** was appointed, with members of Group management and business units participating, to increase transparency and encourage engagement on the part of the Group's employees. The committee convenes on a quarterly basis and as needed, and operates in accordance with an internal procedure established as part of the overall process.
- Establishing **strategy for social and impact investments** – a process involving employees, unions, and management. Our social investment strategy is based on the United Nations' Sustainable Development Goals (SDGs).

- **Promoting the SDGs:** education, fighting poverty, gender equality, health and well-being, and fair economic growth.
- **Setting a goal unique to our DNA: mutual responsibility.** This value is the foundation of the Bazan Group's DNA, and has been positioned beside the goals noted above.
- **Adjustment of the annual amount of supports to the global benchmark** for the reported year: 0.5% of profit before tax, and up to NIS 10 million.
- Stepping up on the social front: the donation fund was expanded to **NIS 30 million** following the terrorist attack of October 7th, in a resolution by the board of directors of the Group.
- To strengthen transparency and improve our ability to respond to requests, we have built a **digital platform** to manage community inquiries and supports and enable existing and potential partners to contact us throughout the year.

## Employee volunteering

### Employee volunteering model

Beyond monetary donations, we value community engagement and encourage Group employees to volunteer throughout the year.

During the last quarter, a resolution was passed to allow the Group's employees to volunteer two days a year at the Company's expense, and an employee volunteering model was built. The steering committee leads a team dedicated to social and community outreach, working with the human-resources unit.

Consistent activity provides a sense of stability, more meaningful relationships, and a genuine connection to the community. Beginning in 2024, each unit is adopting a non-profit organization for a full year of activity and building a structured plan for employee volunteering.

We hope to thereby create meaningful community impact and maintain genuine sustainable relationships with the organizations and our partners, and share the experience of social outreach with our employees.

Approx. **900**

volunteer hours of Bazan Group employees during the Iron Swords War, in October-December 2023

2

Volunteer days per year at the expense of the company (2024)

Approx. **10**

Non-profit organizations adopted by the group's units for involvement and voluntary activity (2024)





## Our impact on the community

### Key areas of support:

#### Health and wellbeing

At-risk youth

Blue & White activities and mutual responsibility

Assistance for peripheral regions and disadvantaged population groups

Education and gender equality

### Support during wartime

Mental resilience and coping with PTSD

Solutions for hosting evacuees

Support for evacuees, first responders, and field units

### Adoption of the community of Kibbutz Nahal Oz

Support for ongoing needs alongside long-term strategic thinking

Total monetary donation in 2023:

# NIS 16.8 million

As a leading group in the Israeli energy market, we are committed to the community and society around us. We work to identify needs and foster long-term partnerships, with the aim of generating impact in the areas we support.

For details regarding initiatives and support for the community amid the Iron Swords War, see pp. [22-26](#).





# Human Resource Development

**Human capital at Bazan is a significant asset, vital to its long-term growth and success. We regard our employees as business partners and endeavor to provide them with a broad response to all of their needs, from onboarding to departure or retirement, and even afterward.**

Leadership succession courses, personally tailored instruction and training sessions, and activities to enhance employee welfare and quality of life are just a small part of the measures adopted to empower employees and express our approach to them. This approach generates a double profit: personal growth and development for the employees, alongside professional and stable business growth for the organization.



## Employee training and cultivation of professional skills

The Group's training and instruction unit is oriented to develop employee professionalism and to ensure that they are kept up to date in their various areas of activity, by providing them with the requisite professional know-how, tools and skills. The Training Department provides a set of tutorials adapted to each role within the Company.

In 2023, 100% of the Group's employees in Israel and 81% of the Ducor employees, received professional feedback designed to enable progress, development and learning, and to provide tools for the development of professional capabilities as required.

### Training

Internal training sessions are delivered by persons from within the Group and are intended to provide a response to a number of needs – regulatory demands, the development of professional and soft skills, qualifications and licenses and nurturing a management foundation. Beyond the face-to-face instruction sessions, tutorials are provided year-round to reinforce and inculcate internal procedures, as well as focused practical training sessions on the factory floor.

External training sessions are delivered by official parties for the purpose of professional qualifications to maintain the employees' competency.

The training addresses topics including ethics, safety and hygiene, professional instruction, and on-the-job training (OJT).

Managers and employees attend training sessions on ESG and sustainability topics, addressing areas including diversity and inclusion, joining the fight against climate change, social investments, and more. This training is also

conducted during orientation days for new employees, to instill ESG values in the Company's organizational culture and encourage familiarity with and discussion of these issues.

The average number of training hours per employee of the Group in Israel was 39 in 2023, a slight decrease of 1.6 hours per employee compared with the preceding year (with an identical decrease for both genders). As a reminder, the last quarter of the year was overshadowed by the War and the related activities at Bazan.

### Survey conducted to design the instruction and training plan

In order to provide a response to the changing requirements, once a year, managers across the Group are asked to check and report which subjects they would like their employees to train in over the following year. Based on the findings of the survey, the training unit schedules additional professional training for the employees of the Group, through internal and external courses. In this manner, the Group succeeds in developing a relevant, interesting and focused series of training sessions.

In general, the Group endeavors to maintain equality between men and women in training hours.

### Identifying capabilities and developing skills

Extensive resources are invested in imparting capabilities and skills aligned with the needs of employees and the organization. This policy includes providing means of identifying capabilities and developing skills, as well as options for professional mobility within the Group. In this way, employees attain self-fulfillment, while the organization benefits from high employee satisfaction due to stronger intra-organizational mobility. 35 employees were transferred to various positions within the Group in 2023.

### Employee development for management positions

Bazan is diligent about development for managers at various management ranks, using a range of methods, including courses; individual mentoring by senior

executives; individual meetings with organizational consultants; individual professional guidance, when starting a position and on the job; and, in appropriate cases, team development activities. Moreover, the Group enables employees and managers to obtain higher education at the top academic institutions in Israel, and finances their tuition. In 2023, 20 employees were enrolled in advanced degree programs with financing from the Company.

### Ties with the academic world

Bazan regards reinforcing its ties with the academic world as a key means for laying the groundwork for the future generation of its employees, as well as a contribution towards strengthening the Israeli economy. Activities with academia are conducted on three levels: imparting knowledge accumulated at the organization through lectures during academic programs; building a leadership succession by recruiting students to work during their studies, and building follow-on programs for graduates; and giving scholarships. In 2023, Bazan awarded scholarships to 12 students in engineering programs at the Haifa University and the Technion, including scholarships for excellence and for students coping with challenges. 12 additional scholarships were donated to students at Bar Ilan University.

The subsidiary Ducor also maintains ties with academia, and engaged five interns for periods of 4-24 weeks during the course of 2023.

### Employee survey

An opinion survey among employees of the Group was conducted in 2023. The response rate was very high, at 85%, compared with 51% in the previous survey from 2021. The results were processed and presented to management and the heads of the business units, and will later be presented to all employees.

Some of the questions in the survey were: do the employees feel they are treated with respect as individuals from diverse backgrounds; do employees feel there is an open, multicultural, supportive atmosphere at the organization; are promotion and training processes perceived as equitable and offered to all diverse groups; do employees feel that the Company is committed to the inclusion of employees from different groups.

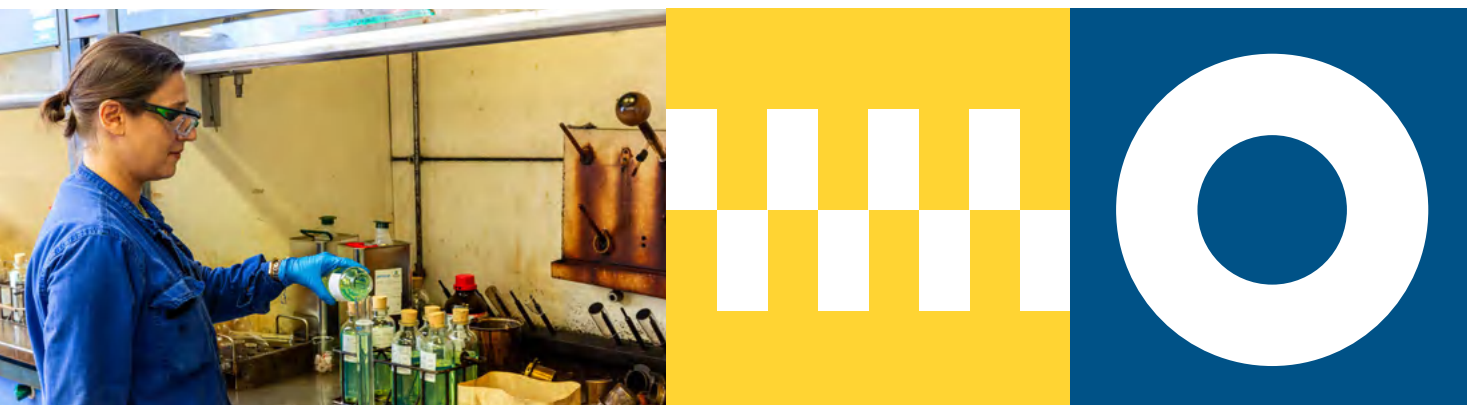


## Diversity, inclusion, and gender equality

We regard diversity and inclusion as principles with tremendous socioeconomic value for the Group. A diverse workforce leads to a more dynamic work environment that stimulates innovative and trailblazing thinking. Employment of individuals with special needs, encouraging the employment of underrepresented sectors of the population and gender diversity in our workforce and management help us to increase the sense of belonging among our employees, and represent a broad variety of skill sets and a vast pool of knowhow in the industry. Our diverse and professional workforce enables us to address the challenges of the time and to quickly adjust to the changing reality.

A figure reflecting Bazan's approach in this area is the gender diversity in the Group's management: we set a target of 40% women in our senior management by the end of 2024, and achieved this goal earlier than anticipated. We expect this rate to be at least maintained going forward.

In order to create an inclusive work environment, we improved the channels of communication between the employees and the management, we have increased transparency, reduced bureaucratic processes and encouraged seamless and productive communication among all persons at the Company.



### Representation of women at Bazan

Bazan takes pride in the significant representation of women across the Group's management ranks, in its various departments, and in managerial roles, including in the areas of manufacturing, innovation, R&D.

As of the reported year, there were 6 women of 15 members of management at Bazan, or 40%. We fully intend to maintain this important objective and to expand additional objectives to reinforce gender diversity. 2 of the 9 members of the Group's board of directors were women.

In addition to the emphasis placed on the representation of women in professional teams and management ranks at Bazan, the Group has set a goal of promoting gender equality through social action. One of the ways this is being achieved is through support for projects aimed at reducing inequalities and imparting business tools and skills.

During the reported year, women employees and managers at the Group volunteered in mentoring programs for teenage girls across Israel, as part of an initiative for breaking glass ceilings and boosting empowerment at an early stage.

The Group ensures that women are included in various roles and promotes actions supporting this approach, from education to mentoring and guidance within the organization and promotion within the Group.

This year, we added a new target for an increase in the number of women in middle management, in comparison to the preceding year. We also preformed a comparative analysis of salary levels in the organization in 2023 subject to the equal pay for employees Law, 1996, employees were divided into 14 categories by generation and sector. In 6 of the categories, a positive pay gap of up to 23% was found in favor of women; the largest pay gap in favor of men was just 9%, and resulted from differences in the duration of employment. The gaps in pay are influenced by factors such as professional seniority and experience, satisfaction, and attainment of objectives, and are not affected by gender differences.

40% women in senior management in 2023 – meeting the objective that the Group had set for itself for 2024

Further information is available in the Group's [Equal Pay Law Report](#).



**Target:**  
Increase in  
the number of  
women in middle  
management



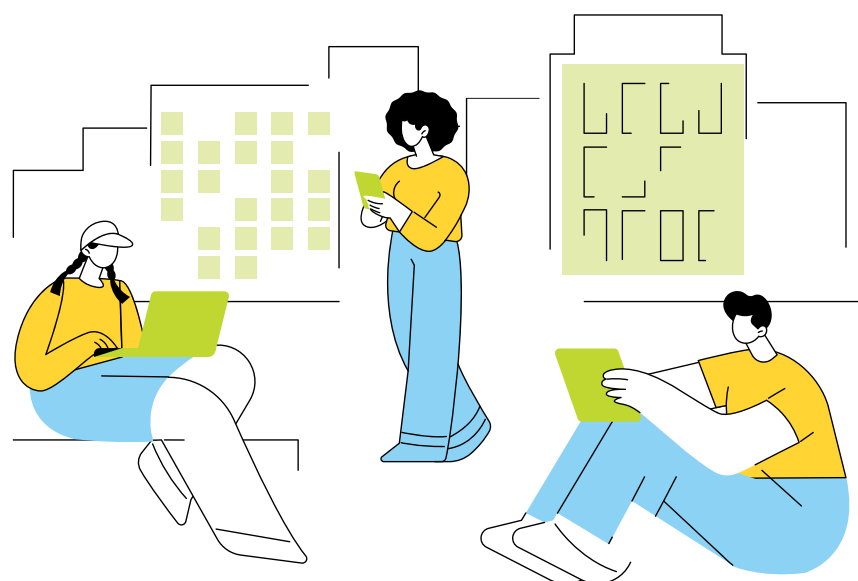
## Inclusion of people with special needs

In the past, the employment of people with disabilities at the Group consisted of contract workers employed in support roles. In 2022, we set a goal for direct employment, through engagement with organizations specializing in inclusion in society and employment. This year, we updated our target to an increase of two employees with special needs compared with the preceding year.

Implementation began in the reported year, with the employment of 9 people with disabilities, of which 5 employed directly and 4 through a collaboration with the company Hameshakem. The necessary accommodations were performed in order to provide a beneficial and safe work environment. Bazan aspires to increase the number of its employees in this category each year.

# 9

People with special needs are employed at Bazan, of which 5 employed directly



## Employment agreements and pay levels

The Group's member companies are party to special collective agreements signed in '21 that are in effect until '24, which provide optimal terms for their employees. Some employees are employed under personal employment contracts. All employees of the Group - whether they are employed under a collective or personal agreement - are entitled to social benefits, including pension insurance.

As of 2023, 86% of employees are employed under collective agreements. The rest of the employees, mainly from the rank of department manager and above, sign personal employment contracts that also include pension and insurance coverage as well as social and other benefits.

# 86%

Of employees are employed under the terms of collective agreements

## Caring for employees pre- and post-retirement

Bazan employees approaching retirement age are entitled to a preparatory course for retirees, with the participation of the Histadrut General Federation of Labor. In the last few years, the course has been given by Irgun Acher. The 2023 course was held at Sammy Ofer Stadium over three days. The course consists of in-person meetings with content professionals and pension advisors, and lectures by National Insurance Institute representatives, an attorney specializing in wills, and an accountant who explains legal financial options for retirement. The last day is usually focused on an experience, and dedicated to an enjoyable outing. Employees can attend the course with their spouses.

Retirement is marked by a dignified ceremony with many attendees; the retiring employees customarily invite their

extended families to attend. The Group CEO, VPs, direct managers, and colleagues are present at the ceremony. Retiring employees receive a medal for their contribution marked with the number of years they worked at Bazan, and a gift from the Group and the employee union.

The Group remains in contact with its retirees after they retire, through a retiree club, trips and getaways, enrichment lectures, and other activities designed to maintain a sense of community. A major event is held during the holiday of Hanukkah, usually a lunch and a performance by a well-known guest artist, with hundreds of Group retirees invited. For the holidays of Rosh Hashanah and Passover, retirees receive holiday gifts and products from the Company, like our active employees. They also receive annual gifts from the employee union.





# Safety and Health

Bazan invests extensive efforts and resources in ensuring a safe and healthy work environment. We routinely conduct many process-based risk analyses to identify possible risk scenarios and provide appropriate solutions. Prior to any work on Bazan premises, risk analyses are performed to examine risks at the work site as well as risks inherent in the work itself. These risk analyses result in the application of suitable protective measures and precautions.

We take a "beyond compliance" approach to the health of employees, whether they are employed directly or through contractors, upholding a safety standard higher than required by law. This principle is reflected in the construction of new facilities, routine operations, and the adoption of a managerial approach that encourages continual improvement of the safety climate at the Group.

We work tirelessly to create a culture of safe and responsible work, raising awareness and reinforcing the commitment of employees and managers to this goal. The Company revamps its approach in this area every year through an updated safety management plan, parts of which are presented in this report.



Facility for practicing safety in working at height



## Managing safety and hygiene

An enterprise-wide safety network oversees all employees of the Group, and is responsible for embedding safety in everyday work plans and project execution. This is achieved both proactively, through tours, inspections, etc., and reactively, by learning from incidents and identifying root causes of failures. As a complementary measure, personal objectives are set for operations and maintenance managers in the relevant areas, which affect compensation elements such as the annual bonus, and appreciation awards are given to employees who demonstrate a strong commitment to safety.

The Environmental Protection, Safety, and ESG Committee within the Group's Board of Directors delineates the Group's health and safety policy, and reports on and monitors activities. Based on the policy and as part of its long-term outlook, the Group's facilities invest extensive financial and managerial resources to comply with all applicable regulatory provisions.

The Group has safety committees operating on two main levels: the official safety committee headed by the Executive Vice President, which convenes monthly; and the safety management committees of the various business units, headed by the units' operations managers, which convene roughly eight times a year.

The Group has a broad safety network encompassing a safety administration, safety managers (engineers certified as safety supervisors with operational experience as facility managers at the Group), and safety inspectors certified as safety supervisors.

Three safety managers at Group headquarters are managerially subordinate to the Executive Vice President, and are responsible for different areas: personal and process safety, electricity safety, and fire safety. In addition, three safety supervisors at the business units are responsible for implementing the safety policies and procedures in the field. Subordinate to the supervisors are safety, health, and environment inspectors, who are safety supervisors by training and have qualification certificates, and serve as safety advisors to the cluster managers. In this capacity, they have all the rights and obligations of the safety trustees, including employee training, identifying safety hazards and engaging in activity to improve the safety conditions.

**The Executive Vice President, who also serves as the VP Safety in the Group, leads this field and is in charge of all safety-related issues on a day-to-day basis**

## Safety risk management at the organization

The safety management plan at Bazan emphasizes the management of risks at the organization, including risk identification, assessment, and control. The plan establishes methods and means for the identification of risk factors; a risk matrix and boundaries of risk acceptable in the workplace; and rules for determining the function in the organization responsible for the risk and for applying controls.

An annual risk-management plan has also been formulated, including a procedure and schedule for applying controls, and specifying methods for monitoring risk mitigation. A safety plan is written annually, detailing the safety policy. The plan is based on past experience, with lessons learned from previous years. The plan is approved by the CEO of the Group; main points are presented to the safety committee of the board of directors.

For new facilities, during planning as well as after completion, risk analysis is applied to each part of the facility using HAZOP (Hazard and Operability Analysis) methodology. Modifications of existing facilities require examination of the need for a risk analysis, using the HAZOP methodology in the case of a complex change, or the What If method for simpler changes.

Both types of risk analysis are performed by a team consisting of a professional overseer, relevant operational representatives, the project manager/engineer, and the safety manager of the business unit or relevant safety representatives. As necessary, facility maintenance representatives, a control engineer, the project/facility electricity/instrumentation engineer, and the environmental protection engineer of the relevant unit also participate.

The full risk analysis is validated in reference to existing facilities every five years.



## Compliance with safety and quality standards

- **Occupational Health and Safety Management Standard, IS 2018 (ISO 45001)** – sets forth requirements for a safety management system integrated with overall management activities.
- **Quality Management Standard, IS 2015 (ISO 9001)** – sets forth requirements for a quality management system integrated with overall management activities.

Since 2017, the Company has been awarded the Platinum Mark of the Standards Institution of Israel, which is granted to organizations that are committed to quality and excellence and hold five or more Quality Marks: information security management (27001), energy management (50001), quality management (90001), environmental management (14001) health and safety at work (45001). The marks attest to the compliance of process and product management systems with international standards.

## Reporting on and drawing lessons from safety incidents

The work of the safety system includes study reports posted on the Group portal and available to all employees.

Instilling a culture of safety is done, among other things, by cultivating dialogue and intra-organizational communication on this subject, combined with a frequently updated system of internal reports, including procedures for reporting, investigating, and learning from incidents. Via this function, employees can report in real time, from any device, on any situation that may cause a safety incident – whether it is due to a human behavioral failure or a near-miss event, with the aim of identifying unsafe components in the work environment.

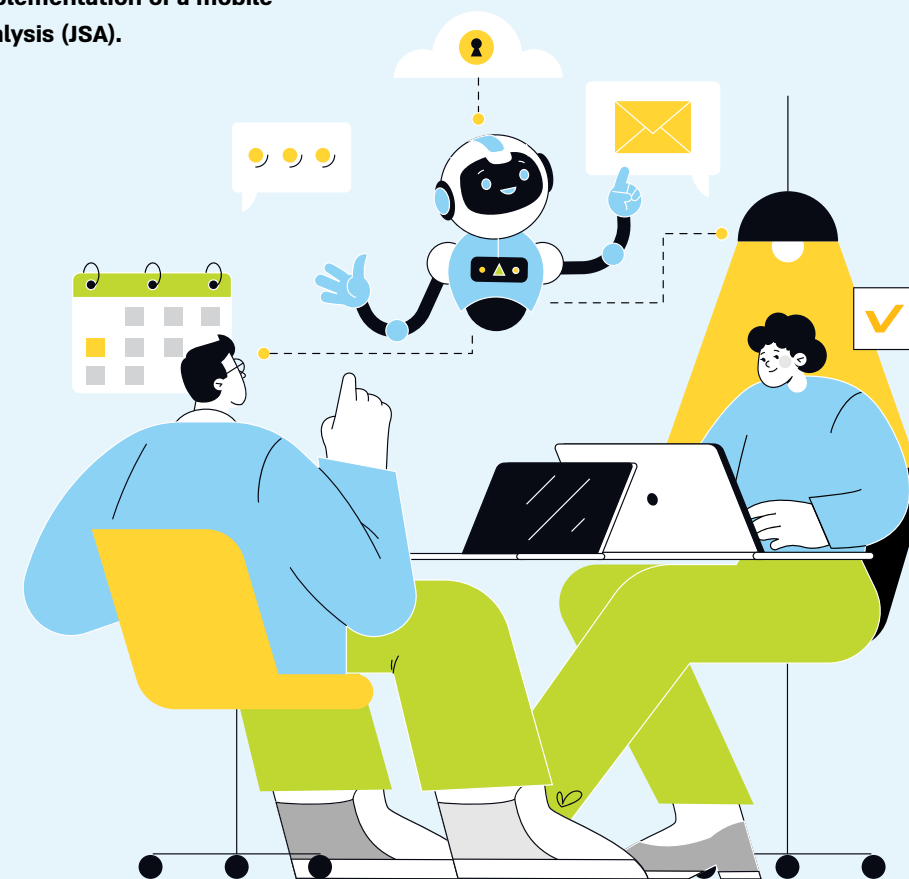


## The use of technological innovation to promote excellence in safety

Safety is an integral part of the innovation approach at the Bazan Group. A number of innovative digital tools are in use in the area of safety (including Connected Worker 4.0 technology), to improve the Group's safety performance and safety climate.

The following are examples of digital tools developed and implemented:

- Development and implementation of a mobile app for documentation of study tours:**  
The study tour app developed and implemented at Bazan is based on the HOP (Human and Organizational Performance) model, considered the global leading methodology for improving safety climate. The method is based on continual methodical examination of work processes by Group managers, identifying possible failures, and resolving the failures by ensuring that appropriate effective defenses exist for every risk scenario (before the failures develop into a safety incident).
- Development and implementation of a mobile app for job safety analysis (JSA).**
- Development of a system for digital reporting**  
Of unsafe behaviors and near-miss events, to make it possible to learn from the incidents and minimize the probability of an accident.
- The Power BI system**  
For real-time updates on safety performance, including process safety indicators, work accident statistics (IR, SR), the number of incident study reports, and the pace of implementation of remedial actions.



# Indicators and targets for the protection of employee safety

A series of indicators and targets has been established for all parts of the organization to ensure that employees' safety is optimally maintained.

After the unusual increase in LTIR (lost time incident rate – the weighted number of work accidents per 200 thousand hours of work) in 2022, caused by aftereffects of Covid-19, absences of managers and employees, and a massive renovation of plant facilities, the prominent downward trend

of recent years resumed in 2023. We expect last year's renovation to help improve processes and safety at the facilities in the long term, and we are working continually to achieve this purpose.

In view of the successful attainment of the LTIR goals since 2018, the baseline year for the review, the Group has set an ambitious target: LTIR of 0.5 by 2025.

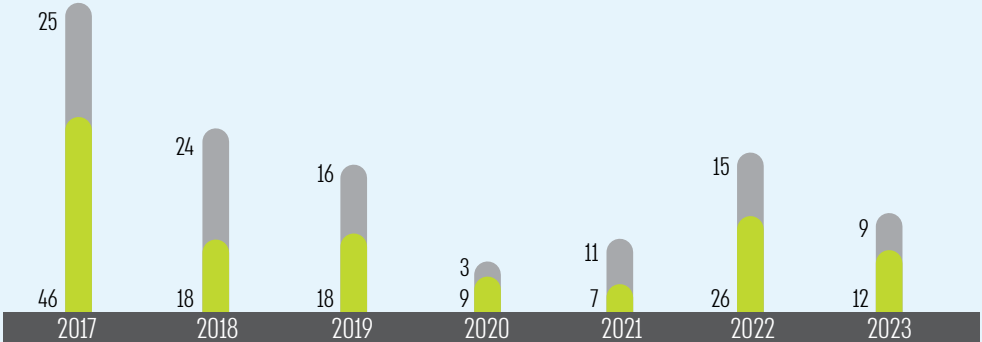
2023:  
**LTIR = 0.84\***



Updated target for 2025:  
**LTIR = 0.5\***

No. of workplace accidents\*\*

■ Company employees – Bazan  
■ Contract workers - Bazan



\* The LTIR is calculated excluding Ducor and Carmel Eco.  
\*\* The report for 2022 has been modified due to the application of the reporting to Carmel Eco.

## Incident investigation indicators and targets

Proactive indicators and targets for safety activities and taking advantage of opportunities (leading indicators):

Indicator	Execution rate
Annual safety plan	100% <div><div></div></div>
Enforcement testing plan (internal tests and enforcement tests)	100% <div><div></div></div>
Workplace safety and health	100% <div><div></div></div>
Annual Group traffic accident reduction plan	100% <div><div></div></div>
Unusual event study reports	Annual performance <div><div></div></div>





## Safety climate

The “safety climate” estimates the tendency of a group of employees to prefer adopting safe modes of action. Monitoring the safety climate in each unit makes it possible to understand the current situation and improve the safety culture of the organization.

The safety climate approach is an advanced, holistic perspective on safety management at organizations. This approach expands the classic underlying assumptions of safety management, which focus on engineering, enforcement, education, and emergencies, to emphasize employees' perceptions of the importance of safety at the organization. The safety climate is affected by the behavior and decisions of managers, which can favorably influence employees' perceptions and lead to safe behavior.

Safety climate is improved by influencing the everyday conduct of managers, from management decisions to operational decisions in the field, and through an emphasis on the importance of safety in actions and practices.

Bazan invests extensive resources in cultivating a high safety climate at its plants, with the aim of ensuring a safer work environment for employees and anybody coming to visit the plant. This effort includes safety climate

measurement at every department and unit, by a team headed by Prof. Gil Luria, considered an international expert in this field, as well as workshops for managers and individual feedback from the team.

The safety climate is measured using questionnaires, interviews, and observations in the field, rated on a scale from 1 to 5. In 2020, a comprehensive safety climate survey was conducted across all of the operational units of Bazan, and results of the survey were presented to the managers. A survey was performed in 2022, in cooperation with the Faculty of Industrial Engineering and Management at the Technion, encompassing approx. 600 employees at all of the production facilities. The survey indicated that the safety climate at Bazan was higher than the common levels at comparable plants in Israel, with a rating of 4.08.



# 4.5

This year, the Group set a goal of bringing the safety climate rating to 4.5 by 2026.

## Professional courses

- **Safety officer** – A 10-month safety officer course is held each year. The course is run by an external institution, with approx. 25 employees and managers attending each course. Along with an official safety supervisor's certificate, the course provides an in-depth perspective on safety.
- **Risk analysts course** – intended for engineers working at the Company, with the aim of providing them with tools for risk analysis in accordance with leading methodologies.
- **An industrial fire fighting course** at a dedicated facility at A&M University in the United States – is held once a year for 15 employees and managers from the Group's production facilities.

## Training

- **Employees who are not directly employed by the group:** as part of the effort to maintain the high standard of safety, we require contract workers working at the Group's facilities to undergo safety training and instruction sessions.
- **Company employees:** beyond the general safety training session on the risks on the production floor, there are also specific training sessions intended to enable specific employees to grasp the risks involved at their own work station.
- **OJT training:** dedicated training sessions on safety topics for a variety of positions - lab employees, electricians, employees working at height, etc.
- **Guests:** before entering the plant, guests complete a tutorial on safety at Bazan, valid for one year.

## Actions to increase awareness, explanations and publicity

- Encouraging managers to attend supplementary safety courses.
- Quarterly sessions designed to engage in lesson learning from past incidents in Israel and abroad
- A safety supervisors course for engineers, managers, maintenance workers and operators
- Dissemination of knowhow and lessons/investigations of incidents via the organization portal
- Communication of the driving rules at Bazan

## Preparedness for emergency scenarios

### Fire preparedness

An integral part of the routine work of the Bazan Group is preparation for stress scenarios. Extensive financial and human resources are allocated to this matter. The emergency preparedness system emphasizes preventive action, including through the following measures:

- Rigorously maintaining the mechanical integrity of operational systems;
- Rigorously maintaining high preparedness of Group employees through comprehensive training, among other means. 120 Bazan employees participated in a course dedicated to fire incidents in the petrochemical industry at a school specializing in this area in Texas, in the United States.
- Implementation of protective systems, including dedicated fire-extinguishment systems.
- A professional fire station that operates seven days a week, staffed by qualified firefighters, employed by the Company, who are skilled at extinguishing industrial fires. The fire station is equipped with fire trucks and cutting-edge dedicated equipment for fighting industrial fires.
- The rescue team comprises approx. 30 employees and specializes in three types of rescue operations: height, surrounded spaces and destruction. The team trains on a regular basis at dedicated sites that have been established especially for that purpose on the Group's premises, with dedicated advanced equipment.
- During the Iron Swords War, a further investment in this system was made, with the acquisition of another fire truck and a remotely controlled robot to assist firefighting teams in emergencies.



# Employee Health

The Group implements a broad approach pertaining to the concern for the health of its employees, including focusing on the following spheres:

## Preventive treatment

Reducing the potential exposure of employees to hazardous substances and physical elements such as noise and radiation, by supplying means of protection against safety and health hazards.

## Ongoing monitoring

Monitoring of employee health, including periodic medical examinations to check the condition of employees' health and the level of their exposure to hazardous substances; environmental checks to examine the concentration of pollutants in the air in the work area, as well as monitoring noise damages by periodic checks, including hearing tests for the employees.



# Caring for employees' health and well-being

Employee health and well-being is more than an ethical obligation of the Group towards its employees; it is an essential condition for its organizational and business success. Bazan promotes this cause through a range of channels and means, including:

- **Comprehensive health insurance and regular checkups:** The Group insures its employees under medical and dental insurance policies, and offers them the option to insure their family members at discounted rates. In addition, the group ensures checkups are conducted for its employees in accordance with the Work Safety Order and the relevant regulations, which include personal tests and monitoring of the work environment. During 2024, hundreds of tests were carried out for the group's employees, which yielded satisfactory results.
- **Staying fit, even on site:** A fitness center for employees offers weekly classes, such as yoga and Pilates. Dozens of employees participate in the classes and in various sports teams. Dedicated messaging is also sent to employees to raise awareness of sports and the offered activities.
- **Defibrillators:** 31 terminals equipped with resuscitation devices are located on Bazan's premises.
- **Special benefits:** The Group operates two virtual culture rooms where notices are posted regarding benefits for employees, teambuilding activities, special activities for children and retirees, and more.
- **Day camps for employees' children:** The Group operates a day camp to encourage volunteering and community activities among the children of its employees. Children and teenagers are invited to volunteer with a wide range of organizations, and are paid for the volunteering days by the Group.
- **Support from a dedicated fund:** The Group's welfare fund provides support for employees during medical events and life events that necessitate financial aid, such as for employees evacuated from their homes, in need of costly medical treatments, and more. The fund is managed by a committee headed by the VP of Human Resources, with the participation of representatives of the employee unions and the various business units.
- **Unmediated communication between management and employees:** The Group's CEO holds periodic talks with employees from various ranks and positions at the Company, to gain a reliable and genuine view of the situation on the ground, including needs and gaps awaiting resolution.





## PURPOSE & POLICY

*Purpose*  
**COMMITTED  
TO CORPORATE  
GOVERNANCE**  
*ESG Policy*

The UNGC (United Nations Global Compact) initiative on issues of sustainability and human rights - becoming a signatory to the initiative

ESG and climate risks were mapped

A Suppliers' Conduct Annex was implemented

The Group's Code of Ethics was updated

Maala's ESG ranking - an increase to platinum status

*Committed to a Sustainable Future*



Adherence to transparency and to compliance with the provisions of the law across all areas of activity is a principle of the utmost importance to the Group in all of its endeavors. Alongside the laws and rules that are relevant to Bazan as a publicly-traded company in Israel – securities laws, company laws and competition laws – the environmental laws and directives in Israel also apply to it, and these are considered to be of an advanced and stringent level in international terms. The Group invests extensive resources in order to rigorously comply with these laws and directives.

# Transparency with Stakeholders

Bazan attributes high importance to continuous, open communication with all stakeholders. The ongoing dialogue with them contributes to attaining a much more in-depth understanding of the expectations and needs regarding the daily activity, in parallel to a constant examination of the value generated for them. The materiality analysis process enabled us to engage with the stakeholders and to learn about their positions regarding important topics for reporting and action. Insights drawn from this process are reflected in the report.

Stakeholder group	Communication channels
Customers	As a relatively small player in the global market, Bazan is able to provide its customers with rapid, professional, quality service that meets the changing market conditions and regulatory requirements. We maintain continuous, rapid, efficient communication with our customers and ensure high accessibility of information, through an up-to-date website and frequent measurements of customer satisfaction through an annual customer survey.
Employees	We see open dialogue with Group employees as a key value. This approach is reflected, among others, in our open-door policy for employees, periodic meetings of groups of employees and managers with the Group's CEO, employee representation, round-table meetings, organizational portal, and employee events.
Investors and financing entities	We maintain ongoing, close communications with our investors and with lenders and financing entities.
Community	We ensure that information about the Group's ongoing activities is accessible, including through routine messaging and updates on its website, which is available to the general public in Hebrew and English.
Suppliers	We are committed to transparency and maintaining an ongoing dialogue with a broad range of suppliers and subcontractors, through the purchasing and engagement mechanisms in our supply chain, among other means.
Regulators	We ensure that a dialogue is conducted through the Group management and those functions in the Company responsible for the various areas of activity including: protection of the environment, health and safety, and security.
Emergency responders	We maintain an ongoing dialogue with the various emergency and security entities.

# Compliance, Ethics, and Anti-Corruption

## Compliance with the law and transparency

Ethics and rules of proper conduct are the bedrock of our activity, forming our borders and compass. The Group is committed to adhering to reporting obligation pursuant to the securities laws aimed at ensuring transparency towards all stakeholders, and maintains compliance plans in a number of fields, designed to ensure rigorous compliance with the requirements of the law and with internal procedures.

Any employee may contact the relevant enforcement supervisor or the Legal Bureau, openly or anonymously, to report or consult on these issues. The enforcement plans contain explicit instructions on how to handle complaints, the protection of complainants and deviations from procedures. There is also a formalized procedure in place

for handling anonymous complaints, while ensuring that both complainants and the objects of the complaint are protected against any damage to their reputation.

The Group operates pursuant to the provisions of the law and the directives regarding securities and company laws, laws regarding competition, the prevention of sexual harassment and protection of the environment and safety, and the enforcement of trade restrictions. There are internal procedures applying to these spheres that are enforced on a routine basis by those entities responsible for this within the Company. In 2020-2023, no legal proceedings were taken against the Group in the area of antitrust or competition law. Details of exceptional events can be found in the Group's financial statements.

## Ethical conduct

Bazan's Code of Ethics was first brought together and approved by the board of directors in 2012, and since then was updated in 2018, 2021 and again during 2023-2024. In the reporting year, implementation was completed of the Suppliers' Conduct Annex as part of the process of contracting with material suppliers.

The code sets forth the values, principles, standards, and behavioral norms of the Group, and provides tools for appropriate decision-making. The code relates to direct employees, contract workers and all stakeholders, and is grounded in the four core values of the Group: safety, professionalism, fairness, and responsibility.

### The Group's Customers

Bazan's success relies on the delivery of quality products to its customers and on its fair conduct towards them. The Group is committed to customer satisfaction, achieved by learning about customers' needs and striving to find adapted solutions, with an emphasis on a service mindset.

### The Group's Employees

The partnership between Bazan and its employees is a key element of its success. This partnership is based on long-term mutual commitment, promoting shared goals. The Group provides its employees with a healthy, safe and

respectful work environment, enabling every employee to grow, to contribute to and benefit from the Group.

### The Group's suppliers and service providers

Good business results depend, among other factors, on the quality of services and materials procured by the Group from its suppliers, which makes them business partners that are essential to its success. We believe in long-term collaborations that include understanding the needs of our suppliers and service providers, coordination of expectations, and full transparency.

### Environment and community

It is crucial for the Group to function as a good corporate citizen within the community. We make efforts to be attentive to the community and engage with it where we can exert a positive social and community impact, immediately and in the long term.

### Proper organizational conduct

We are committed to business conduct based on compliance with the law, transparency, and fairness, while promoting the goals of the Group and maximizing its profits. All employees of the Group are committed to these principles, as well as to intra-organizational teamwork and cooperation with the various stakeholders.



## Implementing the Code of Ethics and building mechanisms for its implementation

The Group has a number of mechanisms for consultation and reporting on ethics complaints. The ethics officer can be contacted anonymously through the Group's portal or by mail, email, or telephone. A formalized procedure for processing anonymous complaints establishes the processes and actions to be applied when a complaint is filed, while ensuring that the reputation of the subjects of the complaint is not tarnished unnecessarily.

Complainants who communicate non-anonymously receive a detailed response to their message, and after the matter has been examined, they receive a report on the conclusions drawn and the subsequent actions taken.

### Number of complaints received in the reported years

- 2019 - 1 complaint
- 2020 - 1 complaint
- 2021 - 3 complaints
- 2022 - 2 complaints
- 2023 - 4 complaints

Close to 99% of the Group's employees in Israel have completed the online tutorial on the Code of Ethics.

A summary of the code is available to [the public on the Group's website](#).

## Prevention of sexual harassment

In early 2018, the bylaws on the prevention of sexual harassment were updated in accordance with the phrasing of the law and the regulations derived therefrom. Harassment and sexual harassment are on the list of severe disciplinary offenses noted in the collective labor agreement. Every two years, Bazan employees participate in mandatory training using an up-to-date tutorial; newly hired employees complete the tutorial and receive information regarding the law from the Human Resources Department. In order to promote and raise the level of awareness to this issue, in 2023, specially dedicated training sessions were held at the Group for managers by an external company, pertaining to the topic of sexual harassment and bullying in the workplace.

## Revision of the Code of Ethics

As part of the goals that the Bazan Group set for itself, in late 2023 a process was launched for revision of the Group's Code of Ethics, with a view to updating the code based on a collaborative effort with the Group's employees and managers – while addressing both the global and local developments. The outbreak of the War delayed the process, which was then relaunched in January 2024 – via a comprehensive workshop on corporate ethics.



The Group's bylaws for the prevention of sexual harassment are posted on every bulletin board in the Group, including contact information for sexual harassment prevention supervisors. Anonymous messages can be sent through the Group's portal or by mail, email, or telephone, or in person in a meeting with the sexual harassment prevention supervisor, who underwent relevant training.

### Number of complaints received in the reported years:

- 2019 - 1 complaint    ■ 2020 - 1 complaint
- 2021 - 2 complaints    ■ 2022 - 1 complaint
- 2023 - 1 complaint

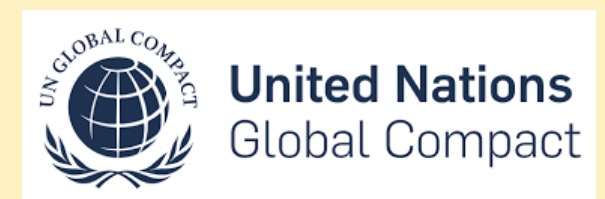
All of the complaints were handled through an individual meeting with the sexual harassment prevention supervisor, with further action taken according to the circumstances.

## Human Rights

As one of the largest and most complex energy groups in Israel, the Bazan Group takes action to both preserve and promote human rights throughout its entire supply chain. The Bazan Group acts in accordance with the principles of the United Nations Global Compact Charter on human rights, and this year it joined the initiative as a signatory to the charter's principles. We are working towards adoption of universal principles of human rights\*, labor, the environment and anti-corruption with a view to integrating them among the Group's employees and Bazan's value chain. The existence of due diligence checks, stakeholder management and the constant

improvement of our policy and procedures are some of the steps being taken in order to promote these principles.

**In 2024, the Bazan Group joined the UN project on human rights and sustainability, the UNGC, as a signatory.**



\*Universal Declaration of Human Rights ([UDHR](#))

## Anti-corruption and bribery

An anti-corruption procedure in the spirit of the Group's principles constitutes yet another element of the code of ethics. The procedure concerns the prevention of corruption and bribery in the Group's activity with stakeholders, primarily customers and suppliers. It provides the employees, as well as third parties operating on behalf of the Group, with the basic knowhow required for the identification and prevention of acts of bribery and corruption, alongside methods of receiving training and guidance on this matter.

As an organization operating in multiple markets across the globe, Bazan is committed to ensuring that it acts according to all the laws, regulations and contractual requirements applicable in all those countries in which it operates. Among others, the Group is committed to operating according to international standards such as the UN Convention against Corruption, the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, the US Foreign Corrupt Practices Act of 1977, the UK Bribery Act 2011, and the EU's Anti-Corruption Report.

The Bazan Board of Directors regards observing the anti-bribery and corruption laws not only as compliance with the requirements of the law, but also an expression of

the Bazan Group's strong business ethics. The Board of Directors is committed to the anti-bribery and corruption policy, which is disseminated to all Bazan Group employees for their knowledge, together with the third parties operating on its behalf.

The Group has a reporting mechanism regarding whistleblowers that is based on the referral and reporting channels of the Code of Ethics.

### The key elements of the anti-bribery and corruption policy:

1. The Bazan Group shall not be involved in any form of bribery and corruption, whether this involves government officials or officers in private companies.
2. The Bazan Group shall not accept, request, agree to accept, promise, offer or give, either directly or indirectly, a bribe or any inappropriate payment.
3. The Bazan Group shall not tolerate employees or business partners acting in its name or on its behalf shall pay or receive a bribe or shall breach this policy in any other manner.

# Committed to Corporate Governance

The Bazan Group is committed to proper corporate governance, which includes ethical conduct, responsibility, and transparency towards shareholders and stakeholders.

The Group operates in accordance with the law and the rules of sound corporate governance, through formalized procedures that, among others, guide the work of the Board of Directors and its committees, the process of identifying and approving interested-party transactions, and the process of appointment and approval of officer compensation. These rules delineate the relationships between the Company, management, the Board of Directors, shareholders, and other stakeholders.

Organizational structure as at the report approval date:



## Board of Directors of the Group

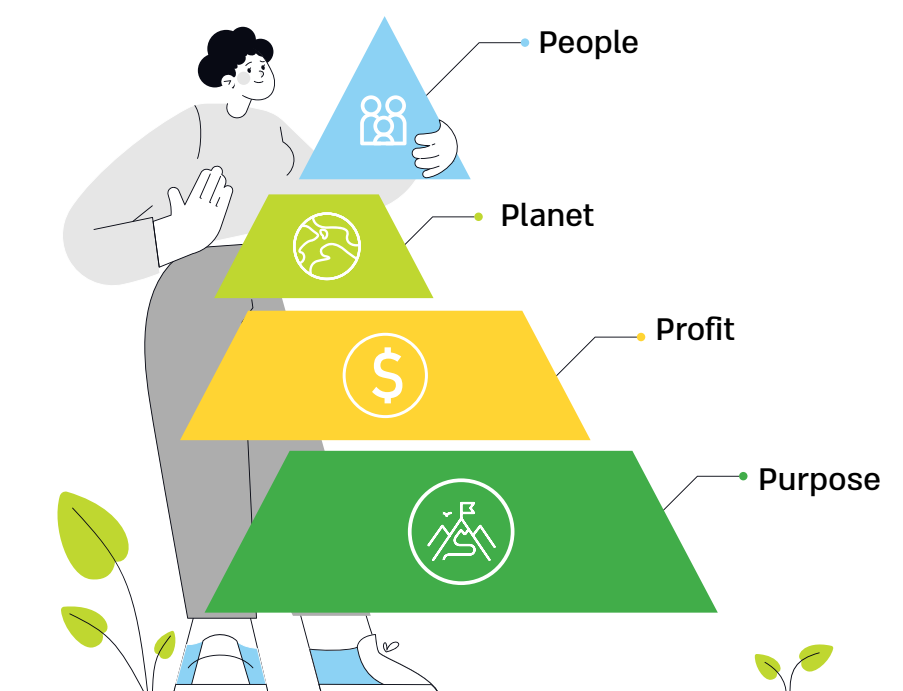
The Board of Directors approves the policies of the Group in all its areas of activity, including all environmental, social, and ethical matters. Further, all corporate governance topics are addressed by the Board of Directors, in recognition of their importance to the sound conduct of the Group. Among other means, this is achieved through an internal compliance system in the area of securities and corporate law, which includes regular reports to the Audit Committee (twice a year) and the Board of Directors (once a year), training, and investigation of violations.

The Board of Directors convenes at least once each quarter, and usually on a monthly basis. Meetings of the various committees are held from time to time, including the balance sheet and audit committee. Once a year, the Board of Directors holds a meeting without management to discuss aspects such as the functioning of the Board of Directors itself. All the material topics are reported regularly in a monthly report submitted by the CEO to the directors. This is in addition to ongoing reporting on key topics of the Company's activity during the meetings. Each quarter, as part of the discussions on the financial statements, the Company units present their activities, via the relevant VPs.

As of the end of 2023, two of the nine members of the Board of Directors were women. External directors are appointed and operate pursuant to the Companies Law, 1999. For further information regarding the composition of the Board of Directors, see the [financial statements of the Company for 2023](#).

## Policy on appointments to the Board of Directors and upholding integrity

The appointment of directors is discussed directly by the Board of Directors. As far as external and independent directors are concerned – this is carried out subsequent to discussion at the Audit Committee, in accordance with the law. In the discussion, the aspects stipulated in the enforcement procedures are considered, including the director's qualifications and availability, and conflicts of interest are examined.





## ESG management in the Group

**The strategy adopted by the Bazan Board of Directors in July 2021 places the overall ESG principles as one of the four pillars on which the Company's activity is based, with a long-term perspective. In order to implement this strategy, we adapted the Group's structure in order to support the ongoing management of ESG and promote activity in this field.**

In 2022, the ESG function was established, which reports directly to the Group CEO. The function operates in relation to clear, defined objectives in the work plan that are approved on an annual basis by the CEO and the Board of Directors. Thus, in 2023, it was decided to place emphasis on improving the reports and increasing the degree of transparency in accordance with global standards (SASB, GRI and TCFD) and pursuant to the evolving regulatory requirements and the emerging trends in this field.

Concomitantly with the establishment of the function, an ESG strategy was formulated in line with the Group's strategy and vision. As such, the dedicated strategy's milestones were defined along with its focus areas. In the reporting year, organization-wide infrastructure has been put in place for ESG governance within the Group.

During 2024, the Group has made a significant leap forward in this field, based on a proactive approach on the way to fulfilling the objectives, and with a long-term perspective. The key actions involved as part of this effort included: understanding the evolving trends and regulatory requirements around the world in this field and the preparations for this, examination and management of the relations with the stakeholders and taking on leading roles in the ecosystem; work with the business units to provide a response to the Group's customers; and integrating ESG within the organizational culture alongside adopting best practices in this field.

We strictly ensure that reports are in accordance with the rules of reporting and the accepted global standards of SASB and GRI – and in affiliation with the TCFD.

The Group's reports have been prepared in accordance with the said standards since 2019; and since 2022, the report has also included its subsidiary, Ducor.

During the past year, the Bazan Group joined the UN initiative on human rights, labor, environment and anti-corruption as a signatory.

Furthermore, for the first time, the Group attained Platinum status in the Maala ranking - the leading ranking for ESG issues in Israel for the last 20 years.

The issue of transparency and strict adherence to reporting is a central part of our ESG strategy in conjunction with all parts of the Group.

### ESG in management and the Board of Directors

ESG issues are reported on a monthly basis to all the members of the Board of Directors as part of a general overview on the Group's operations. This is in addition to a weekly update given by the Head of the ESG Function at the management meetings attended by the CEO.

The Board of Directors Environmental Protection and Safety Committee is charged with overseeing the ESG activities. This constitutes an important voice in the formulation of policy and in implementing the principles in the corporate culture.

The committee receives ongoing updates on ESG matters and convenes at least twice a year – having met on three occasions during the current reporting year – for dedicated discussions. Among other things: an overview of both global and local trends, the Group's activity in the relevant fields compared with the strategy and the multi-year work plan, as well as the integration of ESG in the Group's activity in accordance with the focus areas. The committee approves the annual ESG report, and the Board of Directors reviews it prior to its publication. The Chairman of the Board is a member of the Committee.

### Instilling the ESG principles in the organizational culture and routine activity

In order to implement the Group strategy on this topic, it was decided to gain a more in-depth familiarity with the issue of sustainability and the relevant interfaces in the Group and as part of its routine activity. This was to be achieved, among other things, via: training sessions for both managers and employees, professional workshops on carbon led by global experts, regular updates within the various units and making information accessible on the employee portal.

In addition to this, it was decided to reinforce the function with an ESG Steering Committee and working teams on dedicated subjects. The ESG Steering Committee was established during Q1 2023, and its members include representatives of the various Group units who were

appointed by the VP Human Resources. The Committee's function is to act as the "spearhead" of ESG-related activity, to serve as a platform for discussions and to formulate ESG recommendations for the management, as well as aiding in organization-wide promotion of related working processes. The committee convenes at least once a quarter headed by the Head of the ESG Function.

Members of the Steering Committee lead working teams on the various areas of activity. These include additional employees and managers from the Group units, who work throughout the year to move forward ESG projects and organization-wide processes, and who were specially selected to coordinate and promote this activity. The working teams update the Steering Committee on a quarterly basis and they engage in collaborative thinking to advance the various processes.



# Risk Management

The Group's management has adopted a policy in this area based on an international model (ERM COSO) and implemented a formalized process to manage the risks to which it is exposed. This includes procedures that establish the areas of responsibility and authority of various functions and create mechanisms for identifying, controlling, and monitoring risks.

In implementing this process, the Group works continually to strengthen the commitment of its managers and employees to risk management and to its continued positioning as integral to its business operations. The aim, among others, is to improve the performance of its various units, achieving the strategic and business goals, and maintaining an effective corporate governance policy.

Risk management is the responsibility of the CFO and the Group's Risk Management Forum, which convenes at least once a quarter. They work on a routine basis, aided by external consultants who specialize in this field, towards identifying and prioritizing the Group's risks, as well as drawing up plans to mitigate the risks and to address and monitor their development.

Reports and monitoring of the development of risks and the actions taken to mitigate them are submitted to the risk management steering committee headed by the Company's CEO, the Board of Directors' Audit Committee, and the Board of Directors. This is in accordance with the frequency defined in the Group's risk management procedures.

Once every few years, the Group conducts a comprehensive risk survey accompanied by a professional consultant who specializes in this field. In addition, the Group has formulated an ordered process for annually validating and updating its risk map when new risks relevant to its activity are identified.

In 2020, the Group completed a risk survey approved by the Board of Directors' Audit Committee. In 2021, a risk mitigation plan and key risk indicators (KRIs) were formulated with respect to all of the key risks. The principal risks identified include regulatory changes; preparing for and managing emergency incidents; failure to realize the strategic plan; ESG risks, including climate and environment-related risks; cybersecurity, financing and liquidity.

An additional risk survey was carried out in Q2 2024, in conjunction with the renowned consulting firm, KPMG. As such, an effort has been undertaken to engage in renewed thinking of all the aspects in order to define key risks for which a guide is to be built for both risk management and mitigation. The findings will be presented to the Board of Directors and shall be managed by the Risk Officer on an ongoing basis.

## ESG risks

### ESG risk management program

As a rule, the Group's Board of Directors routinely supervises the financial, social, and environmental performance, including risks and opportunities. The Board of Directors examines the risk management conducted by the Group, it monitors the implementation of risk reduction plans and receives regular updates on this subject. The Head of ESG, who is in charge of promoting ESG risk management, is a member of the risk management forum.

During the reporting year, a process was conducted of mapping out, ranking and prioritizing the ESG risks. The process was carried out under the joint leadership of the Chief Financial Officer, in his role as the Group's Chief Risk Officer, and the Head of the ESG Function, and in conjunction with the Group management.

Mapping the risks and their subsequent ranking was carried out in accordance with accepted global methodologies and was accompanied by a renowned consulting firm that specializes in this field. The process included defining risk categories according to the material topics in the ESG report; assessment of the risks identified and selection of key risks; definition of mitigation plans for each of the risks; and taking into account all the risks as part of the corporate risk management plan.

The risk survey relates to those domains that are derived from the material topics, including:

- **Environment** - GHG emission management and energy efficiency, climate change – addressing and resolving these issues, impacts on water and effluents, air quality and emissions, circular economy and waste.
- **Society** – occupational, health and hygiene, human capital, socio-economic impact, responsible supply chain.
- **Corporate Governance** – business ethics, management diversity, regulatory compliance and transparency.

As part of the risk identification and mapping stage, interviews were conducted with management members and relevant officers in the Group. As part of the climate risk identification process, a peer survey was conducted with a view to examining relevant risks identified across the industry.

The risk assessment stage included both a quantitative and qualitative estimate of the risks by the Group management in accordance with criteria adapted to the relevant impacts of the ESG domain. Subsequent to risk rating, means of mitigation were identified for each individual risk, and the appropriate plans are derived from these for addressing and mitigating the key risks. Accordingly, benchmarks are drawn up for monitoring the developments in these risk environments.

On completion of the process, plans were defined for mitigating the various risks. During 2024, the risk will be integrated in the Group's corporate risk plan, for routine monitoring, mitigation and control.

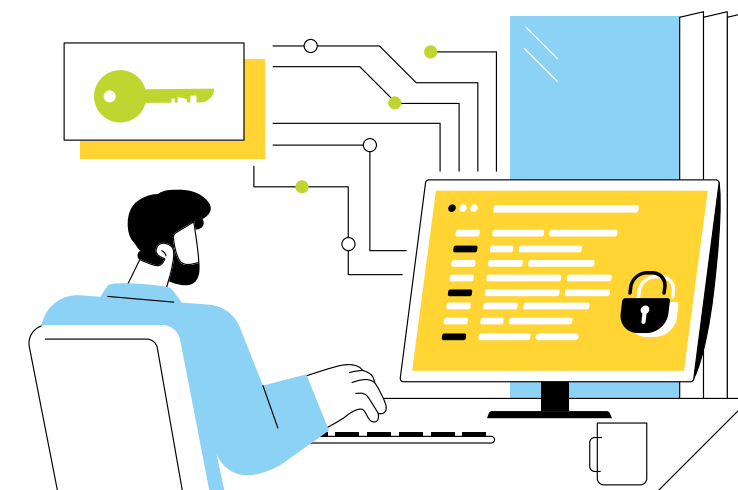
## Cyber risks management

The Group's information and cyber security policy is derived from the state laws and regulations. The Group is compliant with the ISO 27001 Information Security Management Systems (ISMS) Standard and with ISOX and is subject to the Israel National Cyber Directorate and its regulatory directives.

The Group has a risk management procedure dealing with cyber risks. According to the procedure, the Group maintains an enforcement plan in which an annual risk survey is conducted alongside both internal and external audits. Management has in place regular control processes to ensure resilience against the various threats. The work plan is determined based on the risk surveys.

Biannual routine reports are delivered to the Board of Directors based on the reports and other components. In addition, the Steering Committee, headed by the Company Deputy CEO, convenes twice a year.

There is a dedicated training & instruction procedure for this form of risk management and employees are obliged to undergo training to raise their awareness of this threat. Moreover, the drills for employees are held, particularly for the technical teams, in order to contend with the threat.





## SASB & GRI DATA AND INDICES

SASB &  
GRI Data  
and Indices

Committed to a Sustainable Future



# About the Report

This is the third ESG report of the Bazan Group, reviewing its activities in the areas of environment, society and community and corporate governance in 2023.

**The report was written in accordance with the following reporting standards:**

- GRI (Global Reporting Initiative) – In Accordance
- SASB (Sustainability accounting standards board). Sector: Extractives and mineral processing – Oil & Gas – refining and marketing (SASB Code – EM-RM)
- TCFD - Task Force on Climate-related Financial Disclosures

In some of the data tables, due to numbers being rounded up or down, the percentages may not add up to 100% or exact numbers.

It should be noted that there may be changes in the data presented in this report compared to previously reported data - this is due to the data refinement process, improvement of the data collection processes and supporting controls.

The report underwent a comprehensive process of internal verification, and was externally controlled (Limited Assurance) by the accounting firm KPMG.

This ESG report has been approved by the Bazan board of directors, the ESG environment and safety committee, the group's CEO and management.







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### Independent Limited Assurance Report to the users/readers of BAZAN Oil Refineries Ltd. 2023 ESG Report

We were engaged by the management of BAZAN Group Oil Refineries Ltd. (further referred to as "BAZAN" or "the Group") to provide limited assurance on the specified parts as mentioned in the table below (further referred to as "specified parts"), regarding the information presented on BAZAN's 2023 ESG Report for the year ended 31 December 2023 (further referred to as "the Report"), Israel data only. It should be noted that the assurance refers to the information and data included in the topics listed in this table, regarding the reporting year, only.

The limited assurance was performed regarding the data and information in the specified parts detailed in the table below:

Subject Matter	Units	2023
Total number of employees	#	1,392
Average employees' training hours – total	hours	39
Average employees' training hours – men	hours	41
Average employees' training hours – women	hours	30
Conducting materiality assessment	existence	
Employees completing Code of Ethics tutorial	%	96
Injury rate (IR) – group employees (direct)	#	0.79
Injury rate (IR) – contract workers	#	0.91
Injury rate (IR) – total	#	0.84
Number of work-related accidents – group employees (direct)	#	12
Number of work-related accidents – contract workers	#	9
Number of work-related accidents – total	#	21
Absence rate (SR) – direct group employees only (Israel)	#	31.6
Natural gas consumption	GJ	30,097,039
Electricity consumption - external sources	GJ	3,126,930
Electricity consumption - internal production	GJ	651,841
Potable water consumption	m <sup>3</sup>	3,594,906
Reclaimed water consumption	m <sup>3</sup>	3,294,159
Brackish water consumption	m <sup>3</sup>	1,781,886
Industrial effluents discharged into the Kishon River - total	m <sup>3</sup>	427,044
Industrial effluents discharged into the Kishon River - Caol	m <sup>3</sup>	85,395
Industrial effluents discharged into the Kishon River - Bazan	m <sup>3</sup>	341,649
Hazardous waste - total	ton	5,117

Further information and details, including the scope, content, assumptions and estimates determined by the Group regarding the specified parts included in the process, can be found in the relevant chapters of the Group's Report.

BAZAN management is responsible for A. the preparation and the presentation of the ESG Report in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) as described on the relevant page of the Report site, and the information and assertions contained within it B. for determining BAZAN's objectives in respect of sustainable development performance and reporting C. for establishing and maintaining appropriate performance management and internal control systems from which the information is derived, to be free from omissions and material misstatements whether due to fraud or error. D. the identification of stakeholders and material issues for reporting.

Our responsibility is to provide a limited assurance engagement and to express a conclusion based on the work performed. We conducted our engagement in accordance with International Standard on Assurance

Engagements (ISAE) 3000, *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board (IAASB). That Standard requires that we comply with applicable ethical requirements, including independence requirements, and that we plan and perform the engagement to obtain limited assurance about whether the Report is free from material misstatement.

A limited assurance engagement, regarding data and information in the specified parts on the ESG Report, consists of making interviews, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other evidence gathering procedures, as appropriate. These procedures included:

- Examination of the specified parts in the Report, for the purpose of performing a limited assurance, based on public information sources, knowledge of the Group business and other comparative information of similar organizations.
- Interviews of management to gain an understanding regarding the specified parts.
- Interviews with senior management and relevant staff of BAZAN management concerning ESG strategy and policies for the specified parts, and the implementation of these across the business.
- Interviews with relevant staff at corporate and business unit level responsible for providing the information in the Report.
- Comparing the information regarding the specified parts presented in the Report to corresponding information in the relevant underlying sources to determine whether all the relevant information contained in such underlying sources has been included in the Report.
- Where relevant, conducting interviews regarding the calculation, aggregation and methods used to collect and report the specified parts in the Report.
- Reading the information presented in the Report to determine whether it is in line with our overall knowledge of, and experience with, the ESG performance of BAZAN.

As part of the process of performing a limited assurance, we reviewed the changes made to the draft ESG Report of BAZAN and reviewed the final version of the Report to ensure that it reflects our findings.

Limited assurance is less than absolute assurance and reasonable assurance. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement. As a result, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

Based on the limited assurance procedures performed and the evidence we have obtained, described in this report, nothing has come to our attention to indicate that the specified parts as mentioned in the table above, in BAZAN's 2023 ESG Report, Israel data only, are not presented, in all material respects, in accordance with the GRI and BAZAN's reporting criteria.

Our limited assurance report is made solely to BAZAN in accordance with the terms of our engagement. Our work has been undertaken so that we might state to BAZAN those specified parts we have been engaged to state in this limited assurance report and for no other purpose or in any other context. We do not accept or assume responsibility to anyone other than BAZAN for our work, for this limited assurance report, or for the conclusions we have reached.

Tel Aviv, Israel

11 December, 2024

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Group's Data

	2018	2019	2020	2021	2022	2023
Energy consumption (GJ) / year						
Energy consumption by source						
Electricity consumed from external sources	3,031,715	3,087,206	3,112,757	2,919,151	2,802,848	3,126,930
Electricity consumed from internal production	787,606	860,857	755,116	915,125	833,522	651,841
Natural gas	30,145,434	32,724,065	30,328,655	32,365,614	30,144,150	30,079,039
Fuels	35,439,990	36,068,504	35,512,626	35,311,364	35,235,266	35,541,358
LPG	396,322	109,837	334,464	254,399	565,398	391,765
Steam	-	-	-	-	115900	120,500
Energy consumption by activity						
Fuels and Gadiv	54,824,082	56,282,748	52,627,491	54,419,201	55,383,435	53,202,334
Carmel Olefins - petrochemical	14,941,824	16,567,721	17,416,127	17,346,452	14,197,749	16,595,686
Ducor	-	-	-	-	368,764	367,917
Haifa Basic Oils – aromatic oils	35,160	0	0	0	0	-
Carmel Eco	-	-	-	-	60	49
Total Energy Consumption	69,801,066	72,850,469	70,043,618	71,765,653	69,950,008	70,165,986

	2016	2017	2018	2019	2020	2021	2022	2023
GHG emissions (Ton CO <sub>2</sub> e)/year								
Total - Scope 1	2,449,827	2,518,314	2,471,436	2,440,192	2,219,973	2,224,300	2,207,179	2,189,470
Fuels	1,896,748	1,913,533	1,841,354	1,790,657	1,572,645	1,592,046	1,647,273	1,580,336
Carmel Olefins	405,102	486,376	458,179	488,143	465,689	452,164	365,189	153,783
Gadiv	147,977	118,405	171,903	161,393	181,638	180,091	184,166	445,286
Ducor	-	-	-	-	-	-	10,550	10,064
Total - Scope 2	229,393	265,469	261,013	269,232	293,804	321,394	329,212	342,504
Fuels	88,234	103,753	99,028	100,712	137,802	142,123	129,905	144,635
Carmel Olefins	118,683	145,300	140,622	148,110	134,145	154,146	122,513	140,331
Gadiv	22,477	16,415	21,363	20,410	21,857	25,126	24,985	24,513
Ducor	-	-	-	-	-	-	51,807	33,024
Total Scope 3*	-	-	-	-	-	5,381,008	5,931,632	6,092,202
Bazan Group	-	-	-	-	-	5,381,008	5,680,714	5,863,202
Ducor	-	-	-	-	-	-	250,919	229,000
Total GHG emissions	2,679,220	2,783,783	2,732,449	2,709,424	2,513,777	7,926,702	8,468,024	8,624,176

\* Scope 3 emissions were first measured in Israel in 2021 and at Ducor in 2022

Group's Data

	2016	2017	2018	2019	2020	2021	2022	2023
Emissions, kg/year								
Total suspended particulate matter (SPM)	44,789	44,123	35,744	23,749	34,204	22,498	23,609	19,701
Fuels	44,789	27,498	24,632	23,749	21,662	22,498	23,486	19,583
Carmel Olefins	-	16,625	11,112	-	12,542	-	-	-
Gadiv	-	-	-	-	-	-	-	-
Ducor	-	-	-	-	-	-	123	118
Total non-methane volatile organic compounds (NMVOCs)	564,616	504,332	493,084	275,073	233,301	222,585	242,727	182,323
Fuels	222,764	269,000	265,485	129,239	79,778	66,984	59,867	59,181
Carmel Olefins	259,241	166,002	180,917	117,175	114,730	144,567	164,196	103,585
Haifa Basic Oils	8,545	2,737	-	-	-	-	-	-
Gadiv	74,066	66,593	46,682	28,659	38,793	11,034	7,200	13,439
Ducor	-	-	-	-	-	-	11,464	6,118
Total nitrogen oxides (NOx)	1,387,730	1,518,414	1,212,304	1,119,791	1,113,191	1,056,251	933,386	904,962
Fuels	931,939	1,019,059	757,275	674,324	683,771	671,537	656,391	623,765
Carmel Olefins	358,287	423,788	361,493	348,232	324,032	280,511	182,964	186,143
Gadiv	97,504	75,567	93,536	97,235	105,388	104,202	91,347	92,308
Ducor	-	-	-	-	-	-	2,684	2,746
Total sulfur oxides (SOx)	314,162	383,848	431,969	238,022	180,485	220,583	197,741	230,373
Fuels	314,162	383,848	431,969	238,022	180,485	220,583	197,741	230,373
Carmel Olefins	-	-	-	-	-	-	-	-
Gadiv	-	-	-	-	-	-	-	-
Ducor	-	-	-	-	-	-	-	-
Total benzene (C <sub>6</sub> H <sub>6</sub> )	3,401	2,491	2,231	554	571	411	350	315
Fuels	1,326	1,485	1,396	300	257	232	129	110
Carmel Olefins	1,152	494	513	123	64	66	123	87
Gadiv	923	512	322	132	250	113	99	118
Ducor	-	-	-	-	-	-	-	-



# Group's Data

	2016	2017	2018	2019	2020	2021	2022	2023
Water consumption in m³/year								
Total brackish water							1,809,508	2,000,886
Total brackish water in Israel	2,627,373	2,351,479	2,085,839	2,150,424	2,133,733	1,849,724	1,538,508	1,781,886
Fuels	2,206,942	1,875,515	1,604,368	1,559,622	1,592,456	1,270,600	1,038,624	1,199,712
Carmel Olefins	366,914	434,254	447,636	530,836	492,171	499,174	430,107	519,906
Gadiv	67,400	41,710	33,835	59,967	49,106	79,951	69,777	62,268
Ducor	-	-	-	-	-	-	271,000	219,000
Total potable water							3,030,461	3,597,025
Total potable water in Israel	6,548,927	3,486,630	2,748,576	3,085,874	3,018,690	3,691,528	3,027,701	3,594,906
Fuels	5,020,716	1,827,605	1,173,059	1,506,782	1,380,657	2,057,061	1,525,274	1,811,426
Carmel Olefins	1,193,935	1,347,360	1,255,106	1,341,735	1,383,981	1,384,710	1,241,756	1,557,100
Gadiv	334,276	311,665	320,411	237,357	254,053	249,757	260,671	226,380
Ducor	-	-	-	-	-	-	500	504
Carmel Eco	-	-	-	-	-	-	2,260	1,615
Total reclaimed wastewater	929,866	2,856,555	3,409,661	3,610,419	3,457,150	3,299,322	3,550,493	3,294,159
Fuels	929,866	2,856,555	3,409,661	3,610,419	3,457,150	3,299,322	3,550,493	3,294,159
Carmel Olefins	0	0	0	0	0	0	0	-
Gadiv	0	0	0	0	0	0	-	-
Total water consumption	10,106,166	8,694,664	8,244,076	8,846,717	8,609,573	8,840,574	8,390,462	8,892,070
Effluents, kg/year (Israel)								
Total mineral oil discharged into the river	2,492	-	3,262	6,402	6,043	-	-	-
Fuels	2,492	-	3,262	6,402	6,043	-	-	-
Carmel Olefins	-	-	-	-	-	-	-	-
Total mineral oil discharged to effluent treatment plant	822	3,765	4,199	4,278	3,410	1,426	1,912	1,655
Fuels	-	1,145	1,639	1,628	1,390	581	526	828
Carmel Olefins	822	2,620	2,560	2,650	2,020	846	1,386	827
Total TOC discharged into the river	27,191	6,304	5,919	11,682	12,105	1,927	2,523	1,768
Fuels	24,395	6,304	5,919	11,682	10,500	1,927	2,523	1,768
Carmel Olefins	2,796	-	-	-	1,605	-	-	-
Total TOC discharged into effluent treatment plant	50,899	86,620	84,674	60,250	60,527	49,071	55,290	63,704
Fuels	29,680	53,231	51,850	44,876	40,771	31,087	39,589	45,158
Carmel Olefins	21,219	33,389	32,824	15,374	19,756	17,984	15,701	18,546
Total discharges into the river	2,719,233	578,650	662,674	821,235	1,070,564	300,215	311,693	427,044
Fuels	-	542,855	522,487	667,397	843,831	20,5987	250,890	341,649
Carmel Olefins	-	35,794	140,187	153,838	226,733	94,228	60,803	85,395
Total wastewater in The Netherlands (Ducor)	-	-	-	-	-	-	6,779	5,087
Mineral oil discharged into surface water	-	-	-	-	-		52	67
TOC discharged to surface water	-	-	-	-	-		6,727	5,020

# Group's Data

	2016	2017	2018	2019	2020	2021	2022	2023
Waste in tons/year								
Total hazardous waste - treated	1,127	3,665	3,018	2,830	6,257	5,873	3,361	1,364
Fuels	295	1,760	979	593	4,578	3,463	1,742	160
Carmel Olefins	832	1,218	1,159	1,448	994	1,223	304	220
Gadiv	-	687	880	789	686	1,013	1,186	931
Ducor	-	-	-	-	-	-	129	53
Carmel Eco	-	-	-	-	-	-	-	-
Total hazardous waste - landfilled	9,561	1,774	972	3,319	877	1,686	3,013	3,806
Fuels	8,549	1,554	841	2,724	609	1,500	2,691	3,494
Carmel Olefins	259	209	124	66	23	42	198	48
Gadiv	753	11	8	529	246	144	124	263
Ducor	-	-	-	-	-	-	-	-
Total hazardous waste	10,688	5,439	3,990	6,149	7,134	7,386	6,374	5,170
Total hazardous waste in Israel	10,688	5,439	3,990	6,149	7,134	7,386	6,244	5,117
Total non-hazardous waste - treated	2,777	2,723	3,310	10,198	7,343	12,542	3,900	10,030
Fuels	2,274	2,184	2,633	8,836	6,567	11,158	2,626	7,653
Carmel Olefins	503	375	501	965	651	1,228	1,018	1,108
Gadiv	5	673	619	131	471	366	89	1,101
Ducor	-	-	-	-	-	-	167	168
Carmel Eco	-	-	-	-	-	-	-	-
Total non-hazardous waste - landfilled	2,755	2,378	2,189	1,899	1,168	1,128	1,794	1,613
Fuels	2,743	1,566	1,104	1,135	620	687	1,029	755
Carmel Olefins	5	673	619	131	471	366	565	406
Gadiv	7	139	466	633	77	74	119	87
Ducor	-	-	-	-	-	-	1	2
Carmel Eco	-	-	-	-	-	-	80	363
Total non-hazardous waste	5,532	5,101	5,499	12,097	8,511	13,670	5,694	11,643

# Group's Data

## Employee turnover rate

	2019		2020		2021		2022 including The Netherlands (Ducor)		*2023	
	Hired employees	Exited employees	Hired employees	Exited employees	Hired employees	Exited employees	Hired employees	Exited employees	Hired employees	Exited employees
Men	4%	6%	3%	4%	7%	8%	11%	6%	7%	9%
Women	1%	1%	0%	1%	1%	1%	2%	2%	1%	1%
Age 30 or lower	1%	0%	1%	0%	3%	0%	4%	1%	3%	3%
Aged 30-50	3%	3%	2%	2%	5%	3%	7%	5%	4%	4%
Over 50	0%	4%	0%	3%	1%	5%	2%	3%	1%	1%
<b>Total</b>	<b>4%</b>	<b>7%</b>	<b>3%</b>	<b>5%</b>	<b>8%</b>	<b>8%</b>	<b>13%</b>	<b>9%</b>	<b>8%</b>	<b>10%</b>

\* Including Carmel Eco and Ducor

## Bazan Group employees

	2019	2020	2021	2022	2023
<b>ISRAEL</b>					
Company headquarters and management	274	263	257	274	269
Fuels Business Unit	549	541	548	582	569
Polyolefins Business Unit	448	447	447	466	468
Aromatics and Oils Business Unit	94	90	80	84	86
<b>Total direct employees in Israel</b>	<b>1,365</b>	<b>1,341</b>	<b>1,332</b>	<b>1,406</b>	<b>1,392</b>
Service providers and employees of contractors and service providers of the Bazan Group	1,610	1,830	1,881	2,359	1,716
<b>DUCOR</b>					
Total direct employees in The Netherlands	-	-	-	99	97
Service providers and employees of contractors and service providers of Ducor	-	-	-	30	38
<b>Carmel Eco</b>					
Total direct employees in The Netherlands	-	-	-	-	34
Service providers and employees of contractors and service providers of Carmel Eco	-	-	-	-	0

## Diversity and inclusion at the Bazan Group - Israel\*\*

	2019		2020		2021		2022		2023	
Employee rank	% of women	% of under-employed groups	% of women	% of under-employed groups	% of women	% of under-employed groups	% of women	% of under-employed groups	% of women	% of under-employed groups
Senior management	33%	11%	27%	9%	27%	10%	40%	7%	40%	7%
Management	15%	3%	16%	3%	19%	3%	19%	4%	19%	4%
Non-management employees	14%	9%	14%	9%	14%	9%	14%	10%	14%	10%
<b>Total</b>	<b>15%</b>	<b>8%</b>	<b>15%</b>	<b>8%</b>	<b>15%</b>	<b>8%</b>	<b>14%</b>	<b>9%</b>	<b>14%</b>	<b>9%</b>

\* Data in the tables refer to tenured employees. Excluding Carmel Eco

# Group's Data

## Bazan Group\* training hours – average training hours per employee

	2018	2019	2020	2021	2022	2023
Women	31	24	10	19	31	30
Men	38	35	21	29	42	41
<b>Total</b>	<b>37</b>	<b>34</b>	<b>19</b>	<b>27</b>	<b>41</b>	<b>39</b>

\* Excluding Carmel Eco and Ducor.

## Parental leave\*

	2019			2020			2021			2022			2023*		
	W	M	Total	W	M	Total	W	M	Total	W	M	Total	W	M	Total
Employees entitled to parental leave	12	63	75	14	58	72	10	62	72	10	54	64	9	54	63
Employees who exercised their entitlement to parental leave	12	1	13	14	1	15	10	0	10	10	2	12	9	14	23
Employees who returned to work after parental leave	4	1	5	5	1	6	10	0	10	6	2	8	3	1	4
Employees who remained at work 12 months after returning from parental leave	4	1	5	12	1	13	10	0	10	0	0	0	7	13	20

\* \*starting 2023 Parental leave data includes Docur

## Employee feedback sessions

	2019	2020	2021	2022 Israel	2022 The Netherlands	2022 Israel	2022 The Netherlands
Percentage of employees given periodic professional evaluation and feedback	73%	80%	100%	100%	81%	100%	56%

\* Net of Carmel Eco



# Group's Data

## Workplace accidents

	2017	2018	2019	2020	2021	2022	2023
<b>No. of workplace accidents* (Israel)</b>							
Company employees	46	18	18	9	7	26	12
Contract workers	25	24	16	3	11	15	9
<b>All employees</b>	<b>71</b>	<b>42</b>	<b>34</b>	<b>12</b>	<b>18</b>	<b>41</b>	<b>21</b>
<b>No. of workplace accidents - Ducor</b>							
Company employees	-	-	-	-	-	2	0
Contract workers	-	-	-	-	-	4	1
<b>All employees</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>1</b>
<b>No. of workplace accidents - Carmel Eco</b>							
Company employees	-	-	-	-	-	-	4
Contract workers	-	-	-	-	-	-	0
<b>All employees</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>
<b>No. of workplace accidents* (total for Bazan Group)</b>							
Company employees	-	-	-	-	-	28	16
Contract workers	-	-	-	-	-	19	10
<b>All employees</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47</b>	<b>26</b>
<b>Rate of accidents - LTIR (Israel)</b>							
Company employees	2.9	1.2	1.2	0.62	0.49	1.79	0.79
Contract workers	1.9	1.8	1.34	0.36	1.26	1.15	0.91
<b>All employees</b>	<b>2.4</b>	<b>1.5</b>	<b>1.26</b>	<b>0.53</b>	<b>0.78</b>	<b>1.49</b>	<b>0.84</b>
<b>Rate of accidents - LTIR (The Netherlands)</b>							
Company employees	-	-	-	-	-	3.5	0.0
Contract workers	-	-	-	-	-	14	1.1
<b>All employees</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>1.1</b>
<b>Rate of fatal accidents</b>							
Bazan Group*	-	-	0	0	0	0	0
<b>Average days of absence due to safety incidents (Company employees) – SR** - Israel</b>							
Company employees	7	18	13	23	27	17	31.6

\*Net of Carmel Eco

\*\*Injury rate (IR) - Weighted number of accidents per 200,000 hours of work.

Reporting on the number of workplace accidents, the average incident rate (IR) and severity rate of work absences (SR) are reported according to the guidelines of the Occupational Safety and Health Administration (OSHA) in the United States.

# GRI Index

Indicator no.	Indicator	Source	Location
<b>The Organization and Its Reporting Practices</b>			
<b>2-1</b>	Organizational details	ESG Report	p. 12-15
<b>2-2</b>	Entities included in the organization's sustainability reporting	ESG Report	p. 16-18, 124
<b>2-3</b>	Reporting period, frequency and contact point	ESG Report	p. 6-7, 124
<b>2-5</b>	External assurance	ESG Report	p. 126-127
<b>2-6</b>	Activities, value chain and other business relationships	ESG Report	p. 16-21
<b>2-7</b>	Employees	ESG Report	p. 134
<b>2-8</b>	Workers who are not employees	ESG Report	p. 134
<b>Governance &amp; Ethics</b>			
<b>2-9</b>	Governance structure and composition	ESG Report	p. 118-119
<b>2-10</b>	Nomination and selection of the highest governance body	Periodic Report for 2023	Part D Additional Details about the Corporation Regulation 26, p. 9-16
<b>2-11</b>	Chair of the highest governance body	Periodic Report for 2023	Part D Additional Details about the Corporation Regulation 26, p. 9-16
<b>2-12</b>	Role of the highest governance body in overseeing the management of impacts	ESG Report	p. 120
<b>2-13</b>	Delegation of responsibility for managing impacts	ESG Report	p. 120
<b>2-14</b>	Role of the highest governance body in sustainability reporting	ESG Report	p. 120
<b>2-17</b>	Collective knowledge of the highest governance body	ESG Report	p. 120
<b>2-19</b>	Remuneration policies	Periodic Report for 2023	Chapter A Description of the Corporation's Business p. 66
<b>2-20</b>	Process to determine remuneration	Periodic Report for 2023	Chapter A Description of the Corporation's Business p. 66

# GRI Index

Indicator no.	Indicator	Source	Location
<b>Strategy, Policies and Practices</b>			
<b>2-22</b>	Statement on sustainable development strategy	ESG Report	p. 4-7, 34-35
<b>2-23</b>	Policy commitments	ESG Report	p. 115-117
<b>2-24</b>	Embedding policy commitments	ESG Report	p. 115-117
<b>2-26</b>	Mechanisms for seeking advice and raising concerns	ESG Report	p. 115-117
<b>2-27</b>	Compliance with laws and regulations	ESG Report Periodic Report for 2023	p. 115 Part C Consolidated financial statements Note 20, 69-83
<b>2-28</b>	Membership associations	ESG Report	p. 84-87
<b>Stakeholder Engagement</b>			
<b>2-29</b>	Approach to stakeholder engagement	ESG Report	p. 114-115
<b>Employment &amp; OHS</b>			
<b>2-30</b>	Collective bargaining agreements	ESG Report	p. 100
<b>Material Topics</b>			
<b>3-1</b>	Process to determine material topics	ESG Report	p. 38-39
<b>3-2</b>	List of material topics	ESG Report	p. 38-39
<b>Economic Performances</b>			
<b>201-1</b>	Direct economic value generated and distributed	Periodic Report for 2023	Part C Consolidated financial statements p. 9-14
<b>201-3</b>	Defined benefit plan obligations and other retirement plans	Periodic Report for 2023	Part C Consolidated financial statements Note 3, 31-33 Note 18, 65-68
<b>Indirect Economic Impacts</b>			
<b>203-2</b>	Significant indirect economic impacts	ESG Report	p. 82-83

# GRI Index

Indicator no.	Indicator	Source	Location
<b>Anti-Competitive Behavior</b>			
<b>206-1</b>	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Periodic Report for 2023	Part C Consolidated financial statements Note 20, 69-83
<b>Energy</b>			
<b>302-1</b>	Energy consumption within the organization	ESG Report	p. 52-53, 130
<b>302-4</b>	Reduction of energy consumption	ESG Report	p. 49-53
<b>Water &amp; Effluent</b>			
<b>303-1</b>	Interactions with water as a shared resource	ESG Report	p. 69-73
<b>303-2</b>	Management of water discharge-related impacts	ESG Report	p. 69-73, 132
<b>303-3</b>	Water withdrawal	ESG Report	p. 69-73, 132
<b>303-4</b>	Water discharge	ESG Report	p. 69-73, 132
<b>303-5</b>	Water consumption	ESG Report	p. 69-73, 132
<b>Emissions</b>			
<b>305-1</b>	Direct (Scope 1) GHG emissions	ESG Report	p. 46-51, 131
<b>305-2</b>	Energy indirect (Scope 2) GHG emissions	ESG Report	p. 46-51, 131
<b>305-3</b>	Other indirect (Scope 3) GHG emissions	ESG Report	p. 46-51, 131
<b>305-7</b>	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	ESG Report	p. 46-51, 131
<b>Waste</b>			
<b>306-1</b>	Waste generation and significant waste-related impacts	ESG Report	p. 66-67
<b>306-3</b>	Waste generated	ESG Report	p. 66-68, 133
<b>306-4</b>	Waste diverted from disposal	ESG Report	p. 66-68, 133
<b>306-5</b>	Waste directed to disposal	ESG Report	p. 66-68, 133
<b>Employment</b>			
<b>401-1</b>	New employee hires and employee turnover	ESG Report	p. 134
<b>401-2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees	ESG Report	p. 96-97
<b>401-3</b>	Parental Leave	ESG Report	p. 135



GRI Index

Indicator no.	Indicator	Source	Location
Occupational Health & Safety			
403-1	Occupational health and safety management system	ESG Report	p. 102-109
403-2	Hazard identification, risk assessment, and incident investigation	ESG Report	p. 102-109
403-5	Worker training on occupational health and safety	ESG Report	p. 102-109
403-6	Promotion of worker health	ESG Report	p. 102-111
403-9	Work-related injuries	ESG Report	p. 106-107, 136
Training & Education			
404-1	Average hours of training per year per employee	ESG Report	p. 97
404-2	Programs for upgrading employee skills and transition assistance programs	ESG Report	p. 96-97, 101
404-3	Percentage of employees receiving regular performance and career development reviews	ESG Report	p. 96-97
Diversity & Equal Opportunity			
405-1	Diversity of governance bodies and employees	ESG Report	p. 98-100, 134
405-2	Ratio of basic salary and remuneration of women to men	ESG Report	p. 98

SASB Sector Level: OIL & GAS -  
REFINING & MARKETING

Table 1. Sustainability Disclosure Topics & Accounting Metrics

SB DISCLOSURE TOPIC	DESCRIPTION	CATEGORY	UNIT OF MEASURE	CODE	RESPONSE
Greenhouse Gas Emissions	(1) Gross global Scope 1 emissions, percentage	Quantitative	metric tons (t) CO2-e, percentage (%)	EM-RM-110a.1	Sustainability Report, P. 46, 130
	Discussion of long-term and short-term	Discussion and Analysis	n/a	EM-RM-110a.2	Sustainability report, P.48-49
Air Quality	Air emissions of the following pollutants: (1)	Quantitative	Metric tons (t)	EM-RM-120a.1	Sustainability Report, P.56
	Number of refineries in or near areas of dense population	Quantitative	number	EM-RM-120a.2	1
Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-RM-140a.1	Sustainability Report, P 69-71, 132
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Quantitative	Number	EM-RM-120a.1	0
Hazardous Materials Management	Amount of hazardous waste generated, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	EM-RM-150a.1	Sustainability report, P 66-67,133
	(1) Number of underground storage tanks (USTs), (2) number of UST releases requiring cleanup, and (3) percentage in states with UST financial assurance funds	Quantitative	Number, Percentage (%)	EM-RM-150a.2	0
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2)	Quantitative	Rate	EM-RM-320a.1	sustainability report, p.106, 136
	Discussion of management systems used to integrate a culture of safety	Discussion and Analysis	n/a	EM-RM-320a.2	Sustainability report, P102-109

SB DISCLOSURE TOPIC	DESCRIPTION	CATEGORY	UNIT OF MEASURE	CODE	RESPONSE
Product Specifications & Clean Fuel Blends	Percentage of Renewable Volume Obligation (RVO) met through: (1) production of renewable fuels, (2) purchase of "separated" renewable identification numbers (RIN)	Quantitative	Percentage (%)	EM-RM-410a.1	We :applicable Not produce not do fuels renewable yet.
	Total addressable market and share of market for advanced biofuels and associated infrastructure	Quantitative	Reporting currency, Percentage (%)	EM-RM-410a.2	We :applicable Not produce not do fuels renewable yet.
Pricing Integrity & Transparency	Total amount of monetary losses as a result of legal proceedings associated with price fixing or price manipulation	Quantitative	Reporting currency	EM-RM-520a.1	This is not relevant due to local laws and regulations in areas of operation
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	EM-RM-530a.1	At this moment, Bazan is not able to report on this topic and is planning to do so in future reports.
Critical Incident Risk Management	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1) and lesser consequence (Tier 2)	Quantitative	Rate	EM-RM-540a.1	Data is unavailable at this time
	Challenges to Safety Systems indicator rate (Tier 3)	Quantitative	Rate	EM-RM-540a.2	Data is unavailable at this time
	Discussion of measurement of Operating Discipline and Management System Performance through Tier 4 Indicators	Discussion and Analysis	n/a	EM-RM-540a.3	Data is unavailable at this time



