

# CREATING SOLUTIONS FOR A **SUSTAINABLE FUTURE**

**THRACE GROUP**  
SUSTAINABLE DEVELOPMENT REPORT 2022



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# Introduction



## About the Report

[GRI: 2-3, 2-4, 2-5, 2-6, ATHEX ESG: A-G5]

The Report covers the period from January 1, 2022 to December 31, 2022 and was prepared by the Group's Sustainable Development Department. It has been compiled according to GRI standards, while for the sake of consistency, corresponding data from the two previous years are also presented. Additionally, other valid standards and recommendations from internationally recognized initiatives have been taken into account to ensure compliance with a comprehensive disclosure framework, such as SASB standards for the chemical sector, TCFD's recommendations for climate-related financial disclosures, the Athens Stock Exchange ESG Information Disclosure Guide, in which the Group participates in the ATHEX ESG index, as well as the impact on the UN Sustainable Development Goals (SDGs).

For clarifications regarding terminologies, an Abbreviations Index is provided. Any deviations at the last digit level of quantitative information in this Report are due to rounding of amounts. The reported values have been verified by a certified entity. Significant differences that may have occurred in previous years are attributed to the detailed recalculations of data and conversion factors.

Corresponding information has been included and extensively analyzed in the [Annual Financial Report, Section 12: Non-Financial Information Report](#).

## Message from the President

In an era characterized by multiple crises in the economy, health, energy, and geopolitical stability, it is crucial for businesses to take responsibility and lead in creating a more sustainable future. With the core focus on holistic sustainable development in the long term, our Group is constantly evolving through innovation while also placing special emphasis on environmental and social contributions. The strategy for continuous growth, coupled with a commitment to sustainability, lays the foundations for the future prospects of the group, which is dynamically navigating the new business environment that is shaping up. It can meet challenges and seize opportunities. The Group consistently invests in strategic areas that lead to a continuous enhancement of its productive capacity and accelerates the exceptional progress it has already made in recycling and energy consumption with impressive results. The positive evolution of the Group is the outcome of a journey accompanied by significant investments in the right direction.

Konstantinos Halioris



## Message from the CEO

At Thrace Group, the core of all our business practices is the creation of value for society and the environment, while operating under a strong governance framework. Our environmental strategy, within the framework of the circular economy and climate change, includes actions such as production of sustainable products, waste reduction, utilization of recycling opportunities, investment in renewable energy sources, and reduction of greenhouse gas emissions. The exceptional performance of our Group is reflected in evaluations received from reputable independent international organizations, which serve as strong evidence of our team's efforts and underscore our commitment to the principles of sustainable development.

Dimitris Malamos

## Actions and Performance in 2022



### INCREASE IN THE USE OF RECYCLED RAW MATERIALS

with the use of 13.4 thousand tons, which is an increase of 17% compared to 2021



### PROPER WASTE MANAGEMENT

with the goal of continuous improvement in the final disposal rate in Landfills



### PRODUCT CERTIFICATION

with the aim of promoting recyclability and ensuring traceability



### REDUCTION OF ENERGY CONSUMPTION

achieved a 3.45% reduction in energy intensity compared to 2021 concerning production volume



### USE OF RENEWABLE ENERGY SOURCES

with expansion of photovoltaic panels with a total capacity increase of 6.7 MW



### RECORDING CARBON FOOTPRINT

achieved a 1% reduction in emissions intensity (scope 1,2) concerning production volume compared to 2021



### NET ZERO TARGET

with the commitment to establish scientific targets for reducing carbon footprint



### CDP ASSESSMENT

received a B score and climbed 2 ranks compared to 2021. The global average is C, while the industry average is B



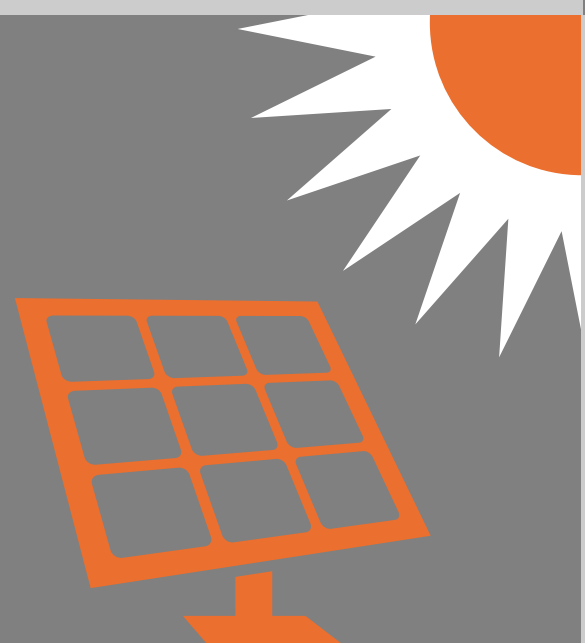
### ECOVADIS ASSESSMENT

achieved 5 silver distinctions for performance related to society and the environment



### CIRCULAR ECONOMY PLATFORM

involves 130 cooperating members


















# The Group



## Business Model

[GRI: 2-1, 2-6, ATHEX ESG: A-G1]

 <p>Comprises of <b>14 companies</b> worldwide engaged in active operations</p>	 <p>Engages in <b>3 sectors:</b> technical textiles, packaging solutions, hydroponic greenhouses</p>	 <p>Covers <b>25 market segments</b> with products and solutions</p>
 <p>Employs <b>2,044 employees</b>, including joint ventures</p>	 <p>Develops a sales network in <b>80 countries</b></p>	 <p>Implements <b>28 technologies</b> in production processes</p>
 <p>Operates in <b>9 countries</b> with production, marketing, and distribution companies</p>	 <p>Group's net sales amount to <b>€394.4 million</b></p>	 <p>Supports circular economy principles with <b>120 product groups</b></p>
 <p>Operates <b>6.7 MW</b> photovoltaic net metering systems</p>	 <p>Processes over <b>110,000 MT</b> of raw materials from polypropylene and polyethylene</p>	 <p>Commits to replace <b>8,500 MT</b> of primary raw materials with recycled plastic by 2025</p>
 <p>Utilizes <b>13,407 MT</b> of recycled material from production residues and external sources</p>	 <p>Reuses <b>100%</b> of internally generated production waste</p>	 <p>Produces <b>100%</b> recyclable products</p>

## Vision

[ATHEX ESG: A-G1]

**To be the most valuable partner for our customers and suppliers and to consistently increase shareholders' value while ensuring a prosperous future for all individuals working in Thrace Group.**



## History



**1977**

In 1977, Stavros Halioris founded the company Thrace Plastics SA in Xanthi



**1995**

In 1995, the company was listed on the Athens Stock Exchange

**1997 - 2014**

From 1997 to 2014, companies that now constitute the Thrace Group were established or acquired, with active commercial and/or production activities in the technical fabrics and packaging sectors: Thrace Nonwovens & Geosynthetics SA, Thrace Polyfilms SA, Thrace Eurobent SA (as a joint venture), Thrace Pack SA, Don & Low Ltd (Scotland), Thrace Synthetic Packaging Ltd (Ireland), Thrace Ipoma SA (Bulgaria), Thrace Greiner Packaging SRL (as a joint venture, Romania), Thrace Polybulk AB (Sweden), Thrace Polybulk AS (Norway), Thrace Plastics Packaging DOO (Serbia), Lumite Inc (as a joint venture, USA)



**2013**

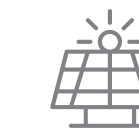
In 2013, in collaboration with Elastron SA, Thrace Greenhouses were founded, utilizing the geothermal fields of Xanthi

**2017**



From 2017, following internal restructuring, the company Thrace Plastics SA continued to operate as Thrace Plastics Holding SA

**2021**



From 2021, commencement of an investment plan in photovoltaic systems



**2022**

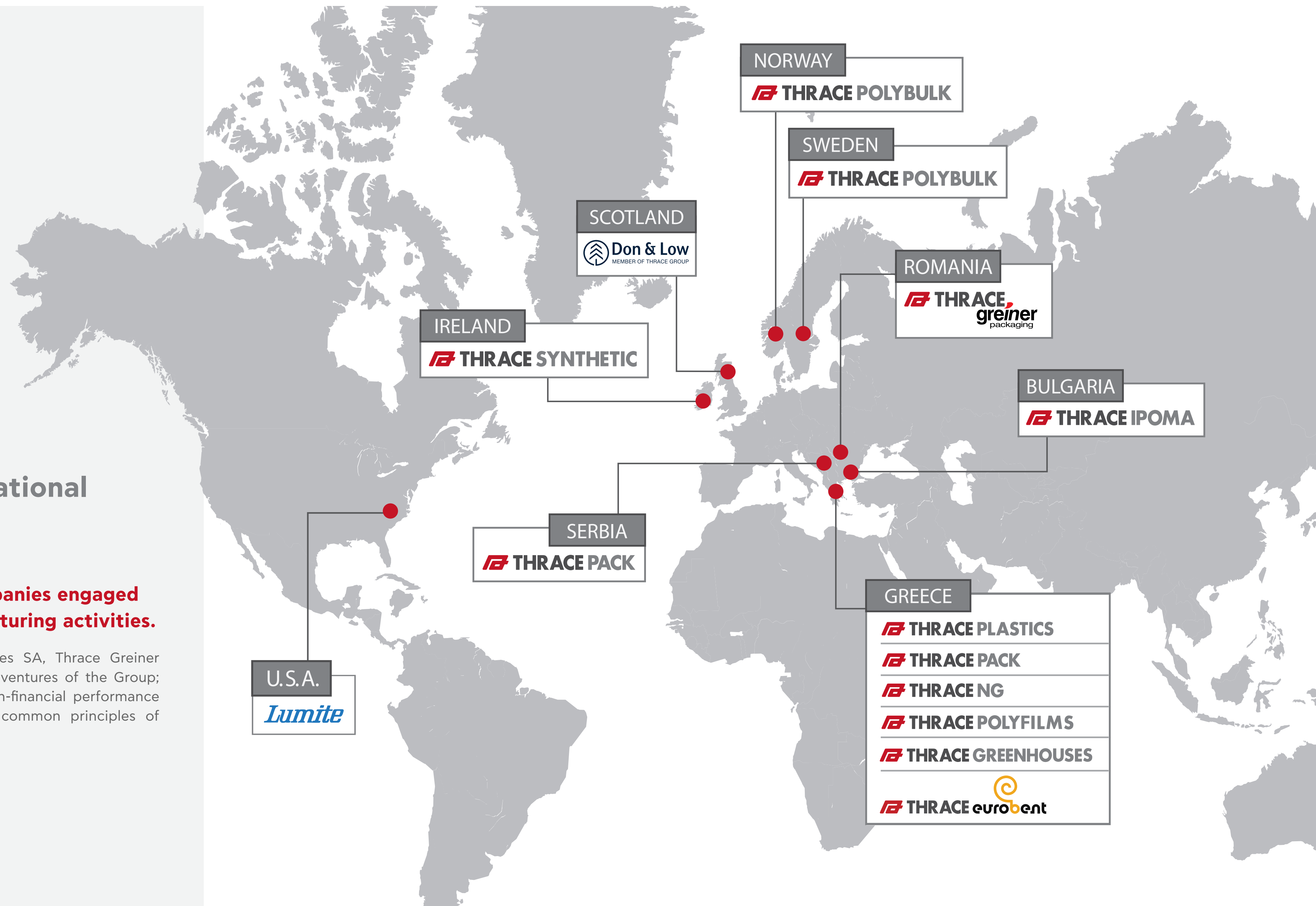
From 2022, a central recycling line has been in operation

## Domestic and International Presence

[GRI: 2-1, 2-2, ATHEX ESG: A-G1]

**The Group consists of 14 companies engaged in commercial and/or manufacturing activities.**

Thrace Eurobent SA, Thrace Greenhouses SA, Thrace Greiner Packaging SRL, and Lumite Inc are joint ventures of the Group; however, the overall data concerning non-financial performance indicators are included, as they apply common principles of sustainable development with the Group.



**Business sectors of activity****Technical Fabrics Sector**

[GRI: 2-6, ATHEX ESG: A-G1]

- Production and trade of synthetic fabrics for industrial and technical uses.
- Broad and diversified product portfolio.
- Europe-based production with a global footprint.
- Extensive sales network, mainly in Europe and America.

Product Families

Geotextiles (woven, nonwoven)

Fabrics

Nets

Yarns

Geogrids

Membranes

Strapes

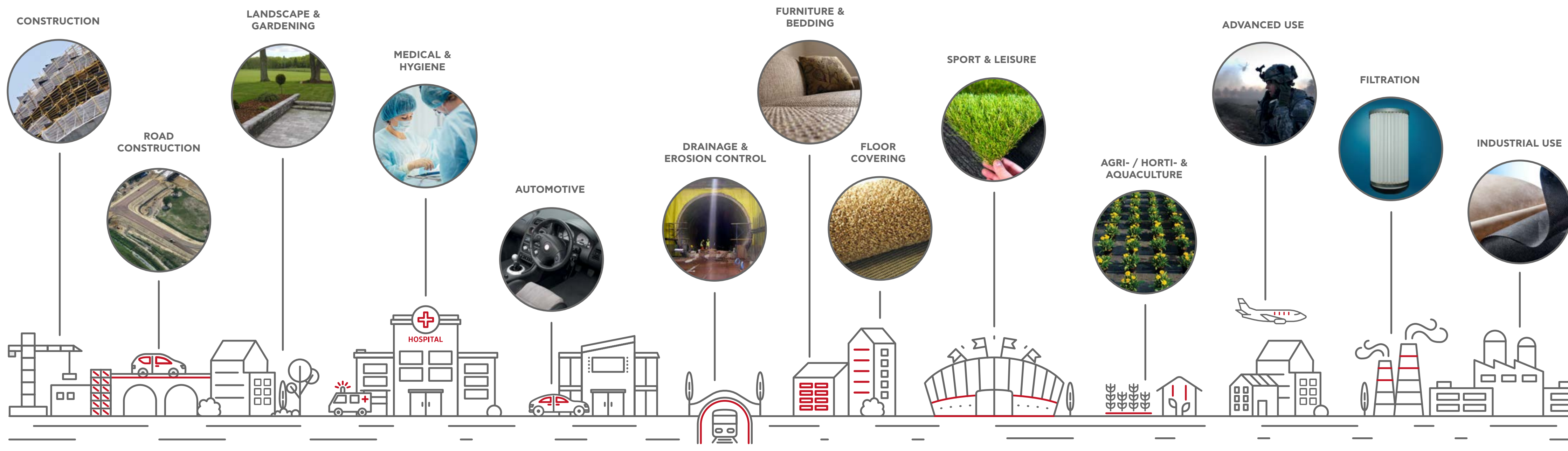
Fibres

Geocomposites

Film

Ropes

Applications



THRACE NG

GREECE

 THRACE euro**cent** Don & Low  
MEMBER OF THRACE GROUP

SCOTLAND

THRACE SYNTHETIC

IRELAND

THRACE POLYBULK

NORWAY &amp; SWEDEN

Lumite

USA



## Business sectors of activity

# Packaging Sector

[GRI: 2-6, ATHEX ESG: A-G1]

- Production and trade of food and industrial product packaging.
- Pioneer in the Northern European market.
- Europe-based production.
- Extensive sales network with continuous volume growth on an annual basis.

### Product Families

FIBC / filling solutions

Container liners / cargo protection

Thermoforming cups

Garbage bags

Bags / FFS film

Packaging fabrics

Crates

Twines

Packaging / pallet covering film

Buckets / pails / containers

Bag in box

### Applications

#### INDUSTRIAL USE (RAW MATERIALS, CHEMICALS)



#### TRANSPORTATION



#### AGRICULTURAL USE (FERTILIZERS)



#### CONSTRUCTION



#### PAINT INDUSTRY



#### FOOD



#### HOUSEHOLD PRODUCTS



#### HORECA HOTEL, RESTAURANT AND CATERING INDUSTRY



**THRACE PACK**

GREECE & SERBIA

**THRACE POLYFILMS**

GREECE

**THRACE IPOMA**

BULGARIA

**THRACE**  
greiner  
packaging

ROMANIA

**THRACE SYNTHETIC**

IRELAND

**Business sectors of activity****Agricultural Sector**

[GRI: 2-6, ATHEX ESG: A-G1]

- The largest hydroponic greenhouses in Northern Europe.
- The only greenhouses in the world heated exclusively by geothermal energy.
- Greek vegetables with almost zero CO2 footprint.
- Cultivation based on the highest standards.

Product Families



Cluster Tomato



Beef Tomato



Eggplant



Mini Cucumber 600gr



Mini Cucumber



Cucumber



Mini Tomato 500gr



Mini Cucumber 750gr

Practices

HYDROPONIC CULTIVATION



GEOTHERMAL ENERGY



CULTIVATION CARE



POST-HARVEST CARE



PACKAGING



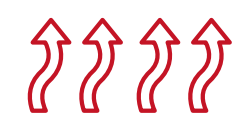
DISTRIBUTION



PRODUCT ON THE SHELF



MARKET



## Distinctions and Evaluations

- Participation in the international organization **CDP**, which evaluates organizations regarding their environmental impacts. In 2022, the Group climbed 2 ranks in the rating hierarchy, receiving a "B" distinction for its performance in relation to climate change, with external certification, confirming that it is on the same scale as the industry average while exceeding the global average.



- Participation in the **Science Based Targets Initiative (SBTi)**, which validates targets for reducing emissions based on the most credible scientific data on climate change. In 2022, the Group committed to setting scientifically based carbon reduction targets and their validation and has already initiated this process.



- Participation in the international organization **EcoVadis**, which evaluates organizations on their sustainable business practices. In 2022, the Group received 5 silver distinctions through the companies Pack, Nonwovens & Geosynthetics, Polyfilms, Greiner and Ipoma.



## Participations in Initiatives

[GRI: 2-28]

	Global association of nonwovens and related industries (EDANA)
	Polyolefin Circular Economy Platform (PCEP) organization
	Circular Plastics Alliance (CPA) initiative
	Non-profit trade association Synthetic Turf Council (STC)
	European Man-Made Fibres Association (CIRFS)
	European Association of Geosynthetic Manufacturers (EAGM)
	Association of Plastics Industries of Greece (SVPE)
	Association of the Greek Manufacturers of Packaging and Materials (AGMPM)
	Federation of Industries and Enterprises (SEV)

## Certifications

<b>ISO 14001:2015</b>	Environmental Management
<b>ISO 45001:2018</b>	Health and Safety Management
<b>ISO 50001:2018</b>	Energy Management
<b>ISO 9001:2015</b>	Quality Management
<b>ISO 13485:2016</b>	Quality Management for Medical Devices
<b>ISO 22000:2018</b>	Food Safety
<b>ISCC PLUS</b>	Certification of Sustainable Sourcing of Raw Materials
<b>BRC, IFS, FDA, HALAL</b>	Food Safety and Quality
<b>Global GAP</b>	Implementation of Good Agricultural Practices
<b>EuCertPlass</b>	Recycling of Secondary Raw Materials
<b>Recyclclass</b>	Content of Recycled Material
<b>OK Recycled</b>	Calculation of Recycled Content
<b>CoVid Shield</b>	Health and Safety
<b>Oeko-Tex® Standard 100</b>	Content of Harmful Substances

# Approach to Sustainable Development



## The adoption of sustainable practices is a fundamental pillar of our strategy

[GRI: 2-3, ATHEX ESG: C-G2]

Thrace Group, responding to modern challenges, remains committed to its longstanding dedication and adherence to ESG goals and substantial contributions to a sustainable future. We, as the Sustainable Development Department, along with all members of the Group, serve this commitment, aiming for a comprehensive understanding of the broad scope covered by the goals and our improvement in each one of them.

The Group is continuously growing and expanding rapidly. It develops in terms of its financial performance and the direct and indirect value it creates, as well as the products it produces. Simultaneously, it demonstrates tangible respect for society and the environment, with Sustainable Development being a "polymer" collaboration at the core of its strategy and culture.

### Ioannis Sideris

Chief Sustainability Officer

### Ioannis Nathanail

Sustainability Manager

The Group, through essential issues, focuses on **7 out of the 17 Sustainable Development Goals (SDGs)** in which it monitors its progress.



## Framework

The Group continually aligns with the most significant Sustainable Development initiatives. At the core of all Group's business practices lies the creation of value for society and the environment, operating on the basis of a strong governance framework.

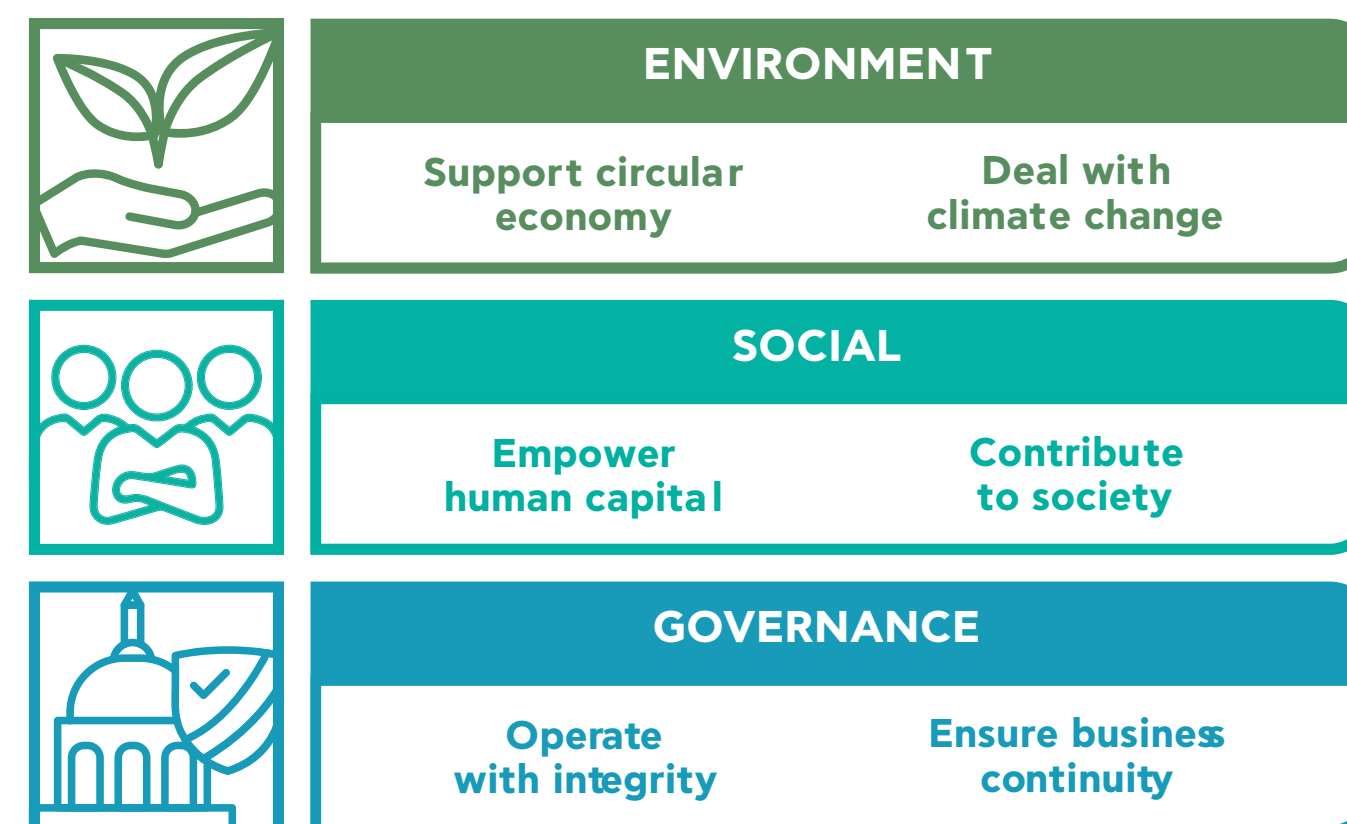


## Policy

[GRI: 2-4, 2-22, 2-23, ATHEX ESG: C-G4]

The Group seeks to implement practices promoting Sustainable Development and is committed to respecting human factors, society, and the environment, in order to remain a reliable social partner.

## Principles



## Supervision

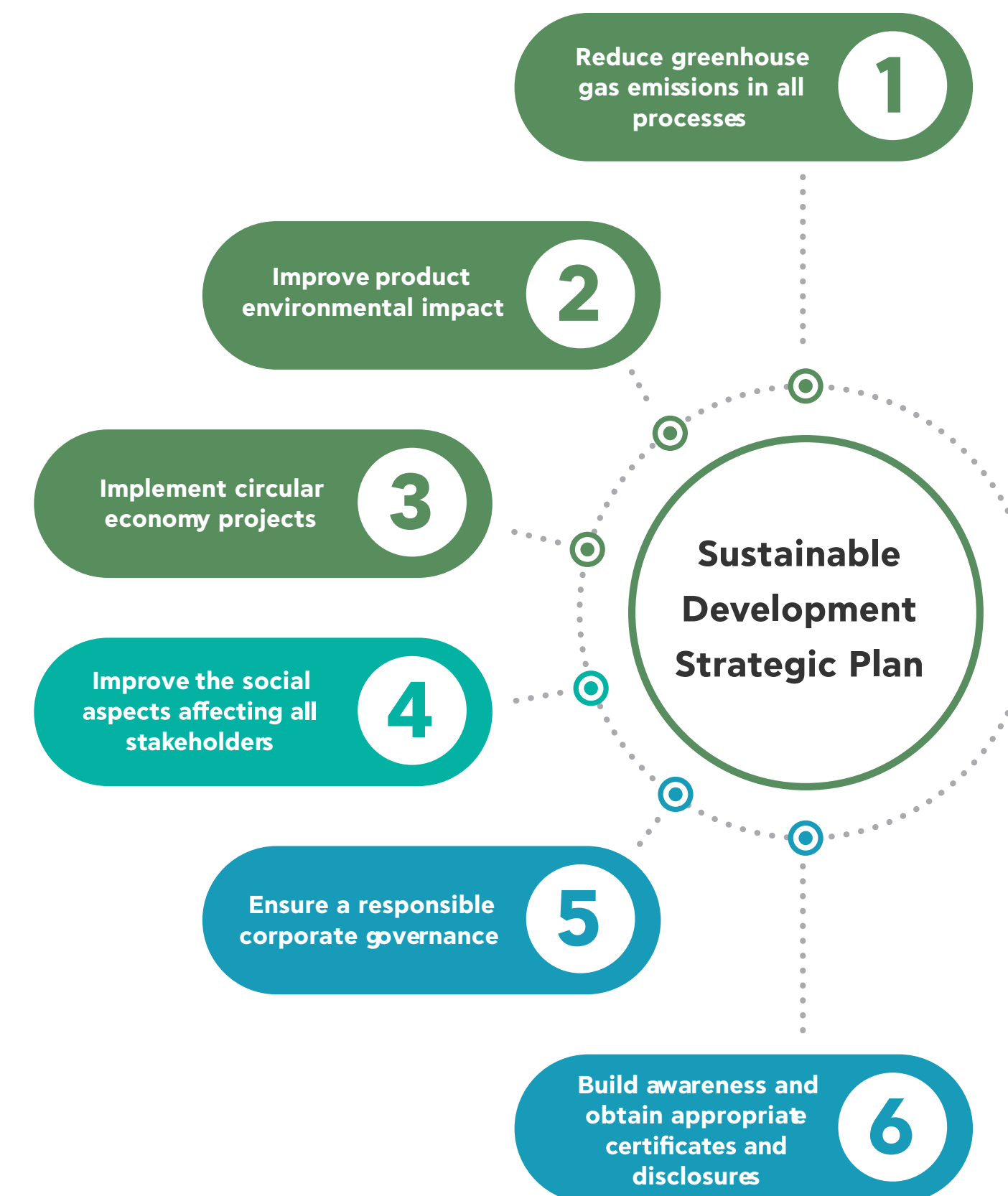
[GRI: 2-13, 2-14, ATHEX ESG: C-G2]

The supervision of the Sustainable Development Policy's implementation is the responsibility of the Sustainability Committee (Environment-Society) and the Audit Committee (Corporate Governance) at the Board level and the Sustainable Development Directorate at the administrative level.

## Strategy

[GRI: 2-22, SASB: RT-CH-110a.2, ATHEX ESG: SS-E1]

The Group follows a 5-year Strategic Sustainable Development Plan based on the following strategic axes, each of which is analyzed into specific actions, initiatives, and objectives:



## Risk Management

[GRI: 2-25, ATHEX ESG: SS-G3]

The Group has adopted a Risk Management Framework, aimed at effectively managing risks and integrating Risk Management Policy and Procedures.

The purpose of the Framework is:

- To promote a unified approach in risk management for all Group companies.
- To define roles and responsibilities regarding risk management.
- To set the Risk Appetite and Risk Tolerances.
- To ensure consistency and transparency in risk assessment and management.
- To provide timely updates and regular monitoring of risks by Management and other stakeholders.

## Stakeholder engagement

[GRI: 2-6, 2-29, ATHEX ESG: C-S1]

The Group has established a Corporate Communication Policy and communicates through formal and informal processes with stakeholder groups affected by its activities and those influencing its strategy, contributing to its more effective functioning.

More specifically, the following objectives are pursued:

- Compliance with stock exchange regulations that companies listed on the Athens Stock Exchange are obliged to follow, as well as securities law in general.
- Establishing the right infrastructure for dialogue with external stakeholders (stakeholders) through the establishment of transparent, reliable, and consistent external communication.
- Adherence to confidentiality and intellectual property rules.
- Defending the credibility of the Group.

## Materiality Analysis

[GRI: 3 1, 3-1, 3-2, ATHEX ESG: C-G3]

At the end of 2022, a redefinition of significant issues related to the Group was conducted, and their prioritization was based on the stages of the GRI methodology (Understanding and updating the business model, recording and validating significant issues, prioritizing and validating material issues).

### Stage 1: Understanding the business model

- **Implementation:** Sustainability Department
- **Sources:** sustainable development strategy and approach, policies and regulations, Group's risk analysis, UN Sustainable Development Goals, study of industry companies' material issues, internationally recognized reporting standards

### Stage 2: Identifying significant impacts

- **Implementation:** Sustainability Department & Sustainability Committee
- 24 significant topics were identified

*\*All the topics are included in the Appendix*

### Stage 3: Prioritizing significant issues

- **Implementation:** Sustainability Department
- **Stakeholders:** Shareholders & Investor Community, Board of Directors, Management, Employees, Customers, Suppliers, Government, NGOs & Civil Society, Business Associations
- 10 material topics were characterized

### Stage 4: Validation of material issues

- **Implementation:** Sustainability Committee & Audit Committee
- The material topics were validated

The topics that arose as material and were confirmed by the **Sustainability Committee and the Audit Committee** are as follows:



Primary & recycled raw materials



Energy efficiency & renewable sources



Product innovation & lifecycle



Direct & indirect greenhouse gas emissions



Customer health, safety & satisfaction



Employee health, safety & well-being



Product quality, safety & information



Economic value created & distributed



Business ethics & anti-corruption



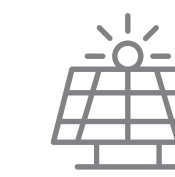
Regulatory compliance & policies

# Environmental Issues



**17%**

increase in the use of recycled raw materials in 2022 compared to 2021



**6.7MW**

operation of photovoltaic systems with a clear expansion plan



**6.23%**

use of energy from renewable sources in 2022



**-3.45%**

reduction in energy intensity in 2022



**-3.1%**

decrease in direct and indirect emissions (scope 1, 2, 3) in 2022



**-1.0%**

reduction in the intensity of direct and indirect emissions (scope 1 and 2) per unit of production volume

# Product Innovation & Life Cycle

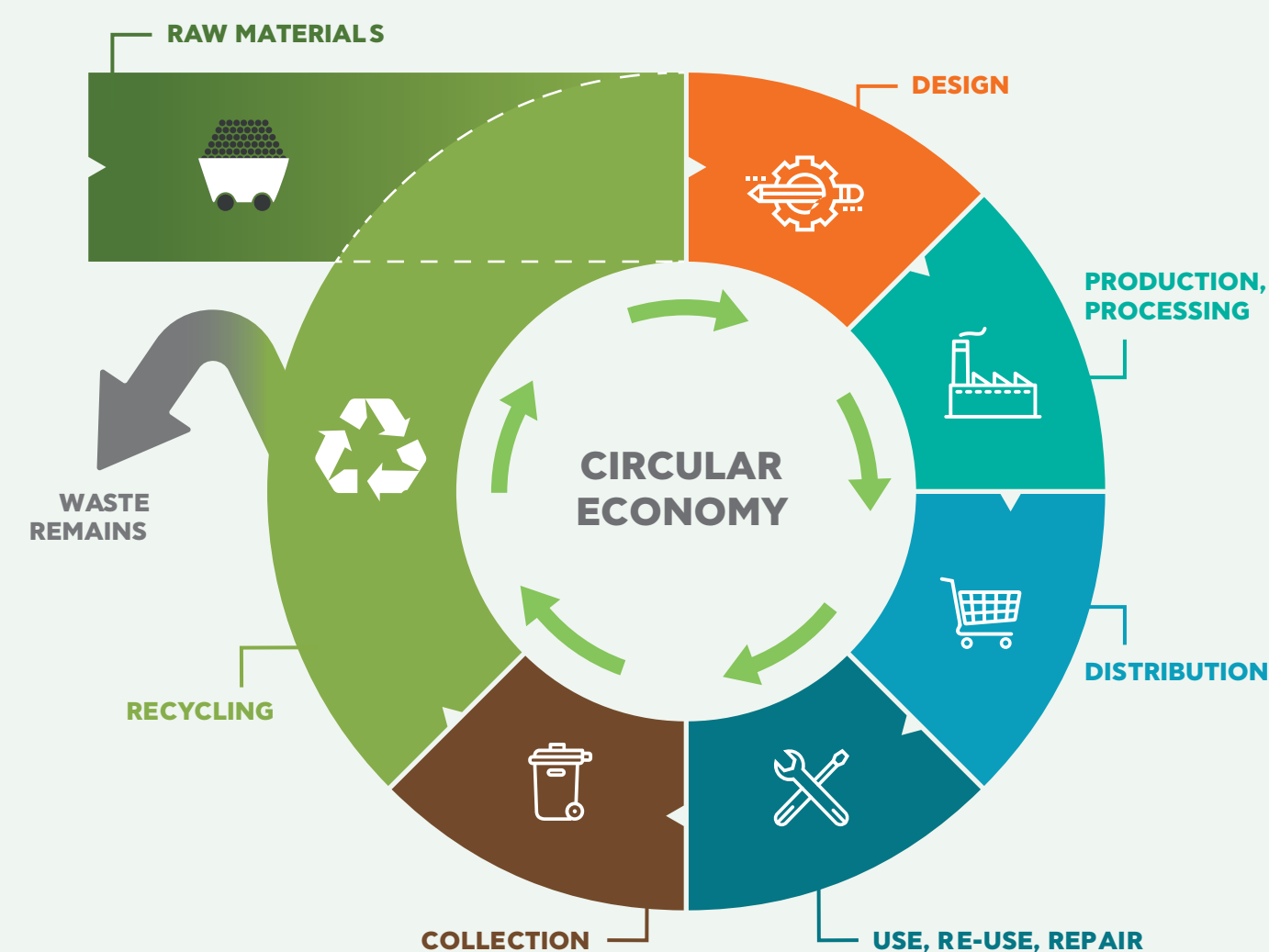
Material Topic

[GRI: 3-3]

## COMMITMENT

### Actions in line with the principles of the circular economy

[ATHEX ESG: SS-E7]



## RAW MATERIALS

- Ensuring efficient use of natural resources
- Avoiding the use of the 27 critical raw materials identified by the European Commission that pose a high risk of supply problems



## DESIGN

- Reducing the average weight of products while maintaining the same technical characteristics
- Designing new innovative and sustainable products with a low environmental footprint



## PRODUCTION

- Continuous monitoring and reduction of energy consumption
- Using recycled raw materials to a high extent depending on the application



## DISTRIBUTION / TRANSPORTATION

- Collaborating between group companies to optimize routes
- Collaborating with customers to reduce the use of secondary packaging



## REUSE

- Conserving raw materials through the reuse of production residues
- Producing reusable products with the aim of maximizing their lifecycle



## COLLECTION

- Storing production residues in suitable temporary storage facilities for optimal utilization
- Collecting recyclable materials through closed-loop recycling systems



## RECYCLING

- Voluntarily committing to replacing 8,500 tons of primary raw materials with recycled materials by 2025
- Providing reliable information on traceability and content of recycled raw materials through appropriate certifications



## DISPOSAL

- Recycling non-reusable internal waste through licensed partners
- Continuously reducing the disposal of non-hazardous waste in landfills through source separation actions



## Research and innovation focused on developing sustainable products

[SASB: RT-CH-410a.1, ATHEX ESG: SS-E5]

Minimizing weight while maintaining the same strength

- Reusability
- 100% recyclability, using a single material
- Incorporating natural materials up to 30%
- Using recycled materials up to 100%

To ensure the sustainable characteristics of the products, the following measures are employed:

- Product certifications according to RecyClass or TUV OK that ensure traceability of recycled plastic
- Environmental Product Declarations (EPD®) based on Life Cycle Assessments (LCA) for representative product types



## Efficient solid waste management

[GRI: 306-2, ATHEX ESG: A-E3]

In each facility, the following actions are taken to reduce the landfill rate:

- Waste separation by stream for reuse or recycling
- Collaboration with external licensed waste handlers for optimal processing
- Employee awareness and training
- Data recording and evaluation

## Proper use and management of chemical substances

[SASB: RT-CH-410b.2, ATHEX ESG: SS-E8]

- Full compliance with legal requirements for the use of chemical substances
- Employee training on safe usage
- Avoiding the use of chemicals or other hazardous substances subject to national or international bans
- Proper temporary storage with necessary safety measures
- Collaboration with external licensed partners for the safe disposal of hazardous waste

## Improving resource efficiency in production facilities

### Project "Zero Pellet Loss"

- Suitable storage and handling procedures
- Conducting inspections to identify and mitigate risks
- Appropriate actions in all facilities
- Employee training

### Project "Zero Waste to Landfill"

- Optimal management of production waste inside and outside the factories
- Collaboration with appropriate licensed recycling systems
- Employee training

## IMPACT

## Solid Waste Management

[GRI: 306-3, 306-4, 306-5, SASB: RT-CH-150a.1, ATHEX ESG: A-E3]

### Disposal at Landfills in 2022

**1,802 tn**

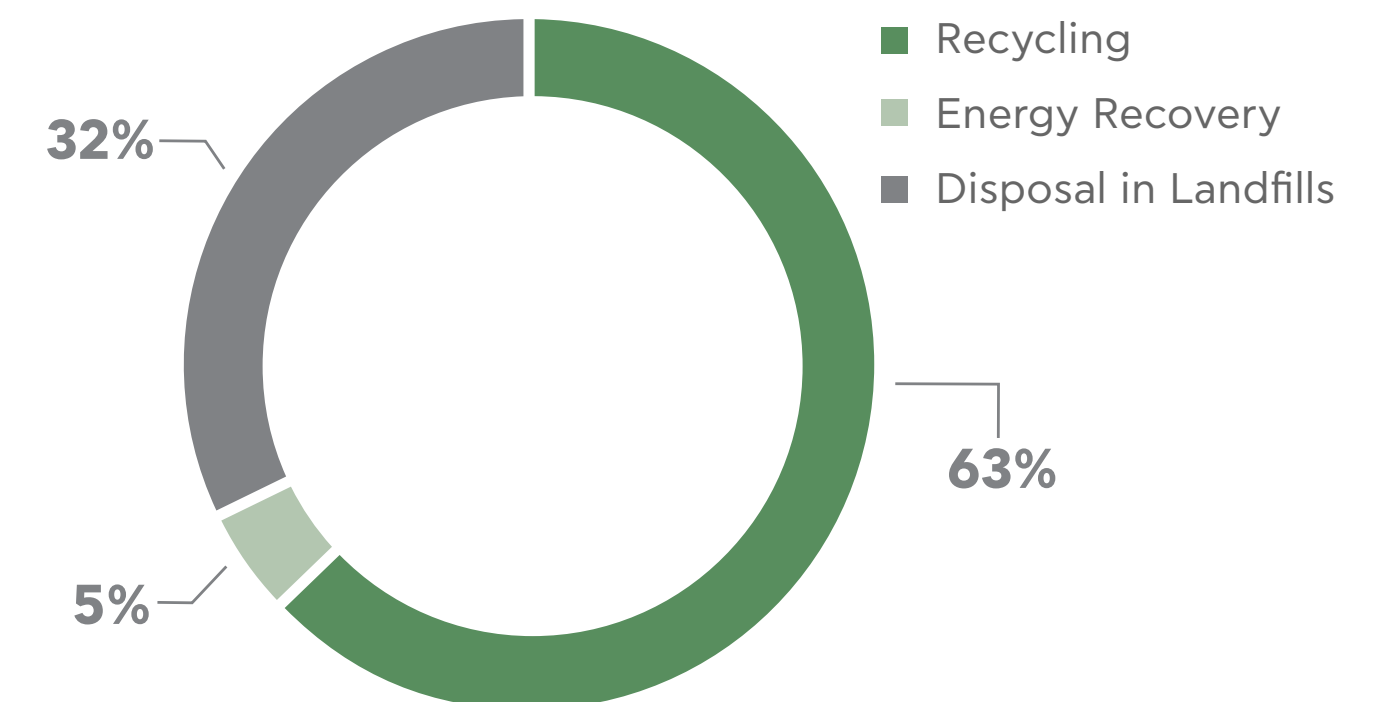
1,795 tn in 2021

### Change 2022/2021

**0.40%**

-30.86% 2021/2020

All the comprehensive information is included in Table 1 (Annex).



# Networking through the circular economy platform *In the Loop*

[GRI: 306-1, ATHEX ESG: SS-E5]

## The "In the Loop" platform:

- Connects companies, brands, public bodies, and consumers
- Contributes to reducing the environmental footprint across the value chain
- Designs specialized reuse systems with the ability to record and certify the number of uses
- Designs specialized closed-loop recycling systems



### REDUCE

Lighter Everyday Use Packaging with Less Plastic



### REUSE

Reusable cups for supermarkets & HORECA



### RECYCLE

Garbage bags from 100% recycled plastic certified by Recyclass



ANNUAL PERFORMANCE

**130** COLLABORATING MEMBERS IN 2022



# Virgin & Recycled Raw Materials

Material Topic

[GRI: 3-3]

## COMMITMENT

### Preserving natural resources by continuously increasing the use of recycled raw materials

- Operating a specialized central recycling unit and investing in state-of-the-art equipment.
- Achieving 100% recycling of the production residues (scrap).
- Securing external sources of recycled raw materials through the IN THE LOOP platform.
- Providing information and training to the staff.



**ANNUAL PERFORMANCE**

**17%** INCREASE IN THE USE OF RECYCLED RAW MATERIALS IN 2022 COMPARED TO 2021

## IMPACT

### Total weight of raw materials

[GRI: 301-1]

Raw materials in 2022

**99,548 tn**

103,262 tn in 2021

Change 2022/2021

**-3.6%**

-1.2% 2021/2020

The total information is included in Table 2 (Annex)

### Total weight of recycled raw materials

[GRI: 301-2]

Recycled raw materials in 2022

**13,407 tn**

11,443 tn in 2021

Change 2022/2021

**17.2%**

63% 2021/2020

The total information is included in Table 3 (Annex)

Recycled raw materials come from production process residues or external sources

### Total weight of packaging materials

[ATHEX ESG: A-G3]

Packaging materials in 2022

**7,037 tn**

7,059 tn in 2021

Change 2022/2021

**-0.3%**

5.5% 2021/2020

The total information is included in Table 4 (Annex)



**2025 TARGET**

**30%** INCREASE IN THE USE OF RECYCLED RAW MATERIALS



# Energy Efficiency & Renewable Energy

Material Topic

[GRI: 3-3]

## COMMITMENT

### Improving energy efficiency in production processes

[GRI: 302-3, ATHEX ESG: A-G3, SASB: RT-CH-130a.1]

- Monitoring energy consumption through modern monitoring systems.
- Reducing energy consumption through the Energy Efficiency Project, aiming for optimal efficiency through specific measures and actions.
- Upgrading electromechanical equipment.
- Employee training.

**2025 TARGET**  
**-15%** REDUCTION IN ENERGY CONSUMPTION IN PRODUCTION PROCESSES COMPARED TO THE PRODUCTION VOLUME

### Investment in renewable energy sources

[GRI: 302-3]

The Group continuously invests in energy from renewable sources, including solar, geothermal, and hydropower.

**ANNUAL PERFORMANCE**  
**6.7 MW** OPERATION OF PHOTOVOLTAIC SYSTEMS WITH A CLEAR EXPANSION PLAN

## IMPACT

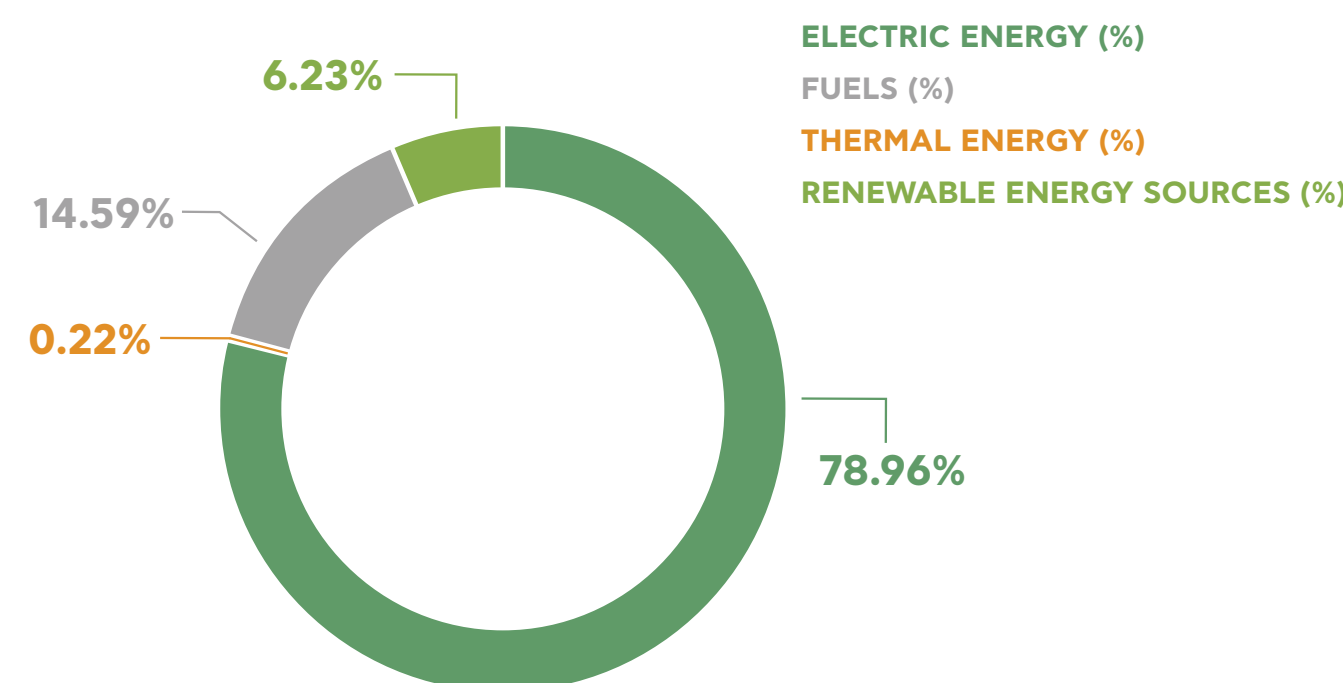
### Energy consumption by type and source

[GRI: 302-1, 302-4, SASB: RT-CH-130a.1, ATHEX ESG: C-E3]

Energy consumption in 2022	Change in 2022/2021
<b>197,958 MWh</b> 211,780 MWh in 2021	<b>-6.5%</b> 13.8% 2021/2020

The complete information is included in Table 5 (Annex)

### Energy consumption by type and source (%)



The total information is included in Table 6 (Annex)

**ANNUAL PERFORMANCE**  
**6.23%** ENERGY USAGE FROM RENEWABLE SOURCES IN 2022

### Energy intensity indicator (energy/production volume)

[GRI: 302-3, 302-4, SASB: RT-CH-130a.1, ATHEX ESG: C-E3]

Energy intensity in 2022	Change 2022/2021
<b>1.82</b> 1.88 in 2021	<b>-3.45%</b>

**ANNUAL PERFORMANCE**  
**-3.45%** REDUCTION IN ENERGY INTENSITY IN 2022



# Greenhouse Gas Emissions

Material Topic

[GRI: 3-3]

## COMMITMENT

### Reduction of direct and indirect greenhouse gas emissions

[SASB: RT-CH-110a.2, ATHEX ESG: SS-E1]

Through a specialized platform aligned with the GHG Protocol and ISO 14064-3 methodology, the following is achieved:

- Collection of required data for each category (scope 1, 2, 3).
- Conversion of data into CO2 emissions.
- Identification of significant improvement points.
- Implementation of measures to reduce emissions.
- Monitoring progress towards targets.

## IMPACT

### Footprint data collection and monitoring

[GRI: 305-1, 305-2, 305-3, 305-4, 305-5, SASB: RT-CH-110a.1, ATHEX ESG: C-E1, C-E2, A-E1]

The following data were collected based on ISO 14064-3 for the year 2022, providing a comprehensive analysis of emissions (scope 1, 2, 3) and external verification.

## Direct and indirect emissions (Scope 1, 2, 3)

CO2 emissions in 2022

**352,513 tCO2e**

363,903 tCO2e in 2021

Change 2022/2021

**-3.1%**

The total information is included in Table 7 (Annex)



ANNUAL PERFORMANCE

**-3.1%**

REDUCTION IN DIRECT AND INDIRECT EMISSIONS (SCOPE 1, 2, 3) IN 2022

## Emission intensity indicators (Scope 1, 2)

tCO2e/production unit

Emission intensity in 2022

**0.53**

0.54 in 2021

Change 2022/2021

**-1.0%**

tCO2e/thousand euros of revenue

Emission intensity in 2022

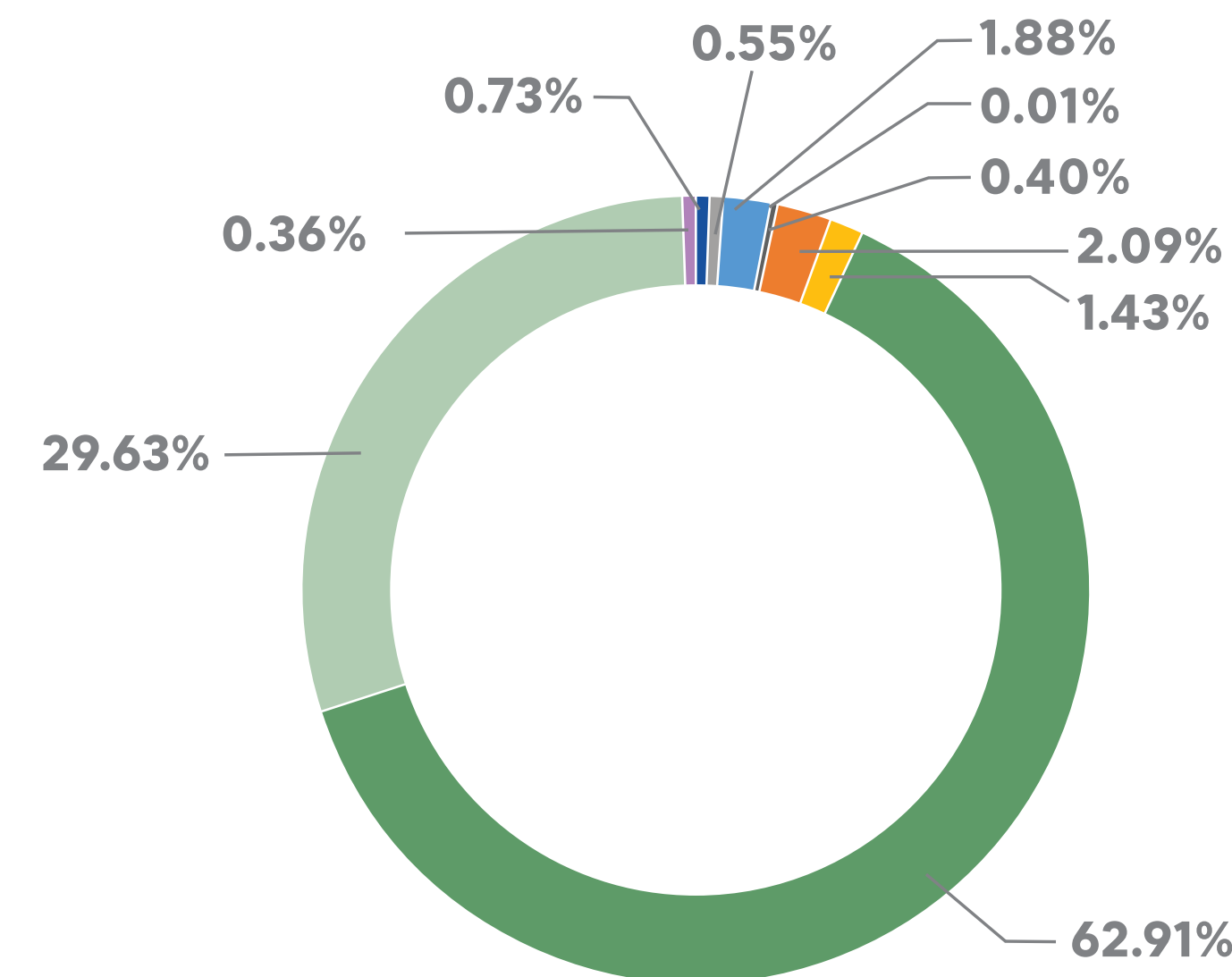
**0.15**

0.14 in 2021

Change 2022/2021

**4.1%**

## Indirect emissions (Scope 3) in tCO2e



- Purchased goods and services
- Upstream transportation and distribution
- Business travel
- Downstream transportation and distribution
- Fuel and energy-related services
- Leased assets
- Generated waste
- Capital goods
- End-of-life product treatment
- Employee commuting

The total information is included in Table 8 (Annex)

# Climate risks & opportunities

[GRI: 201-2, ATHEX ESG: A-E2]

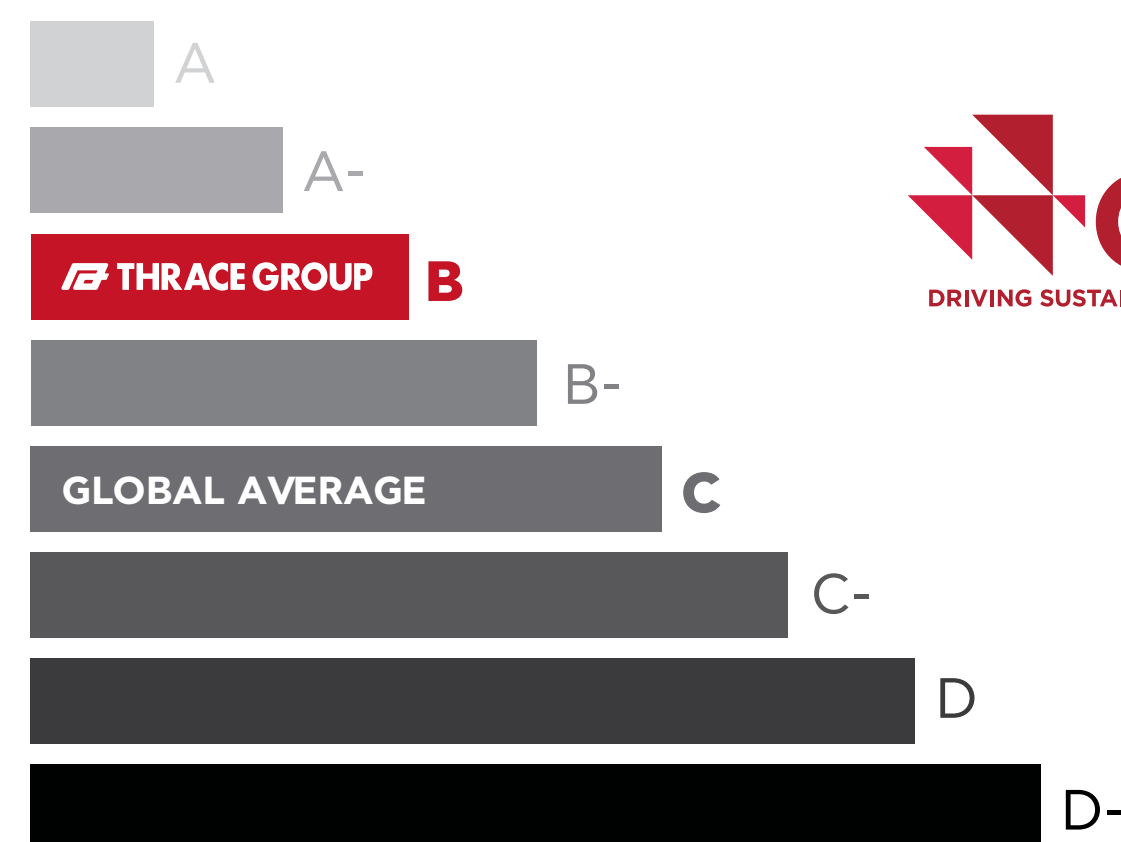
For the identification of opportunities, as well as the physical and transitional risks associated with climate change, the Group aligns with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board.

Types:	Risks related to:	The Group:
<b>Policy &amp; Legal</b>	monitoring changes in the European and national regulatory framework that may create future requirements.	keeps track of the national and international regulatory environment, especially concerning packaging management and recycling, with the goal of leading in new markets for innovative, eco-designed products.
<b>Technology</b>	adapting the production process to meet the demands of transitioning to a low-carbon economy.	monitors potential risks in internal processes, such as requirements for sustainable product manufacturing or the need for new investments in equipment.
<b>Market</b>	responding to changes in the industry's structure in a carbon-sensitive economy.	evaluates the environmental risk concerning carbon emissions, monitors and records direct and indirect emissions from all operations.
<b>Reputation</b>	dealing with changes in consumer preferences.	identifies transitional risks associated with shifts in consumer preferences and provides solutions for sustainable products with a positive environmental footprint.
<b>Physical Risks</b>	addressing risks driven by events, such as increased severity of extreme weather phenomena.	implements relevant precautionary measures against natural disasters, such as additional flood control measures, structural building reviews, and stormwater system assessments, while ensures compliance with relevant laws and regulations.

Types:	Opportunities emerging for:	The Group:
<b>Energy Sources</b>	increasing the use of renewable energy sources and making efforts to gradually reduce energy consumption.	invests in photovoltaic systems and geothermal energy to lower greenhouse gas emissions through the use of renewable energy and implements measurable actions for energy conservation.
<b>Markets</b>	transforming existing markets into new sustainable products and processes where the use of recycled or reusable materials adds value to customers.	develops specialized recycling systems that enable the tracking and certification of recycled raw materials or reusable systems that allow tracking and certification of the number of uses.
<b>Products and Services</b>	developing products and solutions based on the circular economy to add value to customers.	implements the circular economy model through specific actions, such as organizing closed recycling systems for producing new products or designing and producing reusable products.
<b>Resilience</b>	undertaking projects aimed at improving efficiency during the production process.	executes targeted projects, such as zero pellet loss, energy efficiency during production, waste minimization, and reusing production process waste.
<b>Resource Efficiency</b>	increasing the use of recycled raw materials.	prioritizes, through voluntary commitment to the European Union, the replacement of 8,500 tons of plastic material with recycled material by 2025.

## Assessment with a "B" rating by the international organization CDP

In the second year of participation, the Group climbed 2 positions in the rating hierarchy, receiving the "B" distinction for its performance regarding climate change. This confirms that the Group is in the same scale as the industry average while surpassing the global average.



## Establishment of Science-Based Targets (SBTi)



Additionally, the Group committed to establishing science-based targets for reducing its carbon footprint and validating them through the international initiative Science Based Targets Initiative (SBTi). The Group has initiated the process of setting these targets.

## Protection of Biodiversity and Water Management

### Ensuring the protection and preservation of biodiversity

[GRI: 304-2, ATHEX ESG: A-E5]

- The circular economy-oriented strategy aims to keep materials as much as possible within the economy's cycle and away from the environment, thereby mitigating negative impacts on biodiversity.
- Additionally, the ZERO PELLET LOSS project running in all production facilities aims to prevent the release of microplastics into the environment.

### Water consumption and liquid waste management

[GRI: 303-1, SASB: RT-CH-140a.3, ATHEX ESG: A-E4, SS-E3, SS-E4]

- Monitoring of water consumption and employee awareness.
- Integrated preventive maintenance system to address potential leaks.
- Water collection and recycling systems.
- Automatic switches and labeling for potable water use points.



# Social Issues



**act:onaid**

Support of 16 children  
in need for the  
**5th year**

 **Boroume**  
saving food - saving lives

Offering food equivalent to  
**1995**  
meals

 Social Center  
"Stavros Haliotis"

**€412,621**  
in social support  
expenses



# Health, Safety & Well-being of Employees

Material Topic

[GRI: 3-3]

## COMMITMENT

*Safety First: We take care of ourselves | our colleagues | our machinery | our workspace*

## Prevention and avoidance of all types of injuries

[GRI: 403-6, 403-7]

- Commitment to zero tolerance for health and safety issues
- Establishment and communication of relevant principles, policies, and procedures, and implementation of measures to mitigate workplace accident risks
- Provision of life and health care to employees

## Health, Safety, and Environment Policy

[GRI: 403-1, 403-3, 403-4, 403-8]

- Providing guidance and a unified approach to addressing general principles and basic rules
- Ensuring health and safety in the workplace for all employees, collaborators, and visitors
- Instructions for the proper and safe use of equipment
- Training and awareness of personnel, enhancing a culture of sensitivity to these issues

## Health, Safety, and Environment Procedures

[GRI: 403-2, 403-5]

- Identification and continuous evaluation of work-related risks
- Providing all required Personal Protective Equipment (PPE) to employees and informing them of proper usage
- Implementing corrective or preventive actions to eliminate risks and minimize accident probabilities
- Appointing responsible supervisors to ensure compliance with procedures at each facility
- Informing and sensitizing employees through messages displayed on screens

## Facility Safety

[GRI: 403-6, 403-7]

- Implementing safety measures for the facilities
- Confirmation of measure implementation by workplace inspectors and certifying bodies
- Studies on noise, odor, light, and vibration levels, and compliance with legal requirements
- Emergency and evacuation plans
- Regular monitoring and implementation of preventive and corrective measures

## Implementation of COVID-19 Pandemic Response Procedures

The Group closely and responsibly monitors developments related to the pandemic crisis, with a priority on ensuring the health and safety of employees and the smooth operation of the business, so as not to suffer any consequences that would negatively affect its business continuity.

## IMPACT

### Occupational diseases

[GRI: 403-10, SASB: RT-CH-320a.1, ATHEX ESG: SS-S6]

	2020 - 2022	
	Employees	Partners
Number of fatalities due to illness	0	
Number of confirmed illnesses	0	

### Work-related injuries

[GRI: 403-9, SASB: RT-CH-320a.1, ATHEX ESG: SS-S6]

	2022	
	Employees	Partners
Number of fatalities due to injuries	0	0
Fatality rate due to injuries	0	0
Number of significant injuries	12	0
Rate of significant injuries	0.63	0
Number of confirmed injuries	27	2
Rate of confirmed injuries*	2.45	6.32

\*Equivalent to the corresponding number/hours worked\*200,000

The total information is included in Table 9 (Annex)



# Product Quality, Safety & Information

Material Topic

[GRI: 3-3, ATHEX ESG: SS-S1]

## COMMITMENT

### Implementation of quality management procedures

[ATHEX ESG: SS-S9]

- Inspection of raw materials: Evaluation of raw materials through trial production of products and comparison in the laboratory with corresponding products
- Product quality assurance: Inspection of products in all production phases, including dimensional checks, testing of mechanical properties based on international standards, compliance of products with specifications and customer requirements
- Packaging transportation control: Use of packaging based on product technical specifications to ensure smooth and safe transportation and perform suitability optical quality checks during loading
- Customer satisfaction: Regular communication with customers to optimize services provided

## Promotion of transparency regarding products and customer information

[GRI: 417-1, ATHEX ESG: SS-S7]

- Compliance with the respective national legislation
- Adoption of management systems and procedures according to international safety standards and best practices related to product design and life cycle
- Monitoring compliance with all specifications through regular quality checks

## IMPACT

### Product safety and consumer health and safety

[GRI: 416-2, ATHEX ESG: SS-S1]

There were no product recalls due to malfunctions or abnormalities in any of the Group's companies.



# Health, Safety & Customer Satisfaction

Material Issue

[GRI: 3-3, ATHEX ESG: SS-S8]

## COMMITMENT

### Ensuring product quality and customer health and safety

[GRI: 416-1, ATHEX ESG: SS-S1]

- Production of innovative products and integrated solutions tailored to customer needs and requirements, adhering to all required quality and safety specifications
- Adoption of Quality Management Systems and application of related procedures based on international safety standards
- Special attention to the production of packaging that comes into direct contact with food

## IMPACT

### Product safety and consumer health and safety

[GRI: 416-2, ATHEX ESG: SS-S1]

There were no cases of non-compliance with existing legislation and regulations.

# Other Social and Labor Issues

## COMMITMENT

### Implementation of hiring procedures to fill new job positions

[GRI: 401-1, ATHEX ESG: C-S4]

- Priority given to existing employees expressing interest through internal mobility processes
- Selection of new employees based on objective criteria, excluding any discrimination based on race, religion, gender, nationality, beliefs, age, disability, etc.
- Priority given to hiring individuals from local communities, seeking cooperation with local educational institutions and universities

### Fair Remuneration Policy and Equal Opportunities

[GRI: 2-19, ATHEX ESG: A-G4]

- Implementation of Competency Policy and Remuneration Policy for Board members and Committees, as well as top management positions
- Implementation of Wage and Personnel Management Policy for employees
- Linking professional development and remuneration to personal performance and goal achievement

## Employee training and development process

[ATHEX ESG: C-S5]

- Implementation of internal training as part of daily development, as production processes require continuous education.
- Organization of internal targeted formal or informal meetings.
- Contribution of external consultants with high expertise when required, and their input is documented.
- Development of specialized manuals.
- Identification and assessment of training needs by collecting information from each department related to personnel development and the needs of each company.
- Creation of an Annual Training Program by the Human Resources Department.
- Selection of training methods and providers after research and evaluation.

## Freedom of Participation in Labor Unions and the right to collective bargaining

[GRI: 2-30, 407-1, ATHEX ESG: C-S7]

- Respect for employees' right to participate in labor unions and associations
- Compliance with the Labor Code, which has been developed in collaboration with employee representatives and submitted to labor inspection

## IMPACT

### Total number of employees

[GRI: 2-7, ATHEX ESG: C-S2]

	2022		
	Men	Women	Total
Indefinite	1,479	366	1,845
Fixed-term	132	67	199
<b>Total</b>	<b>1,611</b>	<b>433</b>	<b>2,044</b>
Full-time	1,606	420	2,026
Part-time	5	13	18
<b>Total</b>	<b>1,611</b>	<b>433</b>	<b>2,044</b>

The total information is included in Table 10 (Annex)

### Gender pay gap

[GRI: 405-2, ATHEX ESG: A-S3]



The total information is included in Table 11 (Annex)

### Women employees in managerial positions

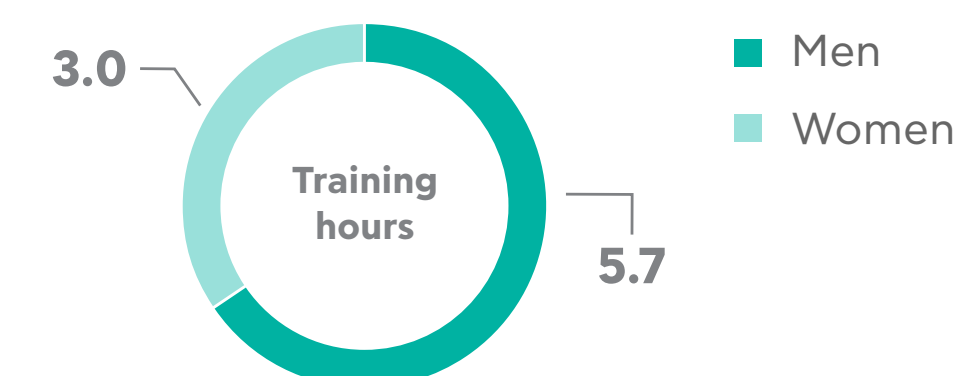
[GRI: 405-1, ATHEX ESG: C-S3]



The total information is included in Table 12 (Annex)

### Employee training

[GRI: 404-1, ATHEX ESG: C-S5]



# Supporting Local Communities

[GRI: 413-1, SASB: RT-CH-210a.1]

## COMMITMENT

Distribution of direct or indirect economic value to the communities in which the company operates, with particular emphasis on:

- Supporting the economies of the countries in which the company operates.
- Addressing the needs of citizens and communities surrounding the Group and affected by its activities.
- Promoting employment by creating and maintaining jobs throughout the value chain.

## IMPACT

- Supporting social solidarity programs and recognized actions by organizations addressing social issues.
- Making individual donations to cover specific needs and support vulnerable social groups.
- Supporting ActionAid for the 5th consecutive year through the Adoption Program.
- Initiating projects to reduce food waste through the company "Thrace Greenhouses" and donating products to non-profit organizations and Group employees.
- Participating in the "Food Rescue and Offer Network" through the non-profit organization "Boroume," providing practical food support to charitable institutions.

## Social Center "Stavros Halioris"

- An Urban Non-Profit organization based in the Local Community of Magiko, Xanthi, operating since 2010, bearing the name of the late Stavros Halioris, founder and President of Thrace Group.
- Its objective is to contribute practically to society through educational, cultural, entertainment, and social activities.
- Activities include supporting initiatives of the Thrace Group Workers' Union, providing scholarships and financial aid to children in the area who wish to study but cannot afford their expenses, as well as providing financial support and covering medical expenses for disadvantaged patients in the region.
- It houses a clinic that provides primary healthcare services to residents of the wider area and hosts meetings of the Social Welfare Center of Magiko.
- Modern influences of climate change have led to the selection of actions focusing on raising awareness among local communities and children on environmental issues, renewable energy sources, and biodiversity conservation.
- Participated in the European Week for Waste Reduction with the theme "Sustainable Textile Products," implemented with the support of the Region of Eastern Macedonia and Thrace and integrated into the actions of the Hellenic Textile Industry Association.

## Social support

	2022	2021	2020
Total expenses of Social Center "Stavros Halioris"	€412,621	€380,017	€328,623



# Corporate Governance Issues



Operating with respect for **inclusivity, diversity, and equality**, while excluding any potential discrimination based on race, religion, gender, nationality, beliefs, age, etc.

0

confirmed cases of

corruption  
& bribery

non-regulatory  
compliance

human  
rights  
violations

personal data  
breaches or  
violations

distributed  
**387.527**  
million euros  
in economic value

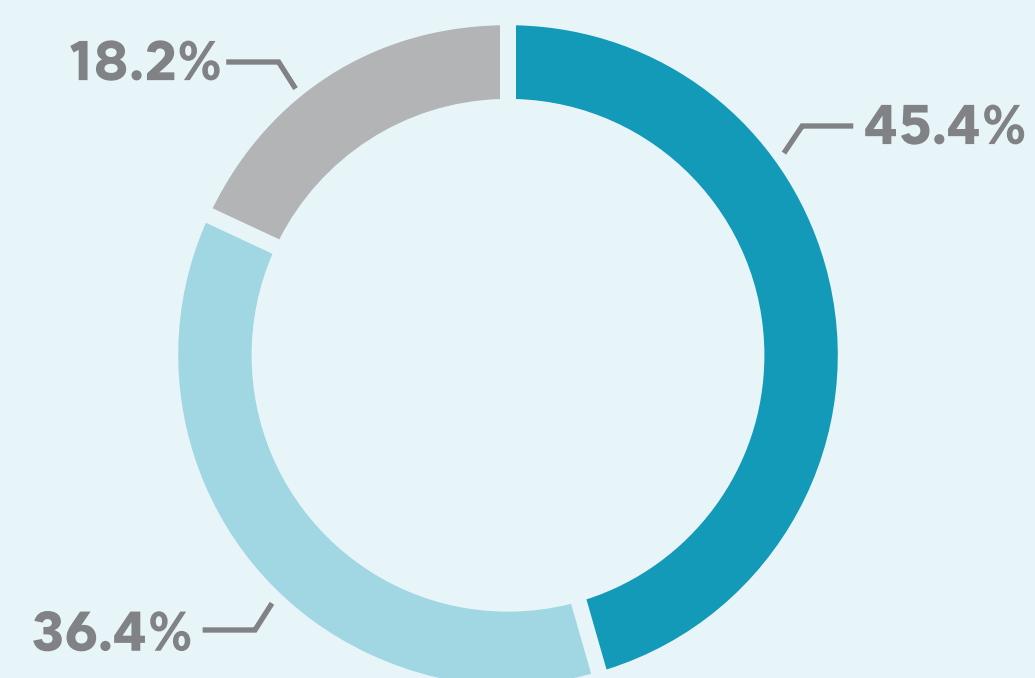
# Governance Structure

[GRI: 2-9, 2-10, 2-11, 2-12, 405-1, ATHEX ESG: C-S3, C-G1]

## Board of Directors

The Group's Board of Directors consists of 11 members with a 5-year term, responsible for developing and monitoring the effectiveness of corporate governance principles and ensuring business ethics and compliance.

Konstantinos Halioris	President
Theodoros Kitsos	Vice President, Independent Non-Executive Member
Dimitrios Malamos	CEO, Executive Member
Vasileios Zairopoulos	Non-Executive Member
Christos Siatis	Non-Executive Member
Christos-Alexis Komninos	Non-Executive Member
Athanasios Dimiou	Non-Executive Member
Georgios Samothrakis	Independent Non-Executive Member
Myrto Papathanou	Independent Non-Executive Member
Spyridoula Maltezos	Independent Non-Executive Member
Nikitas Glykas	Independent Non-Executive Member



- Percentage of Executive Members
- Percentage of Non-Executive Members
- Percentage of Independent Non-Executive Members

## Percentage of Women on the Board\* 18.2%

\*In compliance with the criteria for adequate gender representation on the Board as defined in Article 3 of Law 4706/2020

## Committees

All Committees operate under an approved Operating Regulation by the Board.

### Audit Committee

Georgios Samothrakis	Chairman, Independent Non-Executive Board Member
Konstantinos Kotsilinis	Member, Non-Board Member-third party
Konstantinos Gianniris	Member, Non-Board Member-third party

### Compensation and Nominating Committee

Theodoros Kitsos	Chairman, Independent Non-Executive Board Member
Nikitas Glykas	Member, Independent Non-Executive Board Member
Vasileios Zairopoulos	Member, Non-Executive Board Member

### Strategy and Investment Committee

Konstantinos Halioris	Chairman, Executive Board Member
Dimitrios Malamos	Member, Executive Board Member
Vasileios Zairopoulos	Member, Non-Executive Board Member

### Sustainability Committee

Theodoros Kitsos	Chairman, Independent Non-Executive Board Member
Konstantinos Halioris	Member, Executive Board Member
Dimitrios Malamos	Member, Executive Board Member
Spyridoula Maltezos	Member, Independent Non-Executive Board Member

# Creation and Distribution of Economic Value

Material Topic

[GRI: 3-3]

## COMMITMENT

### Direct economic value generated and distributed

[GRI: 201-1]

The Group generates and distributes economic value to the social whole in which it operates through its business activities and achieving high performance, both directly and indirectly, with a particular emphasis on:

- Strengthening the economies of the countries it operates in through financial flows to stakeholders, including tax payments, payments to suppliers, employee remuneration, dividends to shareholders, and investments in local communities.
- Addressing the needs of communities surrounding the Group and affected by its activities.
- Creating employment opportunities through direct and indirect job creation and retention.

### Operational Continuity

- Achieving stable, sustainable, and recurring profitability, significantly higher than pre-pandemic levels, despite particularly challenging conditions in the global economy.
- Implementation of both planned and extraordinary investment plans.

- Continued dynamic growth with the aim of further increasing production volume, continuous improvement of the product mix and profitability, as well as enhancing recycling capacity within the framework of holistic sustainable development.

## EU Taxonomy Classification

[ATHEX ESG: A-S1]

In this report, two active environmental objectives are examined, which involve climate change mitigation and adaptation. The Regulation classifies activities as "environmentally sustainable" under the following conditions:

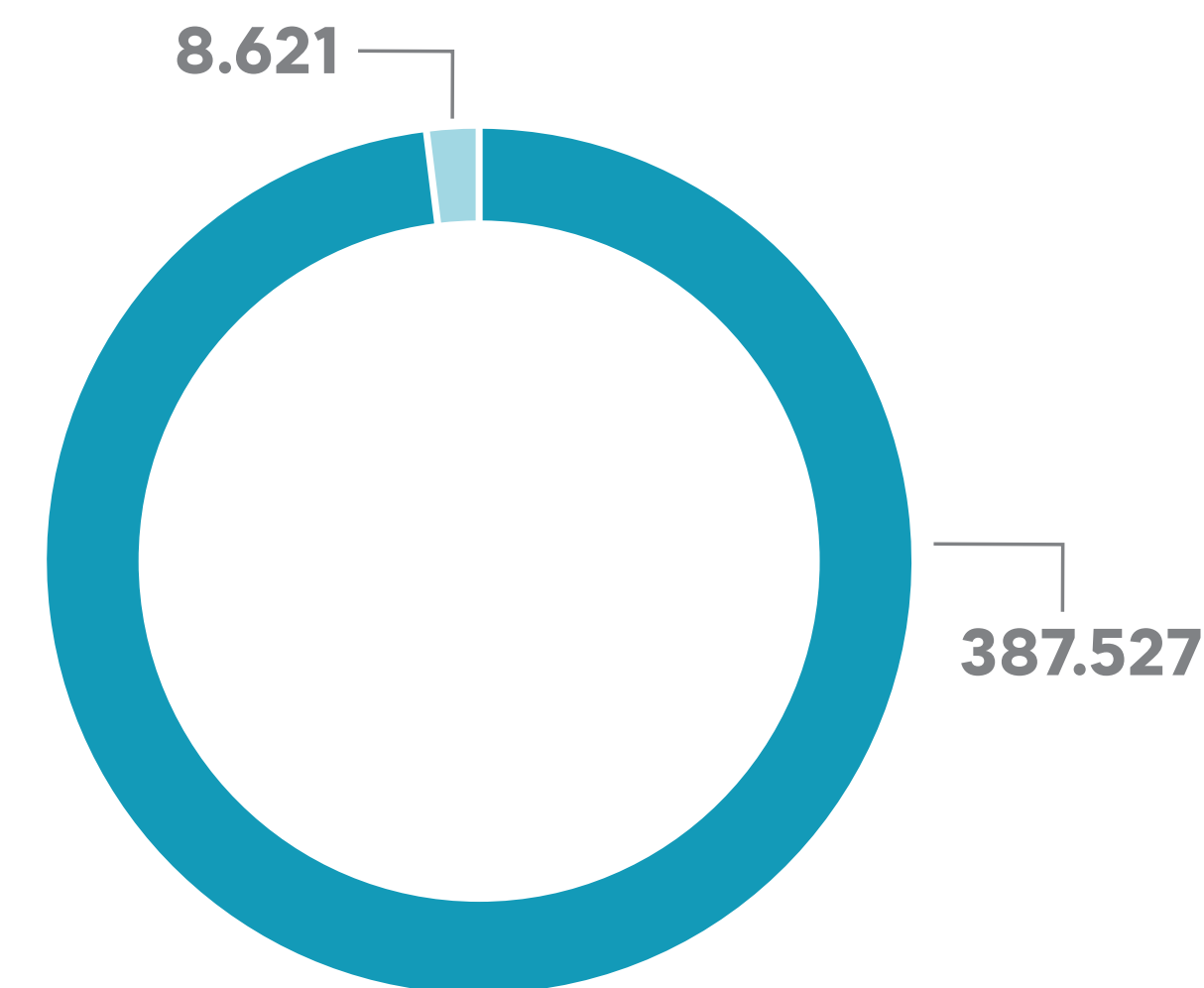
- Substantial contribution to at least one environmental objective.
- No significant harm to the achievement of the other five environmental objectives of the EU.
- Compliance with Minimum Social Safeguards.

	Revenues (Turnover)	Capital Expenditures (CapEx)	Operating Expenses (OpEx)
<b>Total</b> (in million €)	394.38	37.97	9.44
<b>Aligned and eligible with the Classification</b> (in million €)	154.20	21.72	3.89
<b>Percentage</b>	<b>39.1%</b>	<b>57.2%</b>	<b>41.1%</b>
<b>Not eligible</b> (in million €)	240.18	16.25	5.56
<b>Percentage</b>	<b>60.9%</b>	<b>42.8%</b>	<b>58.9%</b>

## IMPACT

[GRI: 201-1, 203-2]

### Direct economic value generated and distributed (in million €)



- Direct distributed economic value
- Undistributed economic value

The total information is included in Table 13 (Annex)

# Business Ethics & Anti-Corruption

## Material Topic

[GRI: 3-3]

### COMMITMENT

## Zero tolerance for corruption and bribery

- Comprehensive framework of principles and policies ensuring transparency and responsible operation
- Conducting annual updates and audits through the Internal Audit Department
- Imposing disciplinary measures
- Formation of an Audit Committee

## Code of Ethics and Conduct

[GRI: 2-23, ATHEX ESG: C-G5]

Sets the behavior standards required from employees, based on fundamental principles:

- Business ethics
- Respect for human rights • Diversity and equal representation
- Compliance with laws and social norms
- Product quality
- Promotion of fair and free competition
- Avoidance of conflicts of interest
- Accuracy and completeness of financial information
- Protection of corporate assets
- Collaboration with public authorities legally and transparently
- Conducting all transactions with honesty and anti-corruption efforts
- Protection and confidentiality of information
- Good labor relations
- Safety, health, and environmental protection
- Circular economy and climate change
- Social contribution

## Corporate Governance Code

The Group, after approval from the Board of Directors and in accordance with Law 4706/20, applies and adopts the Hellenic Corporate Governance Code (June 2021) of the Hellenic Corporate Governance Council (HCGC).

## Mechanisms for Conducting Audits

The Group has adopted and follows a comprehensive framework of principles and policies to ensure transparency and responsible operations. To prevent incidents of corruption and bribery, proactive measures are taken through annual updates and audits conducted by the Internal Audit Department. Disciplinary actions have been established to discourage involvement in such incidents.

In support of internal procedures, the Audit Committee has been formed with responsibilities including the selection process and oversight of external auditors, informing the Board of Directors about the results of the mandatory audit, monitoring the financial reporting process, internal control systems, and risk management, as well as supervising the internal audit and regulatory compliance and risk management units.

### IMPACT

[GRI: 205-3, ATHEX ESG: A-G2]

No confirmed incidents of corruption or bribery have occurred, and no financial loss resulted. Likewise, the Group has not been aware of any intention or behavior related to corruption or bribery.



# Regulatory Compliance & Policies

## Material Topic

[GRI: 2-27, 3-3]

### COMMITMENT

Full compliance with the regulatory framework, Internal Operating Rules, and Group Policies, with zero tolerance for issues related to human rights.

## Internal Operating Rules

- Harmonized with the requirements of Law 4706/2020
- Approved by the Board of Directors' decision
- A summary is available on the Group's website under Corporate Governance.

## Group Policies Manual

[GRI: 2-23, 2-24]

- Serves as the basis for the Group's policies and procedures
- Aims to establish a unified operational framework

## Ensuring Personal Data Protection

[ATHEX ESG: C-G6]

- The General Data Protection Regulation (GDPR) EU 2016/679 is strictly applied, as well as Law 4624/2019 concerning the protection of natural persons with regard to the processing of personal data.
- A Data Protection Officer has been appointed, and an insurance contract has been activated to ensure the protection of personal data in case of any loss.
- The Personal Data Protection Statement is available on the Group's website.

## "EthicsPoint" Reporting Platform

[ATHEX ESG: SS-G1]

- Operates a platform for anonymous or named reporting
- Allows reporting of misconduct, subsequently investigated by the Group

## Respect for Human Rights

[ATHEX ESG: C-S6, SS-G1, SS-S5]

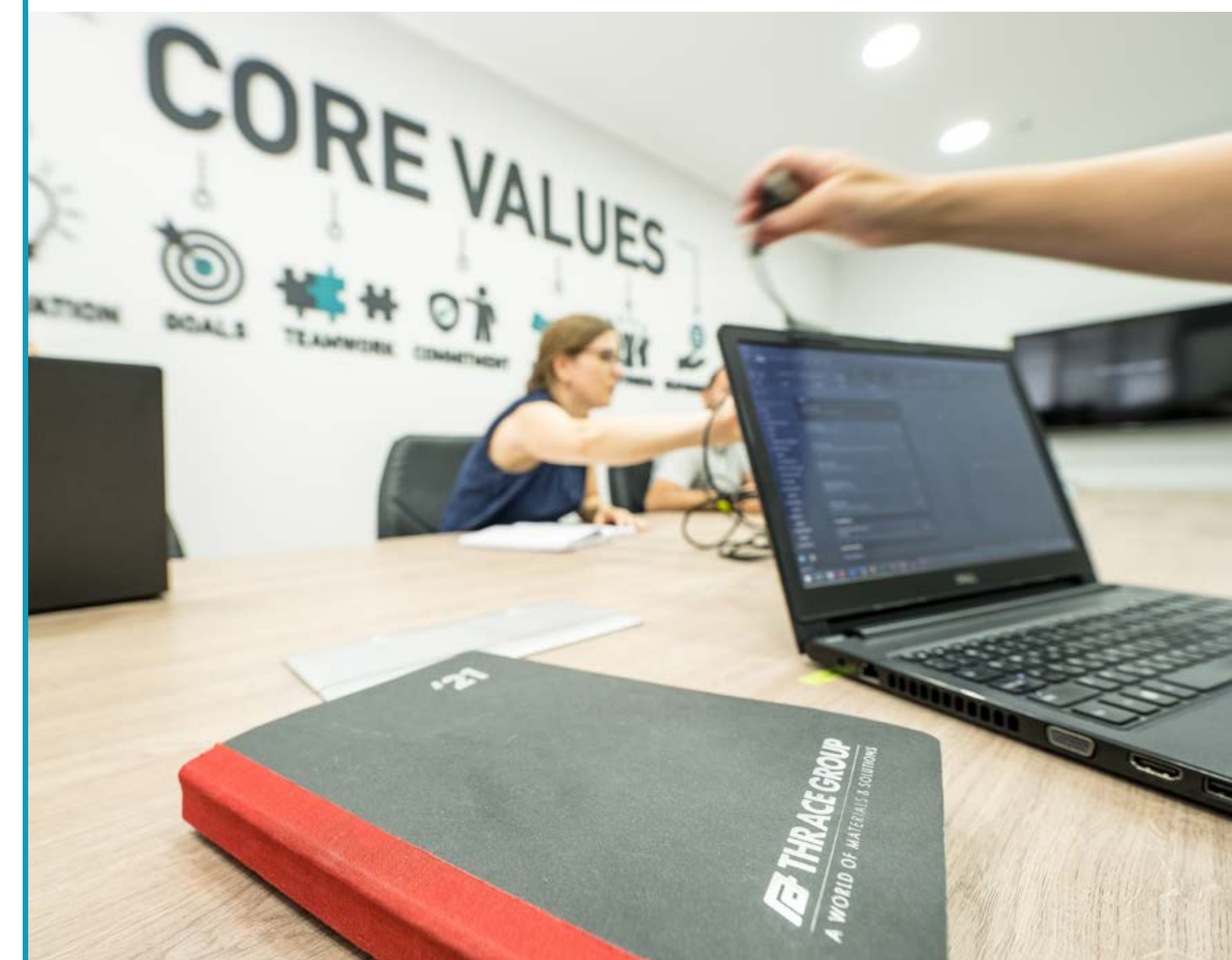
The Group, through its Code of Ethics and Conduct, has established principles to respect human rights, committing to a zero-tolerance policy towards any form of harassment, discrimination, forced labor, and child labor throughout its value chain.

Furthermore, the Group is committed to addressing complaints and treating employees fairly and impartially. It has implemented guidelines and internal regulations concerning human rights and keeps employees informed through the Internal Work Regulations.

Regarding human rights issues, there have been no complaints or confirmed incidents of discrimination based on race, religion, gender, nationality, beliefs, age, disability, etc., including incidents of harassment or violations of human rights, nor confirmed incidents or complaints related to the violation of personal data.

### IMPACT

No confirmed incidents of non-compliance have occurred, and no financial loss resulted.



# Supply Chain Issues

## COMMITMENT

Evaluation and selection of suppliers is a necessary operational function for transparency and achieving a responsible supply chain, ensuring human rights, combating corruption, and achieving environmental goals to reduce greenhouse gas emissions.

## Monitoring of Suppliers' Performance

[GRI: 308-1, 414-1, ATHEX ESG: C-S8]

- Supplier selection is a distinct and well-documented process
- Based on objective and stable criteria (cost, reliability, quality of materials/services, payment terms, delivery speed, potential synergies with other Group companies)
- Supported by written evaluations (supplier-partner assessment questionnaire, evaluation table with criteria, etc.)

## Human Rights in the Supply Chain

[ATHEX ESG: C-S6]

- The Group has adopted principles to avoid cooperation with suppliers at high risk of human rights violations, although it may not be possible to detect violations throughout the entire supply chain.
- Group employees have the right and obligation to use the platform for anonymous or named reporting and report any violations.

## IMPACT

### Total number of suppliers

	2022
Thrace Plastics Co SA	225
Thrace Nonwovens & Geosynthetics SA	1,152
Thrace Polyfilms SA	577
Thrace Eurobent SA	123
Thrace Pack SA	1,007
Thrace Greenhouses SA	288
Don & Low LTD	517
Thrace Synthetic Packaging Ltd	473
Thrace Ipoma SA	557
Thrace Greiner Packaging SRL	382
Lumite Inc	452
Thrace Polybulk AB & AS	20
Thrace Plastics Packaging DOO	110

The total information is included in Table 14 (Annex)

## Expenditures on Local Suppliers

[GRI: 204-1]

The following table represents the percentage of expenditures on local suppliers

	2022
Thrace Plastics Co SA	89%
Thrace Nonwovens & Geosynthetics SA	76%
Thrace Polyfilms SA	66%
Thrace Eurobent SA	54%
Thrace Pack SA	79%
Thrace Greenhouses SA	95%
Don & Low LTD	66%
Thrace Synthetic Packaging Ltd	8%
Thrace Ipoma SA	59%
Thrace Greiner Packaging SRL	33%
Lumite Inc	69%
Thrace Polybulk AB & AS	3%
Thrace Plastics Packaging DOO	23%

The total information is included in Table 15 (Annex)



# Appendices



- Significant topics
- Abbreviation list
- Analytical information tables
- Disclosure data tables

# Significant topics

The topics that emerged as significant during the second stage of materiality analysis are as follows:



## ENVIRONMENT

### Support circular economy

1. Product innovation & life-cycle
2. Virgin & recycled raw materials
3. Waste & scrap management
4. Water & effluents management

### Deal with climate change

5. Direct & indirect GHG emissions
6. Climate risks & opportunities
7. Energy efficiency & renewable energy
8. Biodiversity & conservation



## SOCIAL

### Empower human capital

9. Employee health, safety & well-being
10. Human rights, diversity & inclusion
11. Employment creation & safeguarding
12. Employee training & talent retention

### Contribute to society

13. Product quality, safety & information
14. Customer health, safety & satisfaction
15. Responsible supply chain & local suppliers
16. Social contribution & engagement



## GOVERNANCE

### Operate with integrity

17. Business ethics & anti-corruption
18. Governance structure & mechanisms
19. Regulatory compliance & policies
20. Privacy protection & information security

### Ensure business continuity

21. Emergency preparedness & response
22. Economic value generated & distributed
23. Investment in infrastructure & processes
24. Risks & potential impact analysis

# Abbreviation list

<b>ATHEX ESG</b>	ESG reporting guide by the Athens Stock Exchange
<b>BRC (Brand Reputation Compliance)</b>	International standard for food safety
<b>CDP</b>	International non-profitable organization that helps companies publish their environmental impact
<b>EcoVadis</b>	Organization for the evaluation of companies in relation to matters of non-financial updates and responsible business activity
<b>EPD (Environmental Product Declaration)</b>	Environmental Product Declaration
<b>ESG (Environmental, Social and Governance)</b>	The environment, society and corporate governance
<b>EuCertPlus</b>	Certification focusing on the traceability of plastic materials and the quality of the recycled content of the end product
<b>FDA (Food and Drug Administration)</b>	International organization responsible for the protection and promotion of public health
<b>GRI (Global Reporting Initiative)</b>	International reporting standard for sustainable development
<b>IFS (International Food Standard)</b>	International standard for the certification of food safety and quality
<b>In the Loop</b>	Platform for the upcycling of plastic waste
<b>ISO (International Standardization Organization)</b>	International Standardization Organization
<b>LCA (Life Cycle Assessment)</b>	Method for the analysis of life cycle
<b>RecyClass</b>	Certification for the traceability of recycled content in plastic products
<b>SASB (Sustainability Accounting Standards Board)</b>	International reporting standards of sustainable development
<b>SBTi (Science Based Targets initiative)</b>	International initiative that provides companies with a clear methodology for the reduction of emissions according to the goals set in the Paris Agreement
<b>SDGs (Sustainable Development Goals)</b>	Sustainable Development Goals set by the UN
<b>TCFD (Task Force on Climate-Related Financial Disclosures)</b>	International initiative that develops recommendations for more effective disclosures related to the climate change
<b>tCO<sub>2</sub>e</b>	Greenhouse gas emissions in tons of CO <sub>2</sub> equivalent
<b>TUV OK Recycled</b>	Certification scheme that specifies the requirements to calculate the recycled content of plastic products

# Analytical information tables

**Table 1**
**Management of Solid Waste**

Waste Management Method	Total Weight of Hazardous Waste (tn)			Percentage		
	2022	2021	2020	2022	2021	2020
<b>Recycling</b>	210.6	196.6	209.9	94%	90%	94%
<b>Incineration</b>	13.4	21.1	13.8	6%	10%	6%
<b>Total</b>	<b>224.0</b>	<b>217.7</b>	<b>223.7</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Waste Management Method	Total Weight of Non-Hazardous Waste (tn)			Percentage		
	2022	2021	2020	2022	2021	2020
<b>Recycling</b>	3,570.5	2,201.8	3,205.4	63%	51%	52%
<b>Energy Recovery</b>	314.6	362.4	326.9	5%	8%	5%
<b>Landfill Disposal</b>	1,802.0	1,794.9	2,595.9	32%	41%	43%
<b>Total</b>	<b>5,687.1</b>	<b>4,359.1</b>	<b>6,128.2</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table 2**
**Total Weight of Raw Materials (tn)**

	2022	2021	2020
<b>Polypropylene</b>	85,610	90,366	88,450
<b>Polyethylene</b>	10,646	10,856	12,906
<b>PET (Polyethylene Terephthalate)</b>	384	0	0
<b>Masterbatch</b> (solid additive for coloring or enhancing other properties)	2,908	2,040	3,154
<b>Total</b>	<b>99,548</b>	<b>103,262</b>	<b>104,510</b>

**Table 3**
**Total Weight of Recycled Raw Materials (tn)**

	2022	2021	2020
<b>Recycled raw materials from production residues or external sources</b>	13,407	11,443	7,018

**Table 4**
**Total Weight of Packaging Materials (tn)**

	2022	2021	2020
<b>Packaging Materials</b>	7,037	7,059	6,692

**Table 5**

Energy Consumption by Type and Source (MJ)

	2022	2021**	2020**
<b>Non-Renewable Sources*</b>			
<b>Electricity</b>	562,705,599	586,734,821	547,416,814
<b>Space Heating</b>	1,545,613	1,627,056	1,674,000
<b>Fuels</b>	103,985,964	146,173,320	95,244,785
<b>Gasoline</b>	870,124	904,150	731,011
<b>Natural Gas</b>	90,791,932	134,301,900	81,338,215
<b>Methane</b>	0	241,200	57,600
<b>Liquefied Petroleum Gas</b>	7,058,892	7,381,517	7,717,144
<b>Petroleum</b>	1,397,626	1,524,156	1,606,128
<b>Heating Pellets</b>	3,867,390	1,820,397	3,794,687
<b>Renewable Sources</b>			
<b>Solar Energy (Photovoltaic)</b>	20,515,636	4,494,035	1,134,518
<b>Geothermal Energy</b>	22,963,889	22,385,650	23,748,305
<b>Hydropower</b>	932,976	994,104	836,784
<b>Total (MJ)</b>	<b>712,649,677</b>	<b>762,408,986</b>	<b>670,055,205</b>
<b>Total (MWh)</b>	<b>197,958</b>	<b>211,780</b>	<b>186,126</b>

\*Conversion factors from DEFRA (Department for Environment, Food & Rural Affairs) methodology were used for energy consumption calculation.

\*\*Data has been updated.

**Table 6**

Energy Consumption by Type and Source (%)

	2022	2021	2020
<b>Electricity (%)</b>	78.96%	76.96%	81.70%
<b>Thermal Energy (%)</b>	0.22%	0.21%	0.25%
<b>Fuels (%)</b>	14.59%	19.17%	14.21%
<b>Renewable Energy Sources (%)</b>	6.23%	3.66%	3.84%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table 7**Direct and Indirect Emissions in tCO<sub>2</sub>e

	2022	2021	
<b>Scope 1</b>	5,253	5,676	-7.5%
<b>Scope 2</b>	52,884	54,966	-3.8%
<b>Scope 3</b>	294,376	303,261*	-2.9%
<b>Total</b>	<b>352,513</b>	<b>363,903</b>	<b>-3.1%</b>

\*Data has been updated.

**Table 8**  
Indirect Emissions (Scope 3) in tCO<sub>2</sub>e

Indirect Emissions (Scope 3)	2022	%
Purchased Goods and Services	185,190	62.91%
Upstream Transportation and Distribution	87,231	29.63%
Business Travel	2,135	0.73%
Downstream Transportation and Distribution	1,631	0.55%
Fuel-Related and Energy-Related Activities	5,547	1.88%
Leased Assets	42	0.01%
Waste Generated	1,191	0.40%
Capital Goods	6,140	2.09%
End-of-Life Product Treatment	4,212	1.43%
Employee Commuting	1,057	0.36%
<b>Total</b>	<b>294,376</b>	<b>100%</b>

**Table 9**  
Workplace Injuries

	Employees			Partners		
	2022	2021	2020	2022	2021	2020
Number of Fatalities Due to Injuries	0	0	0	0	0	0
Fatality Rate Due to Injuries*	0	0	0	0	0	0
Number of Significant Injuries**	12	0	0	0	0	0
Significant Injury Rate*	0.63	0	0	0	0	0
Number of Confirmed Injuries	27	35	33	2	4	0
Confirmed Injury Rate*	2.45	1.89	1.77	6.32	11.26	0

\*Per 200,000 worker-hours

\*\*Revised reporting framework

**Table 10**  
Total Number of Employees by Contract and Employment

	2022			2021			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Indefinite	1,479	366	1,845	1,468	341	1,809	1,394	394	1,788
Fixed-Term	132	67	199	224	168	392	272	142	414
<b>Total</b>	<b>1,611</b>	<b>433</b>	<b>2,044</b>	<b>1,692</b>	<b>509</b>	<b>2,201</b>	<b>1,666</b>	<b>536</b>	<b>2,202</b>
Full-Time	1,606	420	2,026	1,688	496	2,184	1,661	509	2,170
Part-Time	5	13	18	4	13	17	5	27	32
<b>Total</b>	<b>1,611</b>	<b>433</b>	<b>2,044</b>	<b>1,692</b>	<b>509</b>	<b>2,201</b>	<b>1,666</b>	<b>536</b>	<b>2,202</b>



**Table 11**  
Gender Pay Gap

2022	2021*	2020*
27%	39%	23%

\*Data has been revised based on the index

**Table 12**  
Women in Management Positions

2022	2021	2020
16%	18%	20%

**Table 13**  
Direct Economic Value Generated and Distributed (in € million)

	2022	2021	2020
Revenues	397.148	430.042	340.891
Operating Costs	311.707	284.191	227.245
Employee Wages and Benefits	57.366	58.544	53.900
Payments to Financing Institutions	16.116	8.996	7.725
Payments/Taxes to the State	2.926	15.826	10.316
Investments in Society	0.412	0.380	0.329
<b>Directly Distributed Economic Value</b>	<b>388.527</b>	<b>367.937</b>	<b>299.515</b>
<b>Undistributed Economic Value</b>	<b>8.621</b>	<b>62.105</b>	<b>41.376</b>

**Table 14**  
Total Number of Suppliers

	2022	2021	2020
Thrace Plastics Co SA	225	175	131
Thrace Nonwovens & Geosynthetics SA	1,152	999	874
Thrace Polyfilms SA	577	525	518
Thrace Eurobent SA	123	120	136
Thrace Pack SA	1,007	992	913
Thrace Greenhouses SA	288	294	322
Don & Low LTD	517	534	526
Thrace Synthetic Packaging Ltd	473	319	272
Thrace Ipoma SA	557	549	586
Thrace Greiner Packaging SRL	382	380	409
Lumite Inc	452	436	413
Thrace Polybulk AB & AS	20	20	20
Thrace Plastics Packaging DOO	110	105	95

## Table 15

### Expenditures with Local Suppliers

The following table represents the estimated monetary value of total payments to suppliers (in million €) and the percentage of expenditures on local suppliers

	2022	2021	2020	2022	2021	2020
<b>Thrace Plastics Co SA</b>	4.2	3.9	2.9	89%	94%	93%
<b>Thrace Nonwovens &amp; Geosynthetics SA</b>	142.3	113.5	86.0	76%	78%	77%
<b>Thrace Polyfilms SA</b>	35.1	30.4	26.0	66%	66%	67%
<b>Thrace Eurobent SA</b>	7.3	6.8	5.0	54%	49%	59%
<b>Thrace Pack SA</b>	71.2	63.5	51.5	79%	81%	79%
<b>Thrace Greenhouses SA</b>	4.9	4.9	5.1	95%	99%	98%
<b>Don &amp; Low LTD</b>	59.3	61.9	58.0	66%	64%	77%
<b>Thrace Synthetic Packaging Ltd</b>	14.5	14.2	13.3	8%	12%	13%
<b>Thrace Ipoma SA</b>	22.3	24.8	16.5	59%	55%	58%
<b>Thrace Greiner Packaging SRL</b>	19.0	17.3	12.8	33%	25%	26%
<b>Lumite Inc</b>	22.8	24.8	15.8	69%	65%	66%
<b>Thrace Polybulk AB &amp; AS</b>	20.9	19.0	21.4	3%	3%	1%
<b>Thrace Plastics Packaging DOO</b>	4.1	4.7	4.2	23%	23%	22%

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