

Smart Life

ZORLU 2030

# Together  
We Have A Future



2022

ZORLU HOLDING  
SUSTAINABILITY  
REPORT

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## ABOUT THE REPORT

At Zorlu Holding, we transparently share our environmental, social and corporate governance (ESG) performance with all our stakeholders through our annual Sustainability Report.

Drawn up in accordance with the **GRI (Global Reporting Initiative) Standards**, the report encompasses the Smart Life 2030 strategy, our sustainability priorities, and our performance in this context. This report both highlights our efforts in supporting the **United Nations Sustainable Development Goals (SDGs)**, and also serves as our communication on progress (CoP) under the **United Nations Global Compact (UNGC)**.

For inquiries, opinions, and suggestions regarding the report, please contact us via: [AkilliHayat2030@zorlu.com](mailto:AkilliHayat2030@zorlu.com).

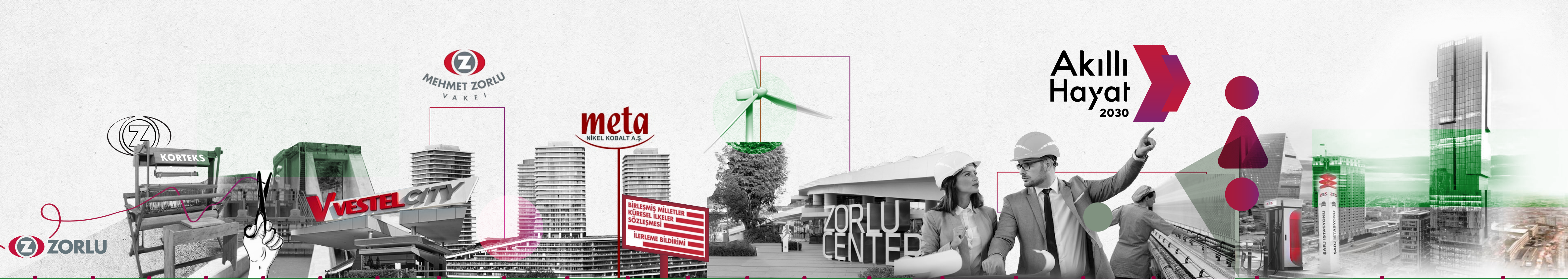
## SCOPE

This report comprehensively covers the operations where our impacts are significant, encompassing the consolidated data of the following entities pertaining to the period of January **1 to December 31, 2022**: **Zorlu Holding A.Ş.**, **Zorlu Energy Group**'s operations in Turkey, Pakistan, and Palestine, **Vestel Group** (Vestel Elektronik Sanayi ve Ticaret A.Ş., Vestel Beyaz Eşya Sanayi ve Ticaret A.Ş.), **Zorlu Textiles Group** (Korteks Mensucat Sanayi ve Tic. A.Ş., Zorluteks Tekstil Ticaret ve Sanayi A.Ş.), **Zorlu Real Estate Group** (Zorlu Gayrimenkul Geliştirme ve Yatırım A.Ş., Zorlu Yapı Yatırım A.Ş., and Zorlu Performans Sanatları Merkezi), and **Meta Nikel Kobalt A.Ş.** (Meta Nikel).

Starting from this year, international operations by Zorlu Energy Group's Zorlu Energy Solutions (ZES) have been excluded from the report's scope



# SUSTAINABILITY AT ZORLU HOLDING AT A GLANCE



1953	1976	1989	1990	1993	1994	1997	1999	2006	2007	2009	2011	2012	2013	2015	2016	2017	2018	2019	2020	2021	2022
Founded by Mehmet Zorlu with the establishment of <b>Zorlu Mensucat Denizli, Zorlu Holding</b> starts its activities in the textiles industry.	<b>Korteks Velvet Weaving Plant</b> is established in Bursa, and approximately 10 years later, it begins its first-ever export of textile products.	<b>Korteks Yarn Factory</b> is established.	<b>Korteks Polyester Yarn Factory</b> begins production as Europe's largest integrated polyester yarn manufacturer and exporter.	<b>Zorlu Enerji</b> is founded to meet the energy and steam needs of Zorlu Group's industrial enterprises.	<b>Vestel Elektronik</b> joins Zorlu Group.	<b>Vestel Beyaz Eşya</b> is founded.	<b>Mehmet Zorlu Education, Health, Culture and Solidary Foundation (MZV)</b> is established.	<b>Zorlu Gayrimenkul</b> is established.	<b>Meta Nikel Kobalt Madencilik</b> , which started its activities in 2000, joins Zorlu Group.  Zorlu Holding signs the <b>United Nations Global Compact</b> .	Zorlu Holding publishes its first <b>Global Compact Progress Report</b> covering the 2007-2009 period.	<b>Jhimpir Wind Power Plant</b> in Pakistan begins generation.	<b>Zorlu Faktoring</b> commences its operations.	<b>Zorlu Center</b> , the construction of which began in 2008 as Turkey's first mixed-use project, opens as a shopping and performing arts center.	Zorlu Holding signs the <b>United Nations Women's Empowerment Principles</b> , institutionalizing its support for empowering women in the society, business, and the economy.  Vestel Elektronik is included in the <b>BIST Sustainability Index</b> for the November 2015 - October 2016 period.	<b>Vestel Beyaz Eşya</b> and <b>Zorlu Enerji</b> voluntarily join Borsa İstanbul's <b>BIST Sustainability Index</b> for the November 2016 - October 2017 period.  <b>Zorlu Energy Group's Sarıtepe and Demirciler Wind Power Plants (WPPs)</b> become operational.	<b>The Smart Life 2030</b> sustainability strategy is developed.  Vestel Beyaz Eşya becomes the first company in Turkey to receive the <b>"Water Footprint"</b> certification in the industry.  <b>Zorlu Solar</b> becomes the only authorized distributor of the US-based First Solar across 26 countries.	Zorluteks is awarded the highest score in the <b>Business Social Compliance Initiative (BSCI)</b> for its performance in sustainable working conditions.  <b>Zorlu Holding</b> becomes a signatory to the <b>Business Plastic Initiative (BPI)</b> .  <b>Vestel Beyaz Eşya</b> expands its brand license agreement with <b>Sharp Corporation</b> to include smart products.  <b>Zorlu Energy Group</b> signs a contract to sell its 100% stake in <b>Zorlu Rüzgar Enerjisi Elektrik Üretimi A.Ş.</b> , which includes Sarıtepe and Demirciler WPPs in its portfolio.  <b>Zorlu Center</b> receives the highly esteemed <b>Albert Sussman International Community Support Award</b> from ICSC, a United Nations body, in recognition of its <b>"No Barriers at Zorlu"</b> project.	<b>Zorlu Energy Solutions</b> expands its electric vehicle charging station network to 81 cities thanks to its investments.  <b>Zorlu Enerji</b> becomes a signatory to the <b>UN Global Compact</b> and the <b>UN Empowerment Principles (WEPs)</b> as part of its Eşit Bİ'Hayat (An Equal Life) approach.  <b>Vestel</b> signs an agreement with Iberdrola, one of the world's largest electricity companies, to manufacture electric vehicle chargers for the charging stations to be installed by the company in the UK, Italy, and Spain.  <b>Vestel</b> breaks new ground by starting to produce battery packs for electric bicycles, and issues <b>Turkey's first green bond in TL</b> to receive an international sustainability rating.  Zorluteks completes the <b>STeP (Sustainable Textile Production)</b> certification process across its factories and commences production under the <b>"Made in Green"</b> label, available to those who hold Oeko-Tex® Standard 100 and Oeko-Tex® STeP certifications.  Established as part of the investments in circular economy, the <b>Polymer Recycling Plant</b> breaks new ground in Europe and Turkey by manufacturing polyester yarn completely out of plastic bottles.  <b>Zorluteks</b> certifies the energy it uses within the scope of its cooperation with <b>Zorlu Energy Group</b> with the <b>International Renewable Energy Certificate (I-REC)</b> .	Zorlu Holding's sustainability targets are updated as part of the <b>Smart Life 2030</b> strategy.  <b>Zorlu Enerji</b> unveils its <b>Renewable Energy Commitment Letter</b> , outlining its goal to achieve 100% renewable energy in total electricity generation by 2030, while focusing on expanding and enhancing its renewable energy portfolio through diversification and development.  <b>Vestel Elektronik, Vestel Beyaz Eşya</b> and <b>Zorlu Tekstil</b> sign the <b>UN Global Compact</b> .  Korteks becomes the first polyester yarn company in the world to be awarded <b>Environmental Product Declaration (EPD)</b> certificates after completing <b>Life Cycle Assessment (LCA)</b> studies in 4 different product categories.  <b>Zorlu Center</b> and <b>Levent 199</b> certify the energy they use within the scope of their cooperation with Zorlu Energy Group with the <b>International Renewable Energy Certificate (I-REC)</b> .  Zorlu Enerji sets a target of investing <b>TL 10 million by 2030</b> to conserve and enhance biodiversity.	<b>Zorlu Holding Human Rights Policy</b> is published.  Vestel Elektronik achieves a 44% increase in its S&P Global ESG score, reaching 65 in 2022, leading to its inclusion in the S&P Sustainability Yearbook 2023 as an <b>"Industry Mover"</b> as the company to make the most progress in its sector.  <b>Vestel Elektronik</b> is included in the <b>BIST Sustainability 25 Index</b> .  Vestel Elektronik plants' CDP (Carbon Disclosure Project) climate change score increases to B and Vestel Beyaz Eşya plants' score rises to A-.  <b>Zorlu Enerji</b> becomes a pioneer in its sector by joining the <b>Science Based Targets Initiative (SBTI)</b> , which it signed by committing to limit the increase in greenhouse gas emissions to 1.5°C.  <b>Zorlu Enerji</b> scores 61 points in the ESG assessment conducted by Moody's, reaching the <b>"Advanced"</b> level. With its ESG score, Vestel Elektronik secures the 4th position among the 57 evaluated energy companies, further establishing itself as a leading force in sustainability in the energy sector.	

## MESSAGE FROM THE CEO



Ömer Yüngül  
CEO

### Esteemed Stakeholders,

The year 2022, which started under the conditions of diminishing impacts of the pandemic that marked 2020 and 2021, coupled with widespread vaccination, took a different turn in February. The profound economic and social consequences of the ongoing Russia-Ukraine war continue to be acutely felt at both global and local levels, compounding the challenges already brought about by the pandemic. The energy and food crisis, which deepened especially with the war, once again revealed the fragility of global systems.

In this process, we have witnessed how problems in one part of the world can affect the whole world, since it is not just large countries, populous societies or prominent sectors and companies that have been affected, but individuals from all walks of life.

In 2022, global growth fell short of expectations, recording a rate of 3.2%, which was 1 percentage point below initial projections, attributable to the ongoing war.<sup>1</sup> Turkey's economy grew by 5.6%, above the global average.<sup>2</sup> The embargoes imposed on Russia as a result of the war and the resulting energy crisis increased inflation. The pursuit of tight monetary policies to fight inflation brought with it the risk of recession all over the world, especially in developed countries.

The challenges, particularly in the energy sector, have contributed to a surge in inflation across numerous countries, including advanced economies, resulting in a widespread "cost of living crisis". The Global Risks Report for 2023, published by the World Economic Forum, highlights the cost-of-living crisis as the top-ranked short-term risk. The report not only identifies environmental and social risks associated with the climate crisis as highly significant in recent years

<sup>1</sup> [Interim Report 2022, OECD Economic Outlook](#)

<sup>2</sup> [Quarterly Gross Domestic Product, TÜİK](#)

“THE ENERGY AND FOOD CRISIS, WHICH DEEPENED ESPECIALLY WITH THE WAR, ONCE AGAIN REVEALED THE FRAGILITY OF GLOBAL SYSTEMS.”

but also emphasizes their potential to impact governments, companies, and individuals over the next decade. The report identifies a range of direct and indirect climate crisis-related risks, including inadequate mitigation and adaptation efforts, extreme weather events, biodiversity loss, natural resource crises, and large-scale forced migration, all of which are projected to have profoundly detrimental consequences in the long term.<sup>3</sup>

According to a study published by the United Nations (UN) in 2022, countries' current policies and commitments fall far short of limiting the global temperature rise to 1.5°C. If current commitments alone are met, the temperature rise is projected to reach 2.5°C by the end of the century.<sup>4</sup> To meet the 1.5°C target agreed under the Paris Climate Agreement, concrete actions need to be taken as soon as possible and with collective consciousness. During the UN Climate Change Conference (COP27) held in the latter half of 2022, global consensus was reaffirmed as countries acknowledged that the current efforts to combat global warming are insufficient, and the challenge of achieving desired outcomes becomes increasingly difficult with each passing year. A significant outcome of COP27 was the establishment of the "Loss and Damage Fund", a crucial decision aimed at providing financial support to developing nations impacted by the climate crisis.<sup>5</sup> The creation of the fund under the framework of climate justice is anticipated to offer substantial assistance to the regions that are particularly vulnerable to the impacts of climate change.



**"IF CURRENT COMMITMENTS  
ALONE ARE MET, THE  
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TO REACH 2.5°C BY THE END OF  
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### Dear Stakeholders,

The succession of economic, social, and environmental crises in recent years has served as a reminder to the world about the significance of building resilience to navigate uncertainties. In light of these circumstances, it is imperative for companies to adopt a comprehensive strategy that enables them to overcome global crises, embrace adaptation for the future, and seize opportunities to enhance their overall success. At Zorlu Group, we continue to work in line with our sustainability strategy Smart Life 2030. With our "responsible investment holding" approach, we are moving forward with an integrated approach to business strategy.

As an export-oriented Group, we adhere to a growth approach that prioritizes diversification and resilience, proactively anticipating risks and opportunities while continually our robust financial structure. In 2022, our Group achieved remarkable growth with a significant 96% year-on-year increase in consolidated sales revenues, reaching TL 102.9 billion, while also demonstrating a 64% rise in Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) to TL 16.7 billion.

At Zorlu Group, we regularly monitor the long-term sustainability targets we have set under the themes of "Human-Oriented Ecosystems" and "Regenerative Business Models", and transparently report our performance against these targets every operating year. Our goal is to attain net zero emissions for Scope 1 and 2 by 2030, and for Scope 1, 2, and 3 emissions by 2050. We also encourage and support our Group companies in their decarbonization efforts. In 2022, we reduced absolute greenhouse gas emissions by 16% compared to last year. Our greenhouse gas intensity by turnover fell by 50%.

At Zorlu Group, we believe that we can become resilient in the face of crises through radical multi-stakeholder collaborations and disruptive innovation. Guided by this awareness, we actively enhance our partnerships with the private sector, public, academia, and non-



3

[The Global Risk Report 2023, WEF](#)

4

[Climate Plans Remain Insufficient: More Ambitious Action Needed Now, UNFCCC](#)

5

[COP27 Reaches Breakthrough Agreement on New "Loss and Damage" Fund for Vulnerable Countries, UNFCCC](#)



**"IN 2022, OUR GROUP  
ACHIEVED REMARKABLE  
GROWTH WITH A SIGNIFICANT  
96% YEAR-ON-YEAR  
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SALES REVENUES, REACHING  
TL 102.9 BILLION, WHILE  
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DEPRECIATION, AND  
AMORTIZATION (EBITDA) TO  
TL 16.7 BILLION."**



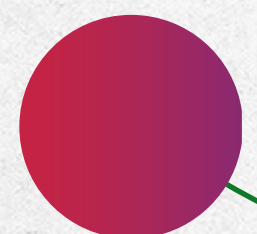
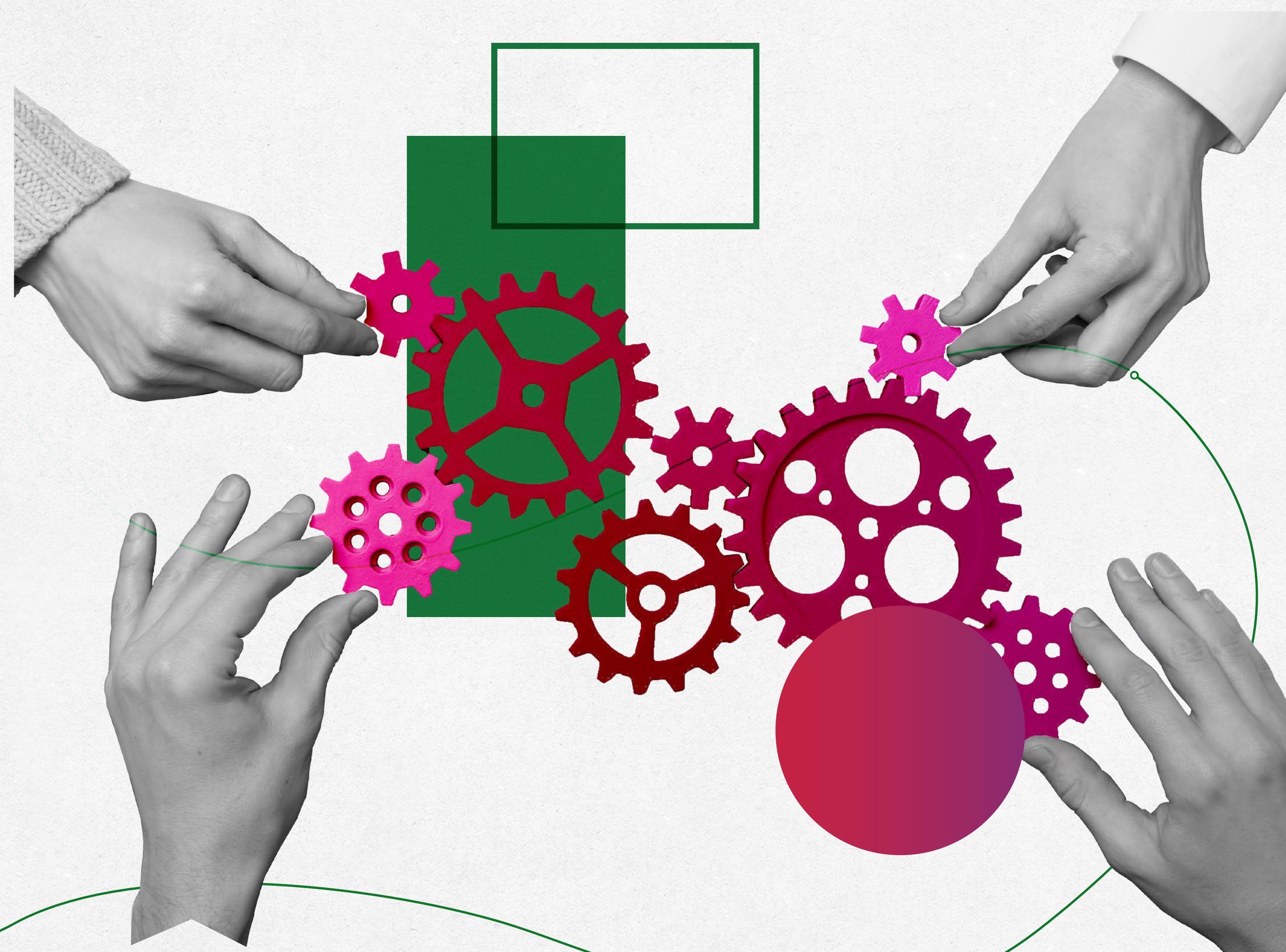
governmental organizations, placing innovation at the heart of the sectors in which we operate. We remain at the forefront of emerging trends, including Industry 4.0, digitalization, big data, and artificial intelligence, as we undertake comprehensive R&D initiatives. In 2022, we increased our commitment to R&D and innovation by nearly doubling our budget, resulting in an investment of TL 1.2 billion, which accounts for approximately 7% of our EBITDA.

I am pleased to share that our publicly traded Group companies are improving their performance in international indices and reporting initiatives every year. In 2022, Vestel increased its S&P Global Corporate Sustainability Assessment (CSA) score by 44% and became the company with the highest year-on-year improvement in its sector and entered S&P The Sustainability Yearbook 2023 as an “Industry Mover”. Vestel Elektronik, Vestel Beyaz Eşya, and Zorlu Enerji, listed on the BIST Sustainability Index, actively participate in annual assessments conducted by the Carbon Disclosure Project (CDP), specifically in the areas of Climate Change and Water Security programs. As of 2022, Vestel Elektronik was also included in the BIST Sustainability 25 Index, which includes companies with high ESG (environmental, social, governance) performance in their respective sectors.

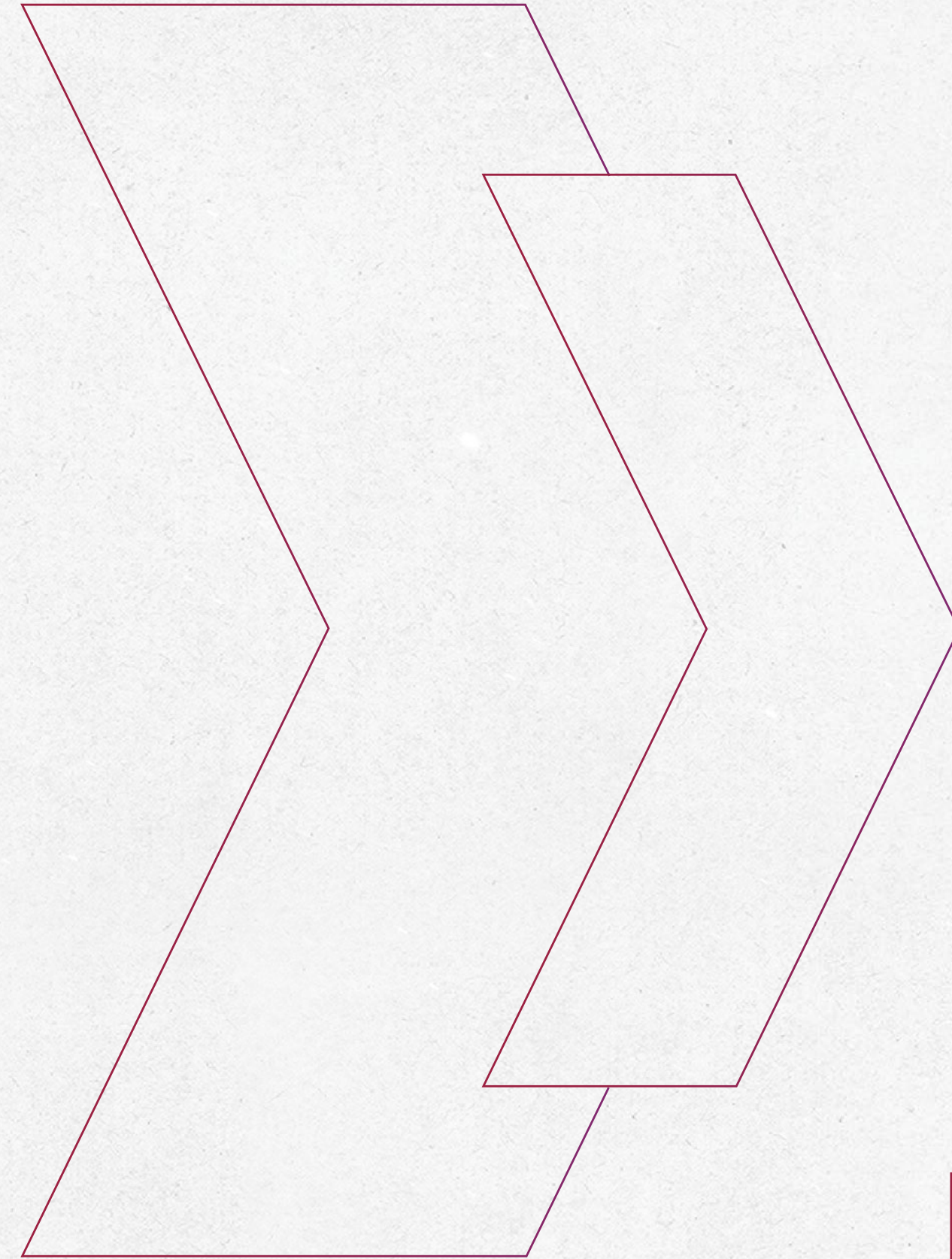
As we commemorate the 100<sup>th</sup> anniversary of our Republic in 2023, we remain steadfast in our pursuit of a brighter future, driven by our commitment and responsibility to uphold the values upon which our Republic was founded. At Zorlu Group, we always strive to realize the best for the people, communities, and planet, which we recognize as vital stakeholders. We acknowledge the invaluable contributions of our stakeholders, and we extend our gratitude to all of them, with a special mention to our dedicated employees, whose belief, trust, and support empower us in our endeavors to shape a smart life.

Sincerely,

Ömer Yüngül  
CEO



# SMART LIFE 2030





## WE CREATE VALUE THROUGH RADICAL COLLABORATIONS BY BUILDING HUMAN-ORIENTED ECOSYSTEMS AND REGENERATIVE BUSINESS MODELS

### Human-Oriented Ecosystems

- › Employee Satisfaction
- › Future of Work
- › Inclusive Value Chain
- › Community Investments

### Regenerative Business Models

- › Combating the Climate Crisis
- › Circular Design

## RADICAL COLLABORATIONS

## INTEGRATED MANAGEMENT APPROACH

- › Enterprise Risk Management
- › Integrated Value Creation

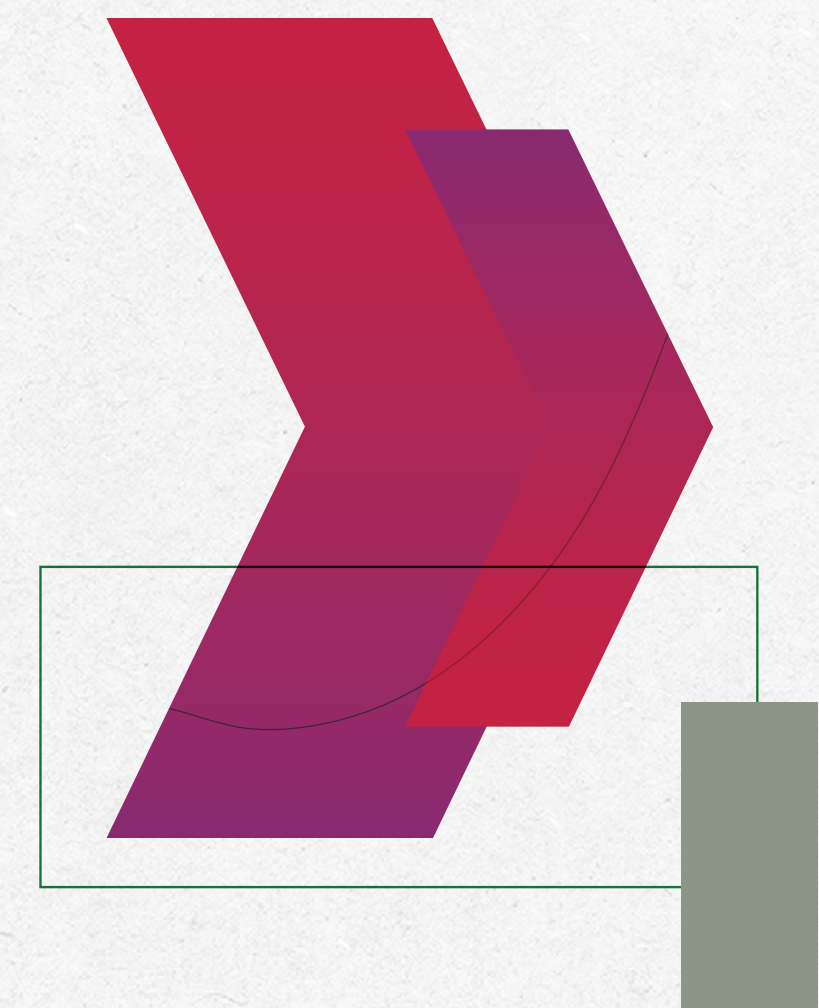
Smart Life  
 2030

## SMART LIFE 2030

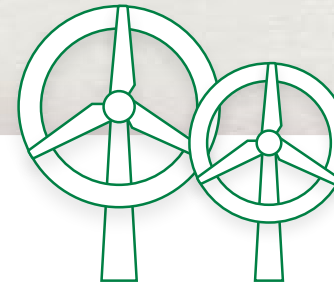
Guided by the Smart Life 2030 strategy, we respond to the risks and opportunities brought by global trends and make our business, human resources, society, business partners, customers, and suppliers more resilient and adaptable to change. While we increase our capacity to create value for all our stakeholders with our strategy based on the principle of responsible investment holding, we are positioned as a stakeholder for the solution of global issues by utilizing the power of technology and innovation.

Consisting of “human-oriented ecosystems” and “regenerative business models”, the Smart Life 2030 strategy is supported by an integrated management approach encompassing corporate governance and risk management. Going beyond traditional corporate partnerships, radical collaborations and innovative approaches drive environmental and social progress, strengthening both individuals and the ecosystem in Turkey. These initiatives are facilitators that enable us to effectively implement our strategic goals.

You can find our Smart Life 2030 Manifesto [here](#).



# ENVIRONMENTAL, SOCIAL, GOVERNANCE (ESG) PERFORMANCE IN 2022

REGENERATIVE BUSINESS MODELS				
Target	Company	KPI*	2022 Performance	Progress <sup>6</sup>
 <p><b>NET ZERO EMISSIONS IN SCOPE 1-2 BY 2030 AND ACROSS THE ENTIRE VALUE CHAIN (SCOPE 1-2-3) BY 2050.</b></p>	Vestel Group of Companies	Carbon intensity (tons CO <sub>2</sub> e/USDm)	37.4	»»»
	Zorlu Energy Group <sup>7</sup>	Carbon intensity (tons CO <sub>2</sub> e/GWh)	487.2	»»»
	Zorluteks	Carbon intensity (tons CO <sub>2</sub> e/tons production)	1.1	»»»
	Korteks	Carbon intensity (tons CO <sub>2</sub> e/tons production)	0.08	»»»
	Zorlu Real Estate Group	Carbon intensity (tons CO <sub>2</sub> e/m <sup>2</sup> )	0.03	»»»
	Meta Nikel	Carbon intensity (tons CO <sub>2</sub> e/tons nickel production)	35.2	»»»
	Zorlu Holding A.Ş.	Carbon intensity (tons CO <sub>2</sub> e/m <sup>2</sup> )	0.05	»»»

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»»» : Indicates progress towards the target.

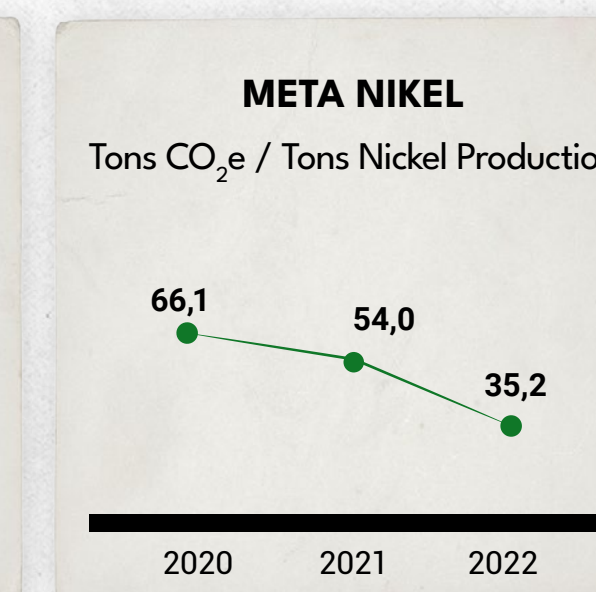
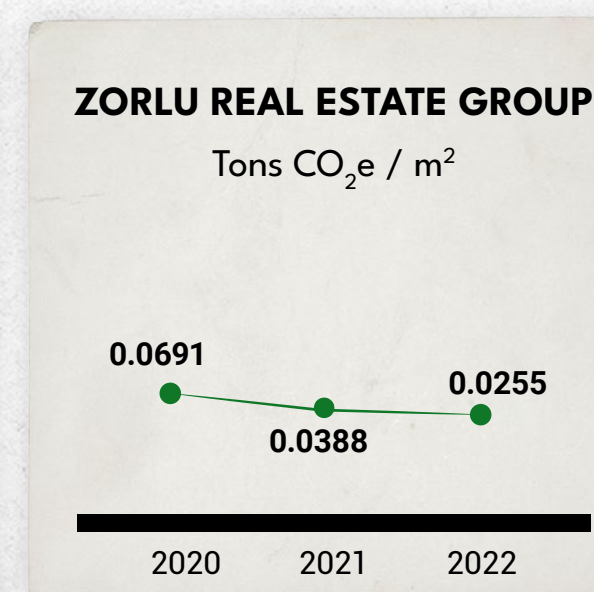
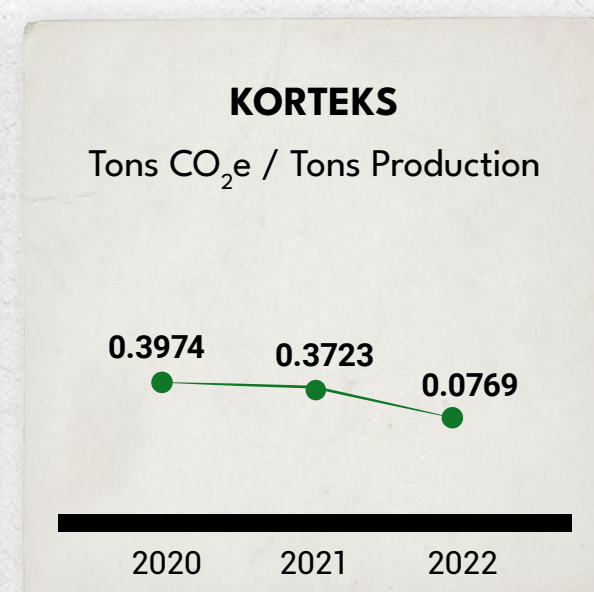
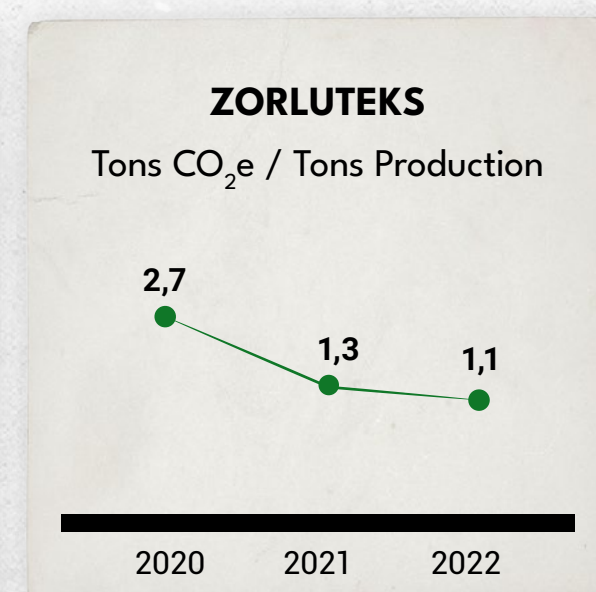
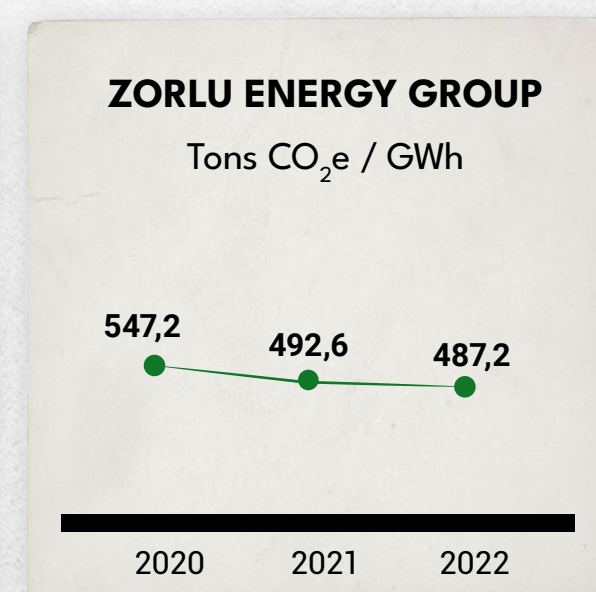
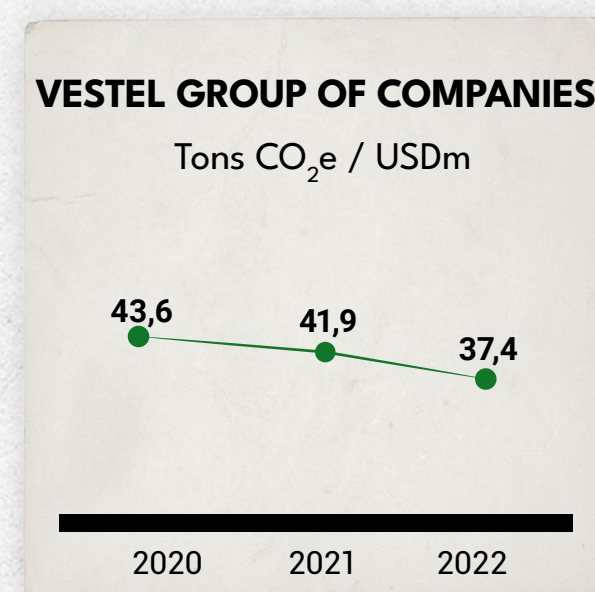
■ : Indicates inadequate performance or lack of progress towards the target.

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Since carbon intensity is calculated based on gross energy production, OEDAŞ and GAZDAŞ are not included in the emission data.

\*

The carbon intensity calculation includes Scope 1-2 emissions.



## REGENERATIVE BUSINESS MODELS

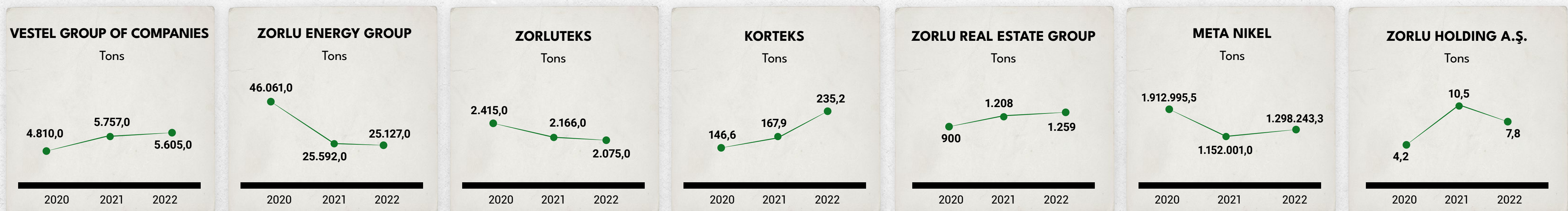
Target	Company	KPI	2022 Performance <sup>8</sup>	Progress
 <p><b>50% REDUCTION IN WASTE BY 2030 COMPARED TO THE 2020 BASE YEAR AND ZERO WASTE BY 2050</b></p>	Vestel Group of Companies	Amount of waste disposed <sup>9</sup> (tons)	5,605	■
	Zorlu Energy Group		25,127	»»
	Zorluteks		2,075	»»
	Korteks		235.2	■
	Zorlu Real Estate Group		1,259	■
	Meta Nikel		1,298,243.3	■
	Zorlu Holding A.Ş.		7.8	»»

8

Korteks, Meta Nikel, and Vestel Group experienced notable growth in capacity utilization rates and production volumes, while Zorlu Gayrimenkul witnessed an upsurge in guest numbers and project activities, due to the assembly and renovation efforts throughout the year.

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The indicator tracked under “waste sent to landfill (tons)” in the 2021 report was replaced with “waste disposed (tons)” as of this year. Disposed waste data refers to the sum of waste sent to landfill, waste incinerated for energy purposes and waste incinerated for non-energy purposes.



## REGENERATIVE BUSINESS MODELS

Target	Company	KPI <sup>10</sup>	2022 Performance <sup>11</sup>	Progress
<p><b>TO RECOVER 50% OF THE WATER USED BY 2030 COMPARED TO THE BASE YEAR OF 2020, AND TO ACHIEVE FULL WATER RECOVERY BY 2050</b></p>	Vestel Group of Companies	Water withdrawal intensity (m <sup>3</sup> /USDm)	401.4	»»
	Zorlu Energy Group <sup>12</sup>	Water withdrawal intensity (m <sup>3</sup> /GWh)	741,777.1	■
	Zorluteks	Water withdrawal intensity (m <sup>3</sup> /tons production)	54.4	»»
	Korteks	Water withdrawal intensity (m <sup>3</sup> /tons production)	1.8	■
	Zorlu Real Estate Group	Water withdrawal intensity (m <sup>3</sup> /m <sup>2</sup> )	0.6	■
	Meta Nikel	Water withdrawal intensity (m <sup>3</sup> /tons nickel production)	187.3	»»
	Zorlu Holding A.Ş.	Water withdrawal intensity (m <sup>3</sup> /m <sup>2</sup> )	0.3	■

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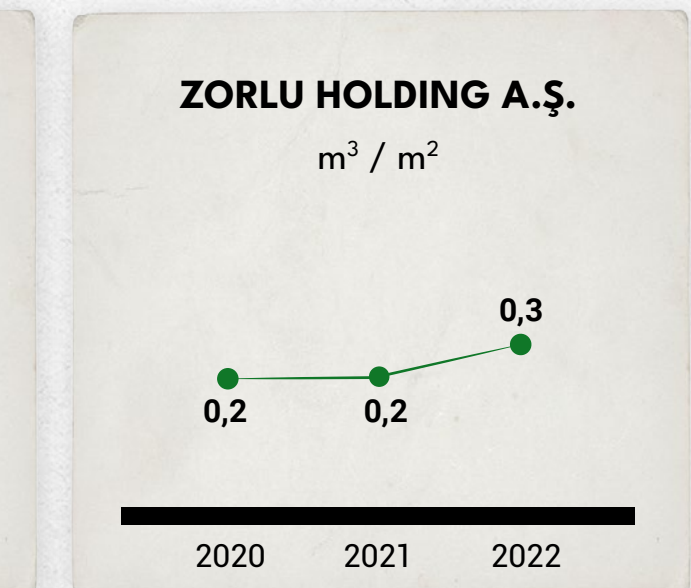
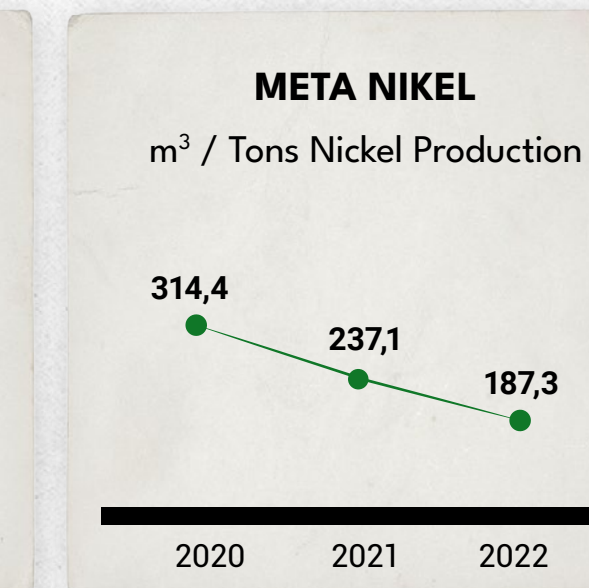
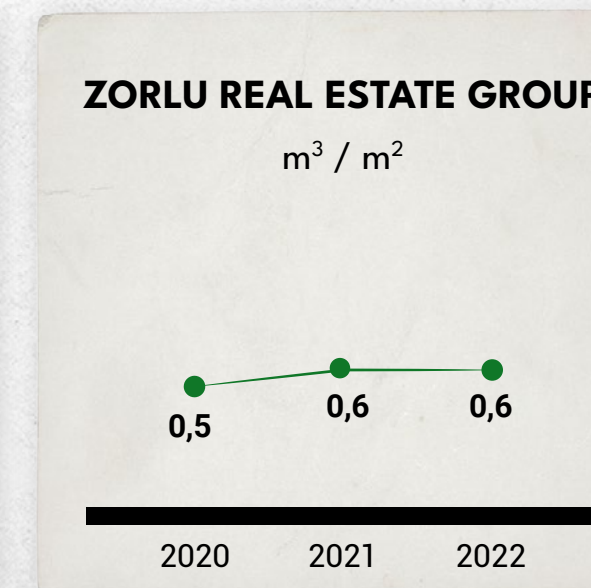
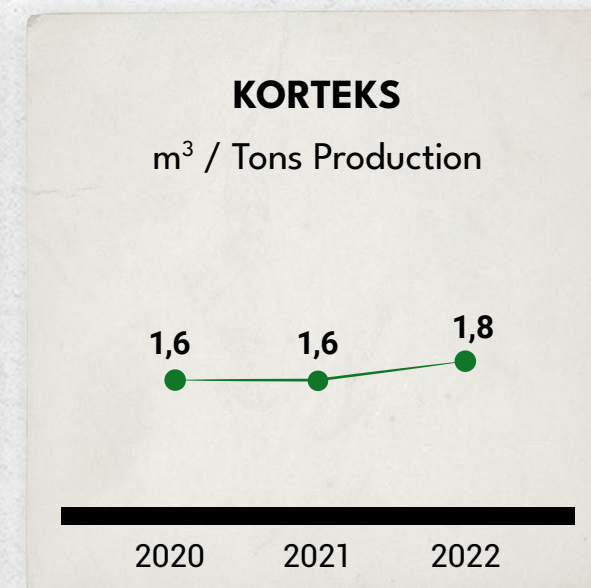
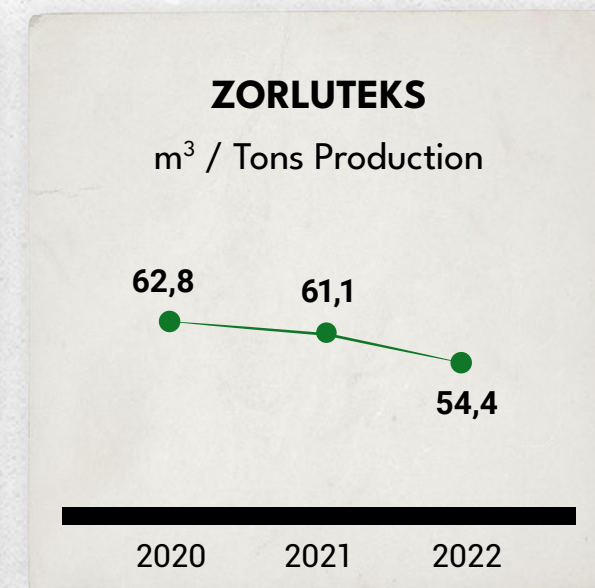
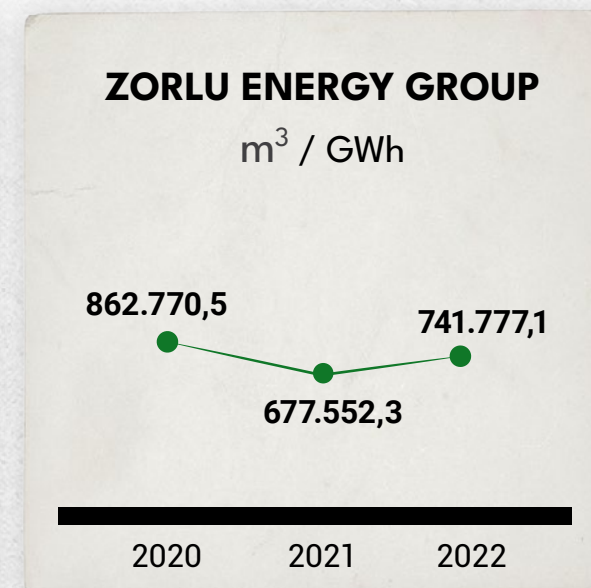
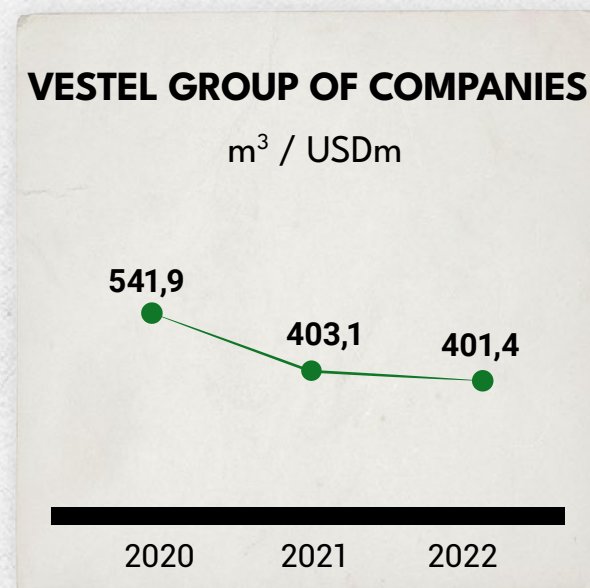
Since water recovery efforts are still ongoing across Zorlu Group, water withdrawal intensity is currently monitored. While calculating the intensity, total water withdrawal (m<sup>3</sup>) was divided into relevant indicators for each sector.

11

Water intensity increased at Zorlu Holding and Zorlu Gayrimenkul due to the number of employees and guests, and at Zorlu Energy Group and Korteks due to the amount of production and distribution within the production portfolio.

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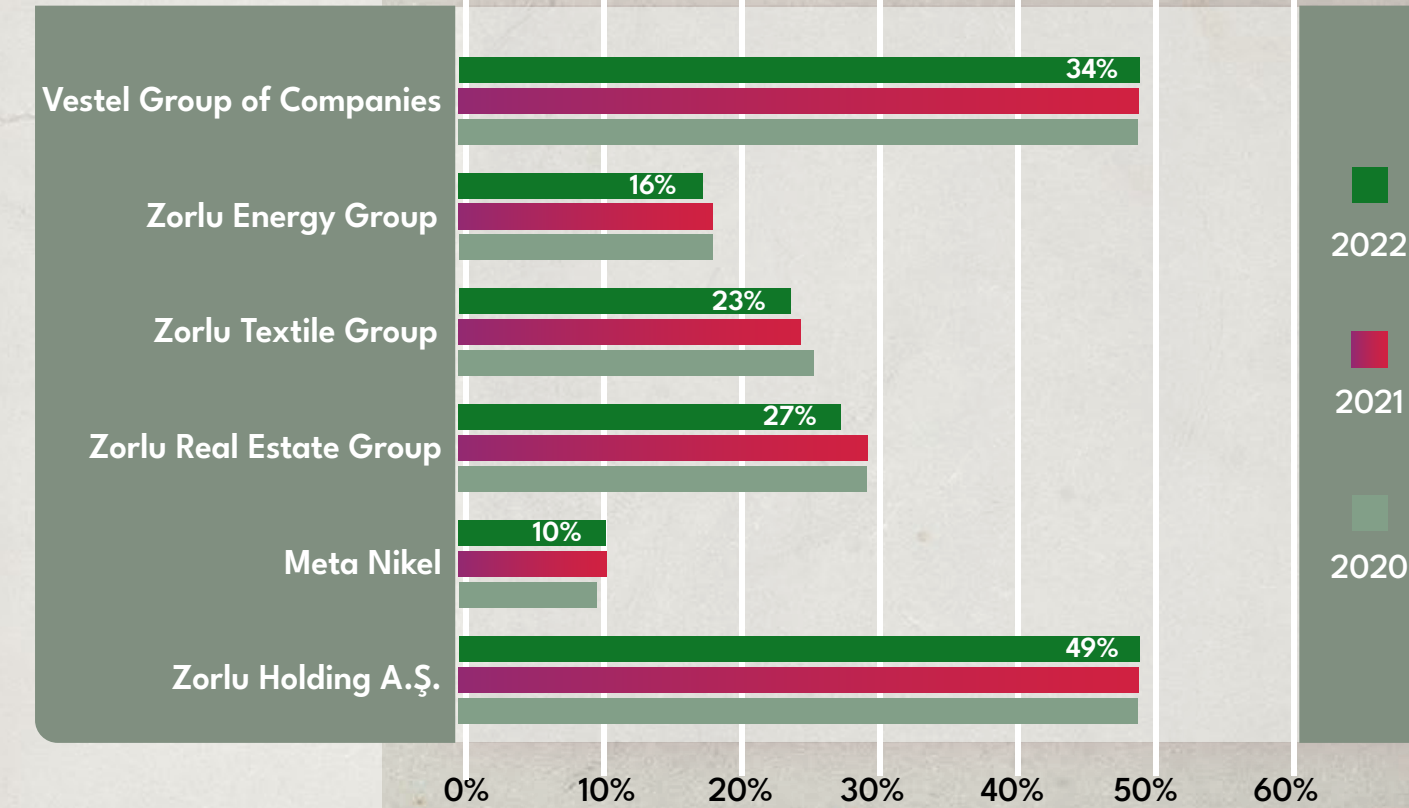
Water withdrawal intensity includes water withdrawn from Geothermal Power Plants (GPP) and Hydroelectric Power Plants (HPP). Domestic water consumption from OEDAŞ and GAZDAŞ has been neglected.



## HUMAN-ORIENTED ECOSYSTEMS

Target	Company	KPI	2022 Performance <sup>13</sup>	Progress
<p><b>TO INVEST IN THE FUTURE OF BUSINESS AND TO BECOME A LEADER OF INCLUSION AND DIVERSITY</b></p> <p><b>TO BE AMONG THE BEST EMPLOYERS IN ALL SECTORS IN WHICH WE OPERATE</b></p>	Vestel Group of Companies	Ratio of female employees (%)	34%	■
	Zorlu Energy Group		16%	■
	Zorlu Textile Group		23%	■
	Zorlu Real Estate Group		27%	■
	Meta Nikel		10%	■
	Zorlu Holding A.Ş.		49%	■

## RATIO OF FEMALE EMPLOYEES (%)



### \* Investing in Communities:

Community investments; focusing social issues as part of the company's long-term strategy, usually in collaboration with stakeholders.

### Commercial Initiatives:

Community investments; usually implemented by the company's marketing departments, primarily aiming business development and increasing the company's visibility and reputation.

**Philanthropy:** Donations; not in line with the company's main social investment strategy, usually made in response to requests made by needy institutions, employees, or in emergencies.

**13**

As the employee engagement survey is conducted biennially across the Zorlu Group, the performance results for 2022 are not currently shared.

### Target

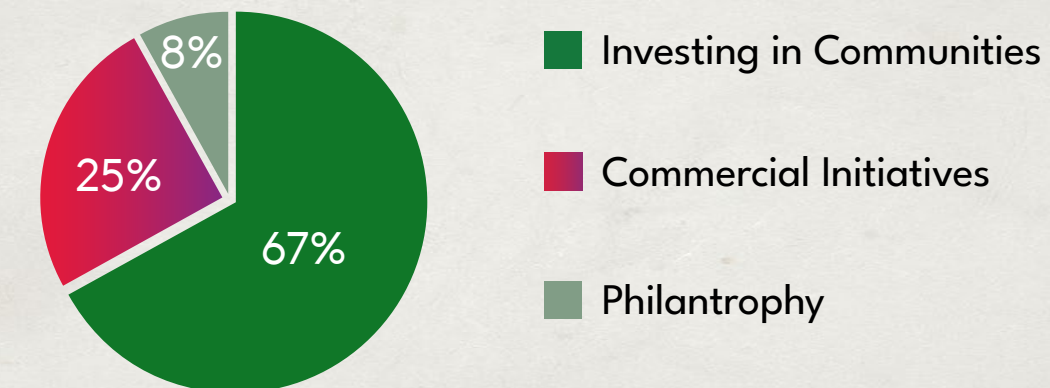


**TO HAVE A 100% SUSTAINABLE SUPPLY CHAIN BY 2030 (PRIMARILY STRATEGIC SUPPLIERS)**

### Progress

- We are mainstreaming the [Zorlu Holding Procurement Principles](#), which we published in 2021 and require the entire Zorlu Group and suppliers to fully comply with.
- Group companies reviewed their suppliers and identified the strategic ones. Audit and control mechanisms started to be implemented to boost traceability and sustainability in the supply chain.

## Support Type of Zorlu Group's Social Investments (By Budget Allocated)\*



### Target



**TO BECOME A PIONEER IN SOCIAL INVESTMENTS AND TO ALLOCATE 1% OF ZORLU HOLDING'S EBITDA EVERY YEAR TO SUSTAINABLE DEVELOPMENT GOALS**

### Company

Zorlu Holding (Consolidated)

### KPI

Ratio of EBITDA allocated to social investments

### 2021

0.7%

### 2022

0.7%

### Progress

■

## SUSTAINABILITY MANAGEMENT

At Zorlu Group, sustainability is embraced by a wide range of stakeholders, from senior management to employees. The Sustainability Committee reporting to the Board of Directors assumes the highest level of responsibility for sustainability strategy, long-term goals, and performance monitoring. In addition to five Board Members, the committee also includes two senior executives, namely the CEO and CFO. The committee, chaired by an Independent Board Member, convenes every month. Established in the second half of 2022, the Sustainability Committee convened 3 times until the end of the year. The following topics were regularly monitored through these meetings:

- Global and local sustainability agenda and its impact on Group companies,
- Zorlu Group's progress towards the Smart Life 2030 strategy and targets,
- Scores and progress of listed Group companies in global and local ESG indices.

**The important decisions taken by the committee that have an impact on the entire Group include:**

- Integrating sustainability criteria into investment decisions,
- Preparing sectoral decarbonization roadmaps,
- Implementing audit plans to increase traceability of the supply chain.

The establishment of the Sustainability Coordination Board (SCB) at the end of 2022 complements the Sustainability Committee by facilitating the presentation of current progress and key high-level decisions, while ensuring effective coordination among Zorlu Holding functions and Group companies. SCB is responsible for implementing Zorlu Group's sustainability strategy and long-term goals, ensuring sustainability-based coordination at Group level, supporting the sustainability activities of Group companies, and monitoring their progress. SCB, which meets four times a year, was established under the leadership of Zorlu Holding Corporate Communications and Sustainability General Directorate and reports directly to the Sustainability Committee. Chaired by Zorlu Holding's CEO, SCB is composed of 14 members including Zorlu Holding's Deputy General Manager of Internal Audit and Ethics, Deputy General Manager of Corporate Communications and Sustainability, Human Resources Director, Strategy and Business Development Director, Purchasing Manager, Corporate Communications Manager, Sustainability Manager, Sustainability Executive, and sustainability coordinators of all Group companies.

For addressing sustainability-focused issues within the Group, temporary working groups can be formed as needed for a specified duration. The Sustainability Coordination Board appoints the chairperson and members of the working groups, and these groups report their progress to SCB.

### ESG Leadership of Group Companies

Group companies, which intensify their efforts to integrate ESG issues into all business processes, are listed in local and international sustainability indices and raise their scores by improving their performance.

Vestel Elektronik increased its S&P Global Corporate Sustainability Assessment (CSA) score by 44% to 65 points in 2022. In addition, Vestel, the company with the highest year-on-year growth in the consumer electronics sector, was included in S&P The Sustainability Yearbook 2023 as an "Industry Mover". Vestel Elektronik plants' CDP climate change score increased to B and Vestel Beyaz Eşya plants' score rose to A-. Vestel Beyaz Eşya's EcoVadis score increased from 41 to 53 in 2022. While Vestel Elektronik has been included in the Borsa Istanbul Sustainability Index since 2015 and Vestel Beyaz Eşya since 2016, Vestel Elektronik was included in the BIST Sustainability 25 Index, which includes companies with high ESG performance in their respective sectors, as of 2022. In 2022, Vestel Elektronik and Vestel Beyaz Eşya scored 75 and 77 points, respectively, in Refinitiv, which evaluates companies listed in the BIST Sustainability Index. Vestel Komünikasyon factory's EcoVadis 2022 rating is Silver.

Responding to the CDP Climate Change and Water Programs since 2019, Zorlu Enerji received a score of B in both categories in 2022. It received a score of 61 in Moody's ESG rating, upgrading its level from medium to advanced. The company has been included in the BIST Sustainability Index since 2016 and has achieved a score of 69 on Refinitiv in 2022. Zorlu Enerji, on the other hand, aims to expand its participation in additional indices in the future and to enhance its scores in existing indices.

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**AS PART OF OUR SMART LIFE 2030 STRATEGY, WE ARE COMMITTED TO ENHANCING OUR PERFORMANCE IN THE REALMS OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE MATTERS. WE ALSO STRIVE TO BOLSTER OUR SUSTAINABILITY OBJECTIVES AND MANAGERIAL CAPABILITIES BY BEING INCLUDED IN NATIONAL AND INTERNATIONAL INDICES THROUGH OUR COMPANIES.**

CEM KÖKSAL

CFO

SUSTAINABILITY COMMITTEE MEMBER

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## DIALOGUE WITH STAKEHOLDERS

We prioritize the opinions of our employees as well as our external stakeholders when making strategic decisions. Based on the principle of creating value for all our stakeholders, we engage in regular and highly interactive communication, especially with our key stakeholders. In this process, we act in cooperation with our stakeholders by integrating the views of different individuals, institutions and organizations. We also participate in various international platforms to be part of the solution by coming together with our sectoral stakeholders and relevant organizations.

We are a signatory to the United Nations' Global Compact and Women's Empowerment Principles and part of the Turkish Business Plastics Initiative. A comprehensive list of the organizations we are members of can be found in the [Appendices](#) section.

We conduct stakeholder analysis by consulting with our stakeholders to determine the key sustainability topics that shape our focus areas. Through these analyses, we understand their expectations and learn how they evaluate our ESG performance. In 2019, we identified our strategically material topics based on the results of the stakeholder analysis we conducted in accordance with the AA1000 Stakeholder Engagement Standard.

At Zorlu Holding and Group Companies, we maintain active and effective communication with stakeholders across our entire value chain. In determining the methods and frequencies of stakeholder communication, we prioritize evaluating the efficiency of communication channels based on the evolving needs of our stakeholders and the demands of the digital age, ensuring that our communication is open, transparent, and effective through continuous monitoring of our activities.

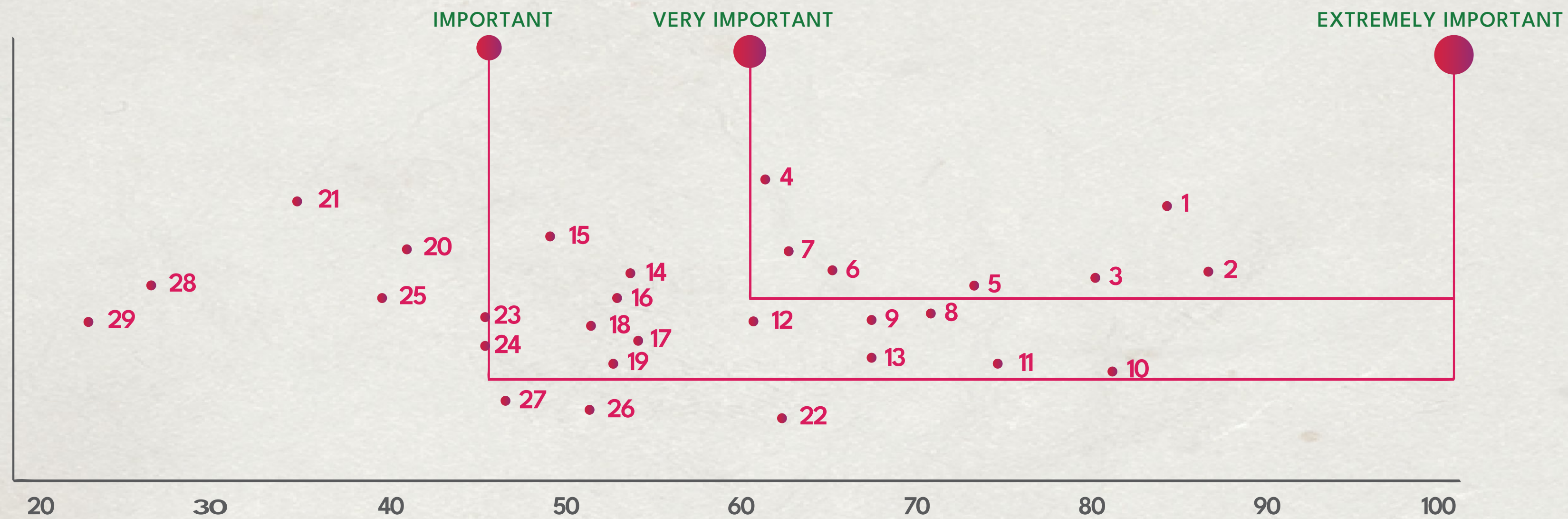
Stakeholders	Communication Method	Communication Frequency
<b>Employees and Group companies</b>	Messages from leaders	At least once a month
	Internal communication messages, e-bulletin, newsletter, monthly magazine	Continuous
	Media communication	Continuous
	Digital media channels (in-house communication platform, website, Smart Life 2030 Blog, social media channels, intrapreneurship website)	Continuous
	Internal and external reports, meetings, trainings	Continuous
	Digital announcement platforms inside buildings/production facilities	Continuous
	Sustainability report	Annual
	Annual report	Annual
<b>Suppliers</b>	Media communication	Continuous
	Digital media channels (website, Smart Life 2030 Blog, social media channels, intrapreneurship website)	Continuous
	Sustainability report	Annual
<b>Public institutions and local governments</b>	Annual report	Annual
	Media communication	Continuous
	Meetings and conferences	As needed
	Digital media channels (website, Smart Life 2030 Blog, social media channels, intrapreneurship website)	Continuous
<b>Non-governmental organizations</b>	Sustainability report	Annual
	Annual report	Annual
	Media communication	Continuous
	Meetings and conferences	As needed
	Digital media channels (website, Smart Life 2030 Blog, social media channels, intrapreneurship website)	Continuous
<b>Shareholders, investors, analysts</b>	Sustainability report	Annual
	Annual report	Annual
	Project partnerships and collaborations	As needed

Stakeholders	Communication Method	Communication Frequency
<b>National and international regulatory bodies</b>	Media communication	Continuous
	Digital media channels (website, Smart Life 2030 Blog, social media channels, intrapreneurship website)	Continuous
	Sustainability report	Annual
	Annual report	Annual
<b>Academia, institutes and research centers</b>	Media communication	Continuous
	Meetings and conferences	As needed
	Digital media channels (website, Smart Life 2030 Blog, social media channels, intrapreneurship website)	Continuous
	Sustainability report	Annual
<b>Media</b>	Annual report	Annual
	Press conferences and other meetings	As needed
	Media communication	Continuous
	Digital media channels (website, Smart Life 2030 Blog, social media channels)	Continuous
<b>Shareholders, investors, analysts</b>	Meetings and conferences	As needed
	Press conferences and other meetings	As needed
	Sustainability report	Annual
	Annual report	Annual
	General Assembly meetings	Annual
	Meetings and conferences	Continuous
<b>Shareholders, investors, analysts</b>	Media communication	Continuous
	Digital media channels (website, Smart Life 2030 Blog, social media channels, intrapreneurship website)	Continuous
	Sustainability report	Annual
	Annual report	Annual

# STRATEGIC PRIORITIES AND SUSTAINABLE DEVELOPMENT GOALS

## IMPORTANCE TO STAKEHOLDERS

STAKEHOLDER ANALYSIS + EXTERNAL TREND ANALYSIS



## IMPORTANCE TO ZORLU HOLDING

STRATEGY + MANAGEMENT PRIORITIES + 4-STEP IMPACT ASSESSMENT

### MATERIAL TOPICS

- 1 R&D and innovation
- 2 Financial efficiency
- 3 Digital transformation
- 4 Climate change and carbon management
- 5 Occupational health and safety
- 6 Talent management
- 7 Gender equality
- 8 Investing in renewable and alternative energy
- 9 Responsible product and service portfolio
- 10 Customer orientation and customer satisfaction
- 11 Entrepreneurship and intrapreneurship
- 12 Employee satisfaction and engagement
- 13 Sustainability leadership
- 14 Stakeholder dialogue
- 15 Responsible procurement
- 16 Business ethics
- 17 Employee rights
- 18 Social investment programs
- 19 Operational excellence and efficiency
- 20 Contribution to local development and employment
- 21 Sustainable raw material procurement
- 22 Social innovation
- 23 Improving digital literacy and access to technology
- 24 Transparency and reporting
- 25 Waste management
- 26 Data security and customer privacy
- 27 Circular economy
- 28 Water management
- 29 Biodiversity conservation and management



## STRATEGIC PRIORITIES AND SUSTAINABLE DEVELOPMENT GOALS

We engaged both internal stakeholders, including employees, and external stakeholders with a direct or indirect influence on our business, to collaboratively determine our sustainability priorities. In collaboration with an independent consulting company, we advanced the process in accordance with the AA1000 Stakeholder Engagement Standard. We reached out to the stakeholders we mapped and prioritized through online surveys, and the feedback we received contributed significantly to the analysis. We are revisiting the analysis, which we last updated in 2019, and aim to share the results by the end of 2023.

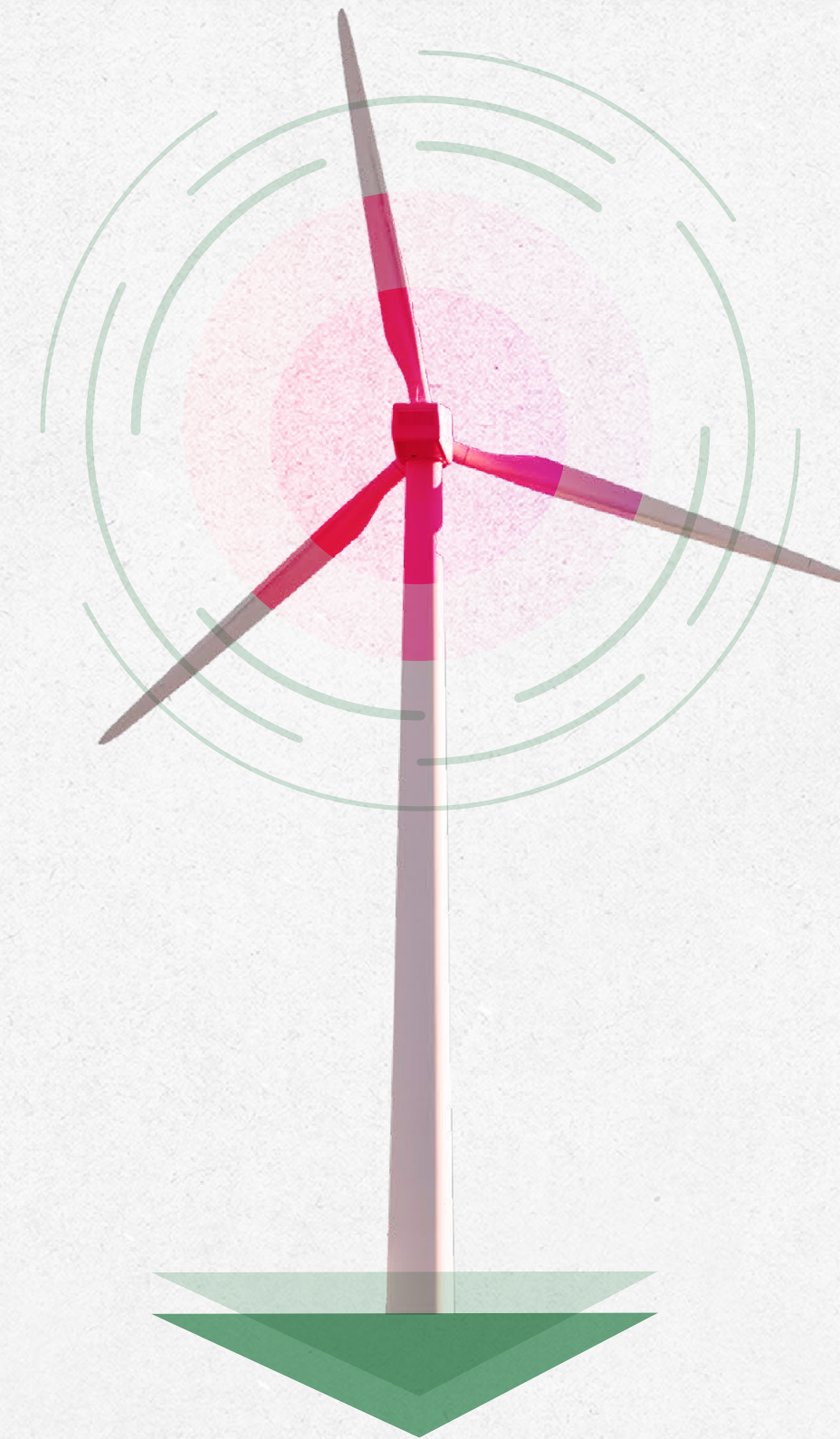
### When analyzing the importance of the identified topics for Zorlu Holding, we

- took into consideration the Smart Life 2030 strategy and the growth strategies of Group companies.
- compiled the views and expectations of the management through face-to-face interviews.
- assessed legal and financial impacts and risks using the Sustainability Accounting Standards Board's (SASB) Four-Step Impact Assessment.

### When determining the priority of the identified topics for stakeholders, we

- conducted a comprehensive field analysis and consulted with various stakeholder groups.
- with an external trend analysis, integrated the determining trends in the global agenda and in the sectors in which Zorlu Holding Group companies operate. For the external trend analysis, we benefited from the approaches of national and international organizations such as the United Nations 2030 SDGs, World Economic Forum Global Risks Report, Presidential Strategy Document and SASB sector annexes.

According to the analysis, extremely important material topics are: R&D and Innovation, Financial Efficiency, Digital Transformation, Climate Change and Carbon Management, Occupational Health and Safety, Talent Management, Gender Equality, Renewable and Alternative Energy. We base our strategic approach on material topics. We take into account the changing expectations of stakeholders and update the analysis in line with trends and global developments. Details of our 2019 analysis can be found in our [2021 Sustainability Report](#).







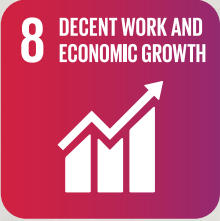

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ZORLU HOLDING CONDUCTS ITS OPERATIONS IN ALIGNMENT WITH ITS SMART LIFE 2030 STRATEGY AND ITS COMMITMENT TO A “RESPONSIBLE INVESTMENT HOLDING” APPROACH, AIMED AT FOSTERING A FUTURE CHARACTERIZED BY EQUALITY, INCLUSIVITY, FAIRNESS, AND INTELLIGENCE. IT IS GUIDED BY THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGS), WHICH ADDRESS CRITICAL GLOBAL CHALLENGES AND AIMS TO FURTHER INCREASE ITS SOCIAL IMPACT BY DEDICATING 1% OF ITS EBITDA ANNUALLY TO INITIATIVES THAT ADVANCE THE SUSTAINABLE DEVELOPMENT GOALS (SDGS).

EGE KARAPINAR  
INDEPENDENT BOARD MEMBER  
SUSTAINABILITY COMMITTEE CHAIR

”

Extremely Important Material Topics	Sustainable Development Goals We Contribute To	How do we manage them?
<p><b>R&amp;D and Innovation</b></p>	<p> <b>9.4.</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p>	<p>In our areas of operation, we prioritize addressing critical issues that impact our business and future, including combating the climate crisis, transitioning to a zero-carbon economy, embracing Industry 4.0 and digitalization, harnessing cloud technologies, and leveraging big data and artificial intelligence.</p> <ul style="list-style-type: none"> <li>➤ In 2022, the budget we allocated for R&amp;D nearly doubled compared to the previous year, reaching TL 1.2 billion.</li> <li>➤ Vestel Group collaborates with many national and international institutions and organizations, particularly universities, with a focus on R&amp;D and innovation.</li> <li>➤ Zorlu Energy Group's R&amp;D and Smart Systems Unit focuses on electric vehicles and energy storage.</li> <li>➤ Meta Nikel has developed a system that increases nickel content and eliminates minerals that can create a carbon footprint with the "magnetic separation-classification setup" technology developed through R&amp;D studies.</li> </ul>
<p><b>Financial Efficiency</b></p>	<p> <b>8.4.</b> Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead</p>	<ul style="list-style-type: none"> <li>➤ While we saved 6,681 MWh of energy across the Group in 2022, we also achieved financial savings of TL 5.5 million.</li> <li>➤ In 2022, our implemented improvement projects resulted in water savings of 31 thousand m<sup>3</sup>, leading to financial savings of TL 64 thousand.</li> </ul>
<p><b>Digital Transformation</b></p>	<p> <b>9.4.</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p>	<ul style="list-style-type: none"> <li>➤ With the aim of becoming the first production facility in Turkey to complete the Industry 4.0 transformation, Vestel City continues its digital transformation efforts and monitors all business processes with end-to-end digital systems.</li> </ul>

Extremely Important Material Topics	Sustainable Development Goals We Contribute To	How do we manage them?
<p><b>Climate Change and Carbon Management</b></p>	<p> <b>13.3.</b> Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</p>	<p>At Zorlu Group, we continue our efforts to draw up decarbonization roadmaps in line with our 2050 net zero target. In total, our Scope 1-2 emissions decreased by approximately 16% compared to the previous year and 20% compared to the base year of 2020, reaching a value of 1,735,311 tons CO<sub>2</sub>e.</p>
<p><b>Occupational Health and Safety (OHS)</b></p>	<p> <b>8.8.</b> Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment</p>	<p>Our occupational health and safety management approach revolves around the identification of OHS priorities, the establishment of a sustainable safety culture, and the promotion of zero accident awareness among all employees. We regularly organize OHS trainings to raise awareness among our employees. In 2022, we provided an average of 6.9 hours of OHS training per employee at Zorlu Holding and Group companies.</p>
<p><b>Talent Management</b></p>	<p> <b>8.5.</b> By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p>	<p>We organize various training and development programs throughout the year to encourage employees to improve their skills. In 2022, we provided a total of 340,888 person hours of training to our employees, reaching 11.4 hours of training per person.</p>

Extremely Important Material Topics	Sustainable Development Goals We Contribute To	How do we manage them?
<p><b>Gender Equality</b></p>	<p><b>5 GENDER EQUALITY</b></p> <p><b>5.1.</b> End all forms of discrimination against all women and girls everywhere</p> <p><b>5.5.</b> Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life</p> <p><b>5.5.2.</b> Proportion of women in managerial positions</p>	<ul style="list-style-type: none"> <li>➤ Created in line with Smart Life 2030, the Gender Equality strategy guides all our activities. Our strategy is based on Zorlu Holding’s leadership approach that extends from the senior management to the grassroots.</li> <li>➤ As a founding member of the 30% Club in Turkey, we actively participate in its initiatives to enhance gender balance, increase women’s representation in decision-making bodies, board of directors and senior management, and contribute to achieving a target of 30% female representation. We are a corporate supporter of the Women on Board Association, working towards the same goal.</li> <li>➤ We have been a United Nations Women’s Empowerment Principles (UNWEP) signatory since 2015.</li> <li>➤ As part of our Eşit Bi’ Hayat (An Equal Life) approach, we continue to offer trainings to raise awareness and enhance knowledge on gender equality among all Zorlu Group employees.</li> </ul>
<p><b>Renewable and Alternative Energy</b></p>	<p><b>7 AFFORDABLE AND CLEAN ENERGY</b></p> <p><b>7.2.</b> By 2030, increase substantially the share of renewable energy in the global energy mix</p>	<p>Through the <a href="#">Renewable Energy Commitment Letter</a> issued in 2021, Zorlu Enerji sets a target to achieve 100% renewable energy in its total electricity generation by 2030, while also focusing on expanding and enhancing its renewable energy portfolio.</p>

# CORPORATE GOVERNANCE



# CORPORATE GOVERNANCE

We place a fair, responsible, transparent, and accountable corporate governance approach at the heart of all our business processes. We believe that this understanding is a critical lever that supports the process of achieving our strategic goals and creating value for our company and our stakeholders. We recognize the importance of identifying non-financial risks as well as financial ones and developing a proactive approach to address these risks. In line with our corporate governance approach, we prioritize the management of non-financial assets including human, intellectual, social, and natural capital, aiming to foster an integrated perspective that becomes ingrained in our corporate culture.

## ORGANIZATIONAL STRUCTURE

Diversity within the board of directors not only enhances decision-making processes but also promotes broader stakeholder representation and fosters innovation, ultimately driving long-term success and sustainability for organizations. Zorlu Holding's Board of Directors consists of 10 members, 3 of whom are women. While the Capital Markets Board (CMB) recommends a minimum of 25% female representation on boards of directors, and the average ratio of women on boards of directors among BIST 100 companies is calculated at 17.5%<sup>14</sup>, we exceed both benchmarks with a 30% female representation on our board.

Zorlu Holding's Board of Directors also includes 3 independent members. As per the principle of separation of powers, the positions of the Chairman and the CEO are held by different individuals. Chief Legal Officer, Chief Human Resources Officer, Chief Financial Officer, Chief Information Technologies Officer, Corporate Communications and Sustainability General Manager and Internal Control and Corporate Risk Management General Manager report directly to the CEO. The Audit Group is positioned to report directly to the Holding's Board of Directors as part of corporate governance systems. There are four committees supporting the work of Zorlu Holding's Board of Directors: Audit and Risk Committee\*, Strategy and Investments Committee, Corporate Governance Committee and Sustainability Committee. For detailed information on the Sustainability Committee, please see the [Sustainability Management](#) section.

As part of its journey to become a responsible investment holding committed to ESG principles, Zorlu Holding launched a corporate transformation project in 2022. In this context, Zorlu Holding's Board of Directors was restructured with the participation of independent members. Under the leadership of independent members, the Committees of the Board of Directors have adopted new working principles and commenced their operations. Furthermore, a General Secretariat was established to ensure coordination among Zorlu Group's corporate governance bodies.

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[10th Annual Report- Women on Board 2022 Türkiye, Sabancı University Corporate Governance Forum](#)

“30% OF ZORLU HOLDING'S BOARD OF DIRECTORS IS COMPOSED OF FEMALE MEMBERS.”

### Committees of The Board of Directors

Audit and Risk Committee

Strategy and Investments Committee

Corporate Governance Committee

Sustainability Committee

(\*) As of January 1, 2023, the Audit and Risk Committee was restructured into separate entities, namely the “Audit Committee” and the “Risk Committee”, each carrying out their respective activities.



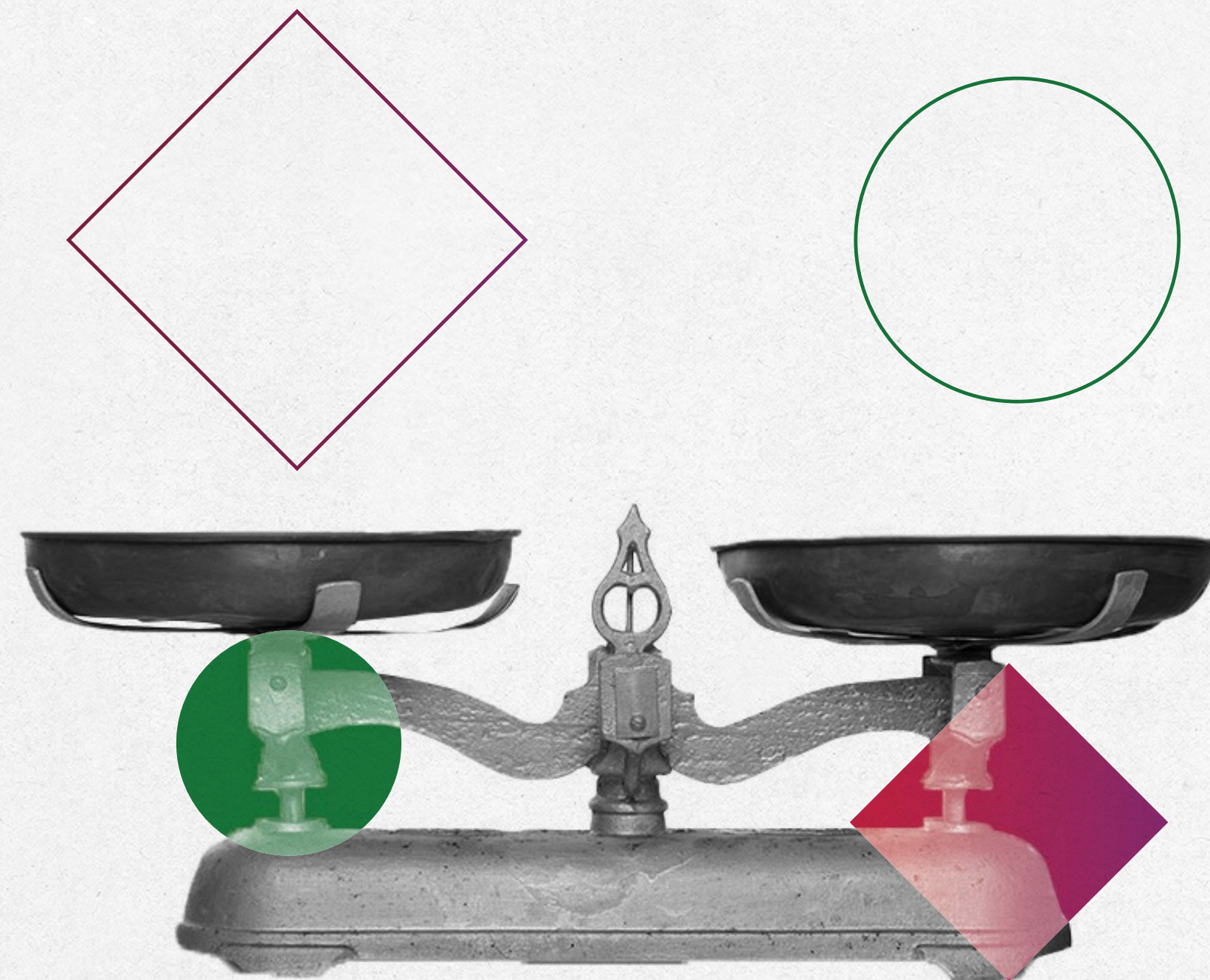
## ETHICAL PRINCIPLES, ANTI-CORRUPTION AND ANTI-BRIBERY

Zorlu Holding Ethical Principles regulate the basic principles, values and ways of doing business of the Holding and all Group companies. They cover all employees, and are binding for all stakeholders, especially suppliers, business partners, dealers, authorized vendors and authorized service providers. The Ethical Principles also ensure that our stakeholder relations are managed effectively. They comprise relationships with employees, corporate and personal conflicts of interest, protection of assets and information security, accuracy in records and financial reporting, occupational health and safety, relationships with stakeholders, compliance with laws and regulations, prevention of money laundering, anti-bribery and corruption, political activities, social responsibility, volunteering and donations, environment and sustainability, and principles and rules for implementation, compliance and violations.

Zorlu Holding Ethical Principles can be found [here](#).

We inform all Holding and Group company employees about the Ethical Principles, which guide all operations of Zorlu Group, as well as their responsibilities concerning these principles. Employees can access the Ethical Principles and the details of the mechanisms designed to establish and develop a culture of business ethics (Ethics Committee, Ethics Hotline, audit, and reporting process, etc.) through Zone, the in-house communication portal.

The Ethics Committee, formed by the Zorlu Holding Board of Directors, aims to establish, improve, and sustain the culture of ethics. The Ethics Committee is chaired by Zorlu Holding's CEO and its permanent members include Zorlu Holding's Chief Human Resources Officer, Chief Legal Officer, and Chief Audit Officer. Responsibilities of the Ethics Committee include leading ethics-related efforts across the Group, carrying out all activities it deems necessary, developing, updating, publishing, and ensuring feasibility of the ethical principles, organizing training programs for employees and relevant agents, and collaborating with relevant expert organizations.





## Implementation Principles and Trainings for the Ethical Principles

In 2018, we began building the infrastructure and content of an online training for our white-collar employees and prepared a comprehensive video accordingly. The online training, which includes case studies and lasts about an hour, is offered to all white-collar employees within the Holding and Group companies. In 2022, a total of 2,858 employees completed the ethical principles training. We offer training on the ethical principles to all new employees through an on-boarding program. Our sector-based planning for blue-collar employees is underway, and we plan to start pilot implementations in 2023.

Our employees are expected to embrace the **Zorlu Holding Ethical Principles** and act accordingly while carrying out all daily duties. In case of any doubt regarding the content of the Principles and/or in case of witnessing any behavior or practice contrary to the rules, all employees who wish to communicate or consult the situation in question can reach the **Ethical Principles Hotline** by sending an e-mail to [etik@zorlu.com](mailto:etik@zorlu.com) or by calling **(0212) 456 23 23** or **(0850) 226 23 23**.

The Internal Audit Review Department, part of the Zorlu Holding Audit Department, conducts the necessary studies, examinations, or investigations on complaints, allegations, and reports received through the hotline accessible to all stakeholders, as well as employees. After reports of violations of the Ethical Principles are evaluated by Zorlu Holding Audit Department, the Internal Audit Review Department forwards the report on confirmed cases of transactions, or actions that have violated the Ethical Principles, or the review report on being unable to determine a violation of the Ethical Principles, to the CEO of the relevant company, Sector Head, members of the Ethics Committee, as well as the Board Members and the CEO. Out of the 12 notifications received through the Ethical Principles Hotline in 2022, investigations were completed and resolved for 9 cases within the same year, while the audit and reporting process for the remaining 3 cases was carried over to 2023.

The Ethical Principles also cover the relevant regulations on anti-bribery and corruption. The Internal Audit Review Department conducted a thorough examination of the 7 reported cases related to bribery and corruption, which were reported in 2022. 5 of these cases were resolved in 2022, while the process for 2 of them was carried over to 2023. In line with the audit report and the recommendations by the legal department, the human resources department and senior management of the relevant company decided to take action (e.g. termination of employment contract, legal action, termination of business relationship with the supplier). A total of 10 employees were given disciplinary penalties, including 7 for corruption.

## RISK MANAGEMENT

We strive to instill risk awareness and culture in all operations of Zorlu Group. The Risk Committee (Early Detection of Risk Committee in publicly traded companies), in coordination with the Corporate Risk Management Department, supervises the early detection and mitigation of all financial and non-financial risks that pose a threat to the existence, development, and continuity of Zorlu Holding and Group companies, ensuring necessary measures are taken. The Holding Risk Committee, an independent committee chaired by an independent board member and including other board members, reports directly to the Board of Directors. The Corporate Risk Management Department plays a vital role in the committee by engaging in meetings with committee members, preparing reports as requested by the committee chairperson or members for presentation to the Board of Directors, and providing recommendations to the Holding Risk Committee and the Early Detection of Risk Committee in publicly traded companies to ensure effective risk management. After this meeting, the Committee Chairperson presents the decisions to the Board of Directors. The Board of Directors approves these decisions if it sees fit. Zorlu Holding CFO holds the highest responsibility for risk management within the organization.

The effective management of risks is crucial for the sustainability of our companies and activities. Under our Smart Life 2030 strategy, we strive to manage risks in the most effective way by combining analytics with our experience and knowledge. Within the scope of risk management, we aim to effectively manage and eliminate all risk factors that may have a negative impact on the company's sustainability.

**According to the Corporate Risk Management Policy, which is binding for Zorlu Holding and all Group companies, risk management consists of the following stages:**

- Establish and update scope and methodology
- Identify risks
- Analyze and assess risks
- Identify actions
- Monitor action plans

Risk management principles are integrated into the processes of defining and revising the scope and methodology, aligning the company's strategies and objectives with its risk appetite. Afterwards, risks and opportunities that may affect the company's objectives are identified through a joint study across the organization, and the likelihood of these risks and their possible impacts on the company are identified. The most appropriate risk responses (**risk acceptance, risk transfer, risk mitigation, risk avoidance**) are identified against the assessed risks, and the risks are proactively managed based on the right actions in this regard. Throughout the risk management process, close monitoring is maintained on the action plan to ensure the progress and completion of relevant actions, with a focus on risk reporting and sharing information with stakeholders.

In 2022, we conducted a risk assessment survey across the Group in order to create an effective risk culture in our Holding and Group companies and to improve the existing risk culture. In this way, we managed to analyze risk awareness and carry out probability-impact analyses. We also offered Cyber Risk Awareness Trainings and completed preliminary work on cyber risk insurance. **In 2022, through the Early Detection of Risk Committee, we submitted the following risk reports to the Board of Directors in order to ensure adequate oversight of corporate risk management processes:**

- Russia-Ukraine crisis and sanctions imposed
- The post-pandemic world and the future of the economy
- Risks threatening the global economy in the WEF Global Risks Report
- The impact of the recession in Europe on the Turkish economy
- Global economic outlook for 2023 and prospects for the Turkish economy
- Results of the risk assessment surveys conducted at Vestel Group and Zorlu Energy Group

## FINANCIAL RISKS

### Liquidity Risk

Liquidity risk is defined as the inability of a company's assets to meet its cash demands. Liquidity risk arises when assets have longer maturities than those of liabilities. We manage liquidity risk proactively, through planning in advance alternative courses of action based on possible scenarios and stress test results.

### Financial Risk

Group companies under Zorlu Holding make long-term investments due to the nature of their operations. The financial needs of these investments are met by bank loans in addition to equities. We manage financial risks, arising from not being able to find sufficient amounts of applicable funds, by integrating alternative financing methods to the existing structure, diversifying the company's funding resources.

### Foreign Currency Risk

Zorlu Holding's Group companies are exposed to foreign currency risk as the external resources used in financing investments and raw materials purchased are predominantly denominated in foreign currencies. We eliminate this risk primarily by routine methods of balancing the accounts. When necessary, we hedge with derivatives to minimize potential negative impacts. We alleviate the impact of fluctuations in the current market values of the derivatives on financial statements by means of hedge accounting.

### Interest Risk

Group companies under Zorlu Holding are affected by the changing interest rates in domestic and global markets in terms of cash flow and profitability as they fund their investments with various external funding resources. We use various derivative products to minimize this risk. We alleviate the impact of fluctuations in the current market values of the derivatives on financial statements by means of hedge accounting.

### Credit Risk

Credit risk is defined as the possibility of a borrower or a party of a contract to be unable to meet contractual obligations. To this end, we conduct comprehensive receivables risk management within Zorlu Holding. Our systematic management framework includes an internal rating mechanism and most notably credit insurance. We embrace a preventive approach in receivables management. For instance, we obtain financial reports from outside sources and carry out intelligence activities about customers with whom we are in a commercial relationship. Moreover, we request letters of guarantee, bank checks, etc. from customers for assurance against receivables risk. Measures and actions taken regarding receivables risk management are monitored and approved by Group companies' Credit Risk Committees.

### Economic Risks

Economic risks manifested through shrinking demand, recession, inflation, increasing energy and commodity costs negatively impact Group companies in investment and operation phases. We measure possible related negative impacts via sensitivity, scenario and stress test analyses and develop different action plans for each case. The Risk Committee periodically reports to the Board of Directors on economic risks that might affect investment opportunities.

## HOW DO WE MANAGE THEM?

## NON-FINANCIAL RISKS

### Strategic Risks

### Operational Risks

### Business Continuity Risk

### Legal Risks and Compliance

## HOW DO WE MANAGE THEM?

Measures to be taken against strategic risks require full-fledged projects, and strategic risks are directly reported to the senior management. Zorlu Holding Corporate Risk Management Department monitors and reports general or industry-specific strategic risks. Strategic risks, such as competition that affect market share, change in customer demands, development of products and services, investments and growth are managed by diversifying investments in various industries and countries, as well as accurate and timely assessment of changes in all fields. Business Development and Strategy Directorate coordinates all necessary activities regarding these risks and opportunities with relevant departments. We assess legal, political, etc. risks regarding Zorlu Holding's overseas investments pre- and post-investment with the help of consulting services when necessary and adopt country-specific courses of action and management frameworks.

Operational risks arise due to transactions necessary for daily practices and require mitigation. Through the activities of the Holding's Audit, Financial Audit, Internal Control and Tax Audit Departments, we control and audit all operational processes (procurement, production, delivery, transportation, sales, human resources, customer services, information technologies, etc.) of the Holding and Group companies.

We strategically develop contingency plans to ensure the preservation and restoration of critical systems, technical infrastructure, and facilities in alternative locations in the event of disasters, unexpected incidents, or emergencies. We periodically revise these plans and test their applicability with necessary exercises.

We manage legal risks such as changes in regulations, lawsuits, tax disputes, violation of intellectual property rights, unfair competition, critical issues in contracts with stakeholders and related risks through efficient coordination between all relevant units within the Holding and Group companies.

## NON-FINANCIAL RISKS

### Reputation Risk

Exposure to all risks may negatively affect the reputation of the Holding and Group companies. We manage reputational risk through maintaining multi-dimensional, consistent, and continuous communication with all stakeholders. In addition, we manage the protection of brand value and credibility in line with strategic business objectives and through the integration of all communication processes. To this end, the Corporate Communications and Sustainability Department was established at the Holding and is monitored at the CEO level.

### Information Security Risks

Information security related risks have recently become increasingly more threatening. We try to mitigate their potential negative impacts on our activities primarily by reinforcing our infrastructure. Efforts on the traceability of technological infrastructure include various external scans as well. Furthermore, we maintain a close adherence to information security laws and regulations, ensuring that our organization operates in full compliance with them at the highest level.

### Environment, Health and Safety-Related Risks

We adhere to policies and procedures concerning compliance with legally mandated standards pertaining to environmental health, stakeholder safety, and stakeholder health. All Zorlu Holding employees go through mandatory occupational health and safety training in accordance with regulations. We transfer risk through natural disaster and terrorism risk insurance.

### Transfer of Non-Financial Risks

We procure insurance policies for each subsidiary to cover insurable risks of Zorlu Holding and all Group companies, including fixed assets, loss of profit, liability, and transportation. We collaborate with suitable insurance agencies for each policy and stay updated on global and local market developments within the relevant business lines to ensure we are well-informed about the current market conditions.

## HOW DO WE MANAGE THEM?

## AUDIT

The Audit Department, which undertakes the audit of Zorlu Group companies, consists of the Internal Audit and Ethics Directorate, Financial Audit and Tax Audit Departments. Duties of the Department include carrying out activities on the effective and efficient use of resources, compliance with written rules, and information accuracy, security, and reliability in line with a Board-approved, risk-based annual audit program. The department also provides consulting services with reasonable assurance.

During the monthly evaluation meetings between the Audit Department and the CEO and Board Members, we review and assess planned and actual activities such as audits, consultancy, and due diligence, and share the findings. They share findings, review action plans and follow-up results based on these findings, and then review plans for the upcoming period.

You can find more information about Zorlu Holding Audit Department under the “Audit” section of the [Annual Reports](#).

## INTERNAL CONTROL SYSTEM

Establishing an internal control mechanism effective in all activities and processes is an indispensable component of a responsible and sustainable management approach. Efforts to enhance internal control within Zorlu Group companies are conducted through a centralized and coordinated structure under Zorlu Holding, along with specialized teams operating both in the field and responsible for coordinating internal control activities across sectors and companies. The Deputy General Managers of Internal Control, operating under the Internal Control and Corporate Risk Management Department at Zorlu Holding, are tasked with developing internal control mechanisms that promote effective and efficient risk management practices, ensuring consistency and integration across Group companies in alignment with their targets. To this end, the department coordinates establishing and maintaining an internal control system to enable sharing, disseminating and spreading the implementation of best practices of companies.

The Internal Control and Corporate Risk Management Department prepares a risk-based internal control work plan annually. In formulating the internal control plan, Zorlu Group considers the objectives of the organization, risk-based assessments conducted by the Internal Control and Corporate Risk Management Department, requests from the Board of Directors, the Risk Committee, and management, internal control-related findings identified by the

Audit Department in their audits, as well as corporate risk maps. The annual internal control work plan is submitted to Zorlu Holding’s CEO and Risk Committee for information and approval.

The Internal Control and Corporate Risk Management Department supports executives and employees with identifying improvement areas in business processes and the internal control system, as well as determining the steps to be taken. The department also provides support for utilizing informational technologies effectively, implementing predetermined actions and regularly monitoring the progress of such actions. In addition, it provides regular guidance to executives and process owners on these issues. During regular meetings between the Internal Control Department, the Risk Committee, and the respective management, the planned and executed internal control activities for the year are evaluated, and findings are shared and discussed. Action plans to be implemented on the findings and follow-up results are shared and plans for the upcoming period are reviewed. All relevant executives and employees of Group companies contribute to establishing, monitoring and evaluating internal control systems and taking the necessary measures.

You can find more information about Zorlu Holding Internal Control and Corporate Risk Management Department under the “Internal Control” section of the [Annual Reports](#).

# RADICAL COLLABORATIONS AND DISRUPTIVE INNOVATION



## RADICAL COLLABORATIONS AND DISRUPTIVE INNOVATION

Today's complex and interconnected social and environmental crises, including rising global inequalities, the climate crisis, and biodiversity loss, require collective action from the private sector, governments, academia, civil society, and individuals to effectively address these challenges. However, these problems can only be solved through radical multi-stakeholder collaborations, not through different efforts involving different actors. Radical collaborations help scale the value created, while bringing together individuals with different backgrounds, perspectives, and expertise, paving the way for creativity and innovation. By challenging conventional thinking and fostering interdisciplinary collaboration, new solutions and technologies can emerge that can address global crises more effectively and efficiently.

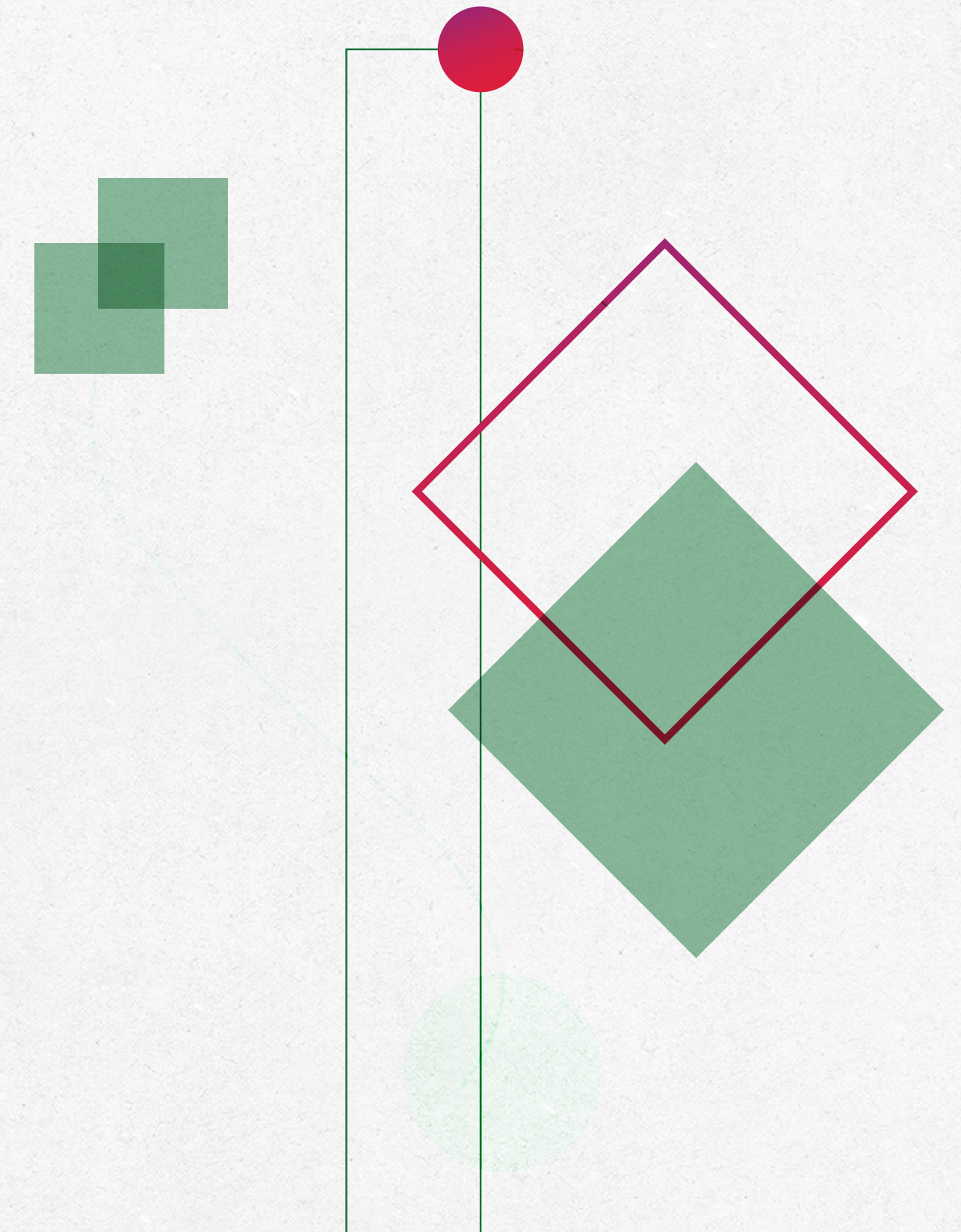
At Zorlu Holding, we actively participate as a stakeholder in the industry, working towards creating solutions to address global issues. The radical collaborations we have established to develop a business model with a focus on people and in harmony with nature are equipped with a strong and functional structure. Acting as levers in the Smart Life 2030 strategy, these collaborations offer a versatile environment for our Group companies to achieve their goals. In this way, we aim to respond to multi-layered global challenges through multi-stakeholder structures. We empower the startups we support or invest in to take a radical path and become capable of creating value on their own.

Through our collaborations, we prioritize disruptive innovation to address pressing challenges, focusing on key areas such as climate crisis mitigation, transitioning to a zero-carbon economy, Industry 4.0 and digitalization, cloud technologies, big data, and artificial intelligence. Through extensive R&D and innovation efforts, we take steps to improve our performance, the sectors in which we operate and the society we live in.

Our Group companies play a role in building a sustainable future with their comprehensive and multi-stakeholder R&D and innovation processes. In 2022, our R&D and innovation investments nearly doubled compared to the previous year, reaching approximately TL 1.2 billion, resulting in the application and successful acquisition of 187 and 182 patents, respectively.



**“IN 2022, WE INCREASED OUR R&D  
BUDGET TO TL 1.2 BILLION, NEARLY  
DOUBLING THE ALLOCATION COMPARED  
TO THE PREVIOUS YEAR.”**





# INNOVATION AND INDUSTRY 4.0 TRANSFORMATION AT ZORLU GROUP

## VESTEL GROUP OF COMPANIES

Vestel's robust R&D investments and intellectual capital on which they are based enable the seamless implementation of Industry 4.0 and digitalization practices, evident through their consistent receipt of numerous annual awards. With the aim of becoming the first production facility in Turkey to complete the Industry 4.0 transformation, Vestel City continues its digital transformation efforts and monitors all business processes with end-to-end digital systems. The company's digital transformation teams continue to work on artificial intelligence software, Internet of Things (IoT) technologies, smart automation, automated guided material handling vehicles (AGVs) and autonomous mobile robots (AMRs) for horizontal/vertical value chain integration. In addition, with the goal of continuous improvement in production, the company focuses on process innovation and continues its Total Productive Maintenance (TPM) efforts, which ensure proactive and holistic management. In this context, Vestel can effectively manage many systems: Vestel Elektronik Production System, which enables the integration of digital transformation and lean production structures; the Production Management System, which enables instant monitoring of the entire production process in a digital environment starting from the production planning stage; and the Production Operations Management, which enables real-time monitoring and tracking of production data by establishing a connection between machines in factories with machine-to-machine connectivity. Vestel Beyaz Eşya continues to lead the way in establishing and commissioning robot cells, consistently striving for operational excellence by enhancing their efforts within the robot-machine-human nexus.

In recent years, Vestel has been focusing on smart devices, smart homes, smart cities and building revenue-sharing based business models around them and integrating its products into the Smart Home concept. With an accelerated focus on data security and analysis, Vestel endeavored to create a comprehensive big data platform in 2022, aiming to foster an ecosystem that seamlessly integrates with existing technologies and voice assistants to cater to all connected products.

Vestel collaborates with many national and international institutions and organizations, particularly universities, with a focus on R&D and innovation. As part of university-industry partnership, the company conducts 10 R&D center projects and continues its multi-partner projects within the scope of 4 active Horizon 2020 programs. As of 2022, Vestel has been included in the scope of support with two more projects involving battery technologies and electric vehicle charging stations. As part of radical collaborations, Vestel focuses on industry-industry and university-industry partnerships. It collaborates

with over 70 industrial partners, including companies such as Google and Amazon. Furthermore, representing the industry and business community in organizations such as the Turkish Industry and Business Association (TÜSİAD), Turkish White Goods Manufacturers Association (TÜRKBEŞD), Turkish Technology Development Foundation (TTGV), Electronic Device Manufacturers Association (ECİD), Telecommunications, Satellite, and Broadcasting Businessmen Association (TUYAD), Automotive Suppliers Association (TAYSAD), and Union of Chambers and Commodity Exchanges of Turkey (TOBB), it actively participates in processes, closely monitors developments, and provides insights in the areas of legislation, standardization, and collaborative processes within its fields of operation.

Having experienced a major transformation and increased its effectiveness in the automotive sector with its electric vehicle batteries and its partnership in the TOGG national automobile project, Vestel positions itself as the solution partner of corporate customers with the electric vehicle chargers it produces, while continuing to work to meet the needs and expectations of consumers. In 2022, the company's Electric Vehicle Charging Station Design project was accepted to the "Technology-Oriented Industrial Leap" incentive program, which was implemented by the Ministry of Industry and Technology of the Republic of Turkey, aiming to support the local production of high value-added, medium-high and high-tech products. In addition to the electric vehicle chargers it offers to the market, Vestel has completed R&D studies on direct current (DC) charging units that enable fast charging, and is also working on software for the management of charging points. Furthermore, by adding electric bicycle batteries to its new business lines, Vestel offers long-term, sustainable business models for the projects of major bicycle manufacturers during the design stage of their future models. The company is also Turkey's first domestic electric bicycle battery manufacturer.

Vestel Beyaz Eşya not only maintains its collaboration with Sabancı University through TÜBİTAK's (Scientific and Technological Research Institution of Turkey) Entrepreneurship Support Program BiGG but also, led by Dokuz Eylül University, extends support to aspiring entrepreneurs in transforming their technology-oriented business ideas into promising ventures, encompassing the entire journey from the initial concept stage to market implementation. Dokuz Eylül University Technology Transfer Office (DETTO) plans to continue its support by mentoring entrepreneurs in innovative studies together with consortium partners from different sectors in the TÜBİTAK 1601 BiGG Implementing Organization Support Program for Capacity Building in the Fields of Innovation and Entrepreneurship.

## ZORLU ENERGY GROUP

As part of its robust R&D and innovation strategy, Zorlu Energy Group spearheads digitalization initiatives leveraging big data and artificial intelligence. Additionally, they focus on advancements in green hydrogen, energy storage systems, electric vehicle charging stations through ZES, and the extraction of valuable minerals such as lithium from geothermal fluids.

Zorlu Energy Group continues its efforts to reduce greenhouse gas emissions from geothermal energy with the GECO (Geothermal Emission Control) project. The project, implemented in geothermal fields and guided by the vision of “A sustainable future depends on leaving no trace in our environment”, entails the implementation of practices to mitigate carbon emissions. This includes the capture and reinjection of gases, including carbon dioxide, released during electricity generation. In 2022, the establishment of a pilot carbon capture and storage facility at the Kizildere III Geothermal Power Plant marked the commencement of carbon capture and storage activities. The final report of the project is planned to be published in 2023.

Benefitting from the support of the European Union’s (EU) Horizon 2020 program through the GeoSmart project, Zorlu Energy Group remains dedicated to its research and development endeavors. These efforts encompass the storage of geothermal fluid in both liquid and vapor phases at the Kizildere Geothermal Power Plants, investigating the impact of integrating Concentrated Solar Power (CSP) and Biomass technologies into geothermal power plants to enhance overall performance, as well as optimizing reinjection temperatures for the efficient utilization of resources.

Through the Integrated Planning of Multi Energy Systems (PlaMES) project, Zorlu Energy Group aims to create the low-carbon market of the future and design a new planning tool for the long run. The project aims to reduce the carbon footprint of generation and storage systems, as well as transmission and distribution networks, through integrated planning and operation, and predictive and preventive maintenance before failures occur. The project outputs include the development of tools to ensure that existing and planned generation and distribution infrastructures meet current and evolving energy demand at the most efficient level and create flexibility. The Big Data Solutions for Open Energy Marketplace (BD4OPEM) project, which aims to efficiently integrate digital technologies into the energy sector, seeks to minimize the impact of changes in energy production and consumption profiles on the grid as a result of the introduction of new technologies into our lives.

Funded by Horizon 2020, the EU’s largest R&D and innovation program, the FlexiGrid project aims to introduce flexibility to the distribution grid of the future. The FlexiGrid project strives to

establish a low-cost, flexible, and scalable distribution network by leveraging state-of-the-art energy storage, distributed energy systems, and demand response equipment to create a flexible market system between local generation and consumption points. While creating this system, a transparent data management system will be developed by using digital smart grid technologies, vehicle-to-grid energy transfer technologies, internet of things (IOT) and blockchain technology. Four pilot countries, namely Bulgaria, Sweden, Switzerland, and Turkey, were selected for the execution of the project. The areas of responsibility of OEDAŞ (Osmangazi Elektrik Dağıtım A.Ş.) were chosen as the region where the project will be carried out in Turkey. As part of the pilot application, OEDAŞ carried out field installations, including an Electric Vehicle to Grid (V2G) compatible charging station and battery storage system, to offer flexibility in the Eskişehir region. The project unites organizations from various European countries, comprising 16 partners, in a collaborative effort to leverage digital and smart grid technologies at the grid edge for enhanced operational efficiency and effectiveness. The project aims to provide innovative business models with IoT platforms, P2P (peer-to-peer) marketplaces, vehicle-to-grid, power-to-heat and power-to-gas solutions.

You can find the Our Stories video about Zorlu Energy Group’s FlexiGrid project [here](#).

Another R&D project carried out by Zorlu Energy Group, GeoPro aims to expand the use of geothermal energy, a renewable energy source, in order to build a low-carbon and climate-resilient future.

Zorlu Energy Group’s R&D and Smart Systems Unit was awarded a total of TL 5.7 million in support from EMRA (Energy Market Regulatory Authority of Turkey) for the EV and energy storage projects “Investigating the Impact of Charging Stations and Electric Vehicles on the Grid and Optimizing Such Loads” and “Testing Lithium Ion-Based Energy Storage Systems for Load Shifting”. The solutions that the company plans to develop aim to increase grid security to the highest level by reducing grid load through smart algorithms along with the widespread use of electric vehicles. Zorlu Energy Group is also one of the partners of the eCharge4Drivers project launched in Europe for the same purpose with its network of electric vehicle charging stations and electrip, an hourly electric vehicle rental platform. Zorlu Energy Group strives to overcome the difficulties in finding suitable charging options for electric vehicles, whose sales are increasing rapidly across Europe, and to improve the charging experience.

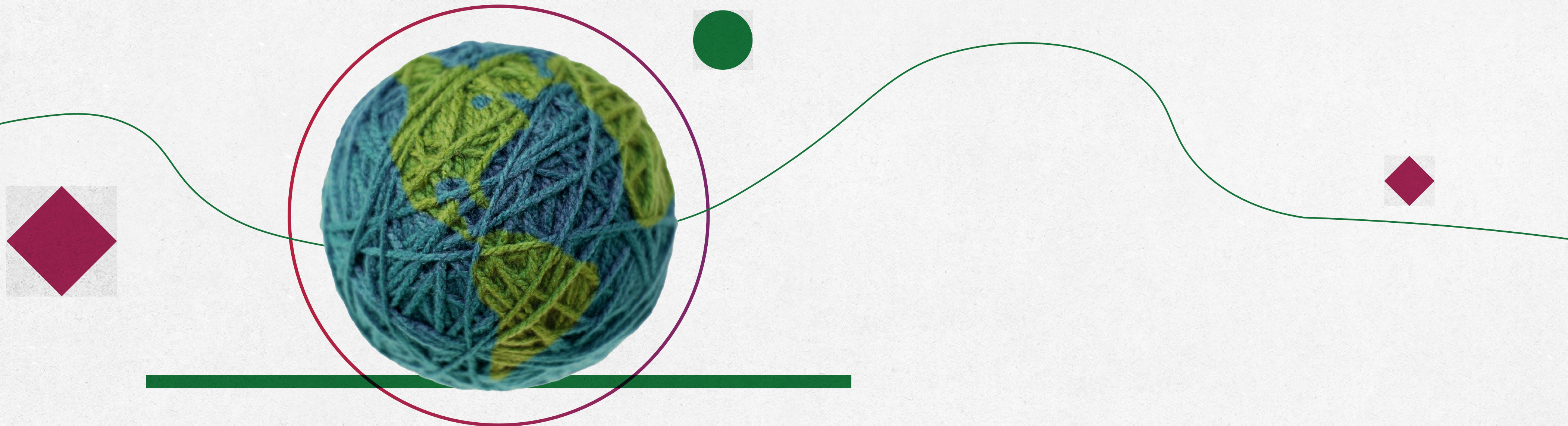
## ZORLU TEXTILES GROUP

Korteks is actively engaged in R&D initiatives focused on utilizing sustainable raw materials, specifically working towards the development of three-dimensional warp knitted fabric structures. These structures are produced using a blend of bio-based content and recycled yarns, catering to the demanding requirements of comfort and durability for automotive seats. Due to the continued growth potential of the automotive sector and the intense global competition, these efforts are of great importance both to meet market expectations and to comply with legal obligations concerning the sector. The company continues its TÜBİTAK project to develop biodegradable polyester made from waste PET suitable for filament spinning.

With its PLASTICE Project, Korteks has been accepted to the Horizon Europe Green Deal Program, through which the European Union conducts research, development, and innovation projects. As the company's inaugural project in the program, PLASTICE aims to make a valuable contribution to the circular economy. It focuses on recycling intricate textile and plastic waste that are challenging to separate, ultimately manufacturing final products with a significantly reduced carbon footprint by utilizing recycled raw materials.

Zorluteks' 3 projects, namely "Reclaim", "ZeroBrine" and "Oxipro" were accepted to Horizon 2020. The ZeroBrine project strives to decrease water and salt usage, while the OXIPRO project aims to minimize chemical consumption by optimizing and reducing the number of pre-treatment processes. The RECLAIM (RE-manufaCturing and Refurbishment LArge Industrial EquipMent) project plays a significant role in reducing the overall carbon footprint of the factory by preventing unnecessary resource consumption. The project aims to extend the life of machinery, equipment and materials and reduce the use of resources. In addition, the company continues to work on alternative natural dyes to prevent the formation of hazardous waste caused by synthetic paint waste through R&D studies.

Zorlu Textiles Group also benefits from public incentives for its open innovation activities. It continues its projects in the fields of new product and service development by establishing long-term collaborations with universities, institutes, and research centers.



## META NIKEL

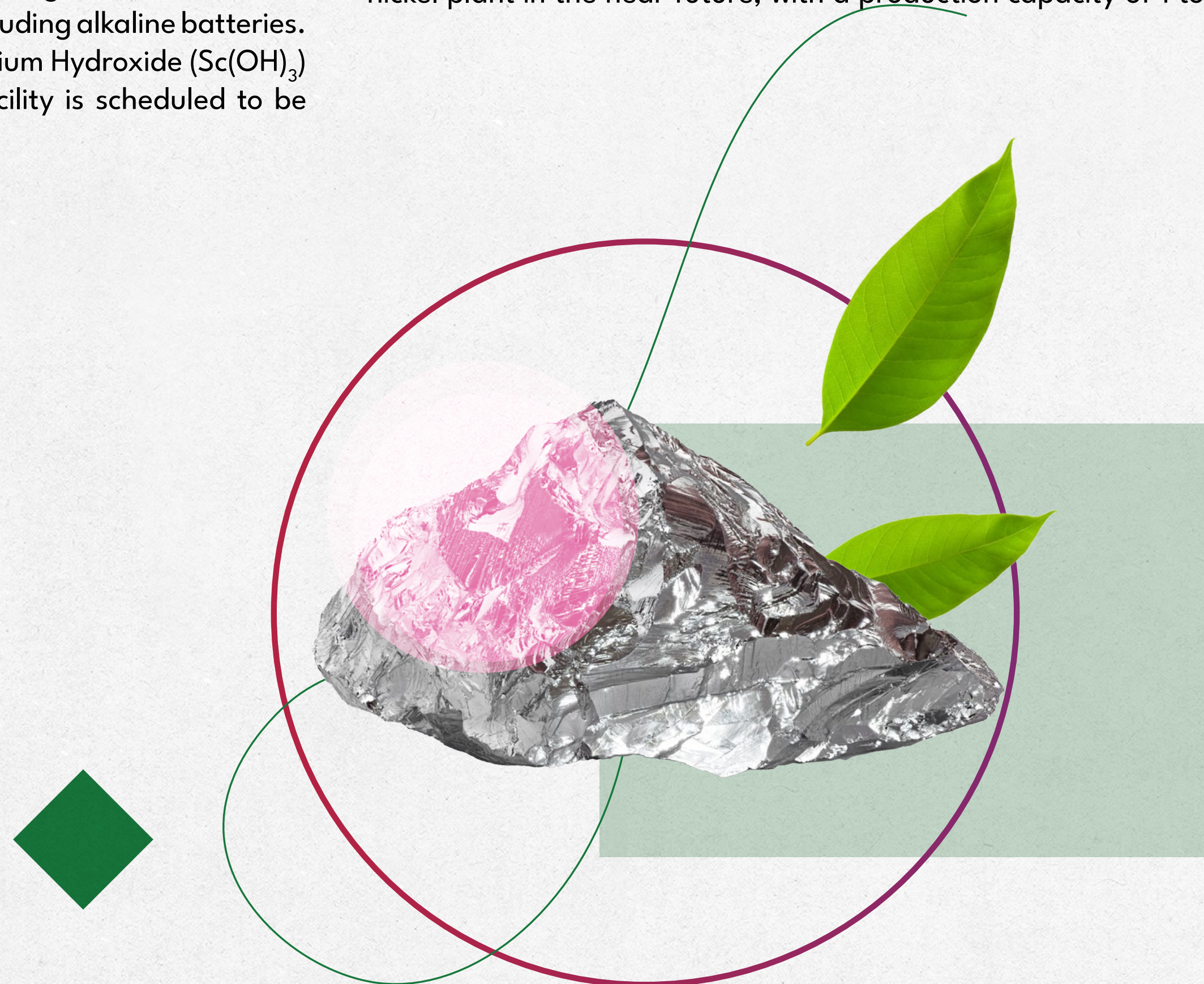
Meta Nikel, one of our Group companies, broke new ground worldwide by developing a magnetic separation technology for the enrichment of nickel ore and initiated the patent process for this technology. Among the key benefits of the new technology is the potential to economically process ores with low nickel content thanks to its nickel content enrichment application, thereby increasing production capacity to a much higher level.

Removing carbon minerals that create a carbon footprint before they enter the system, the new technology also stands out with its carbon emission reduction effect. The pioneering magnetic separation technology developed by Meta Nikel not only reduces chemical consumption, such as sulfuric acid, but also makes a significant contribution to attaining the plant's production capacity target while advancing sustainability objectives.

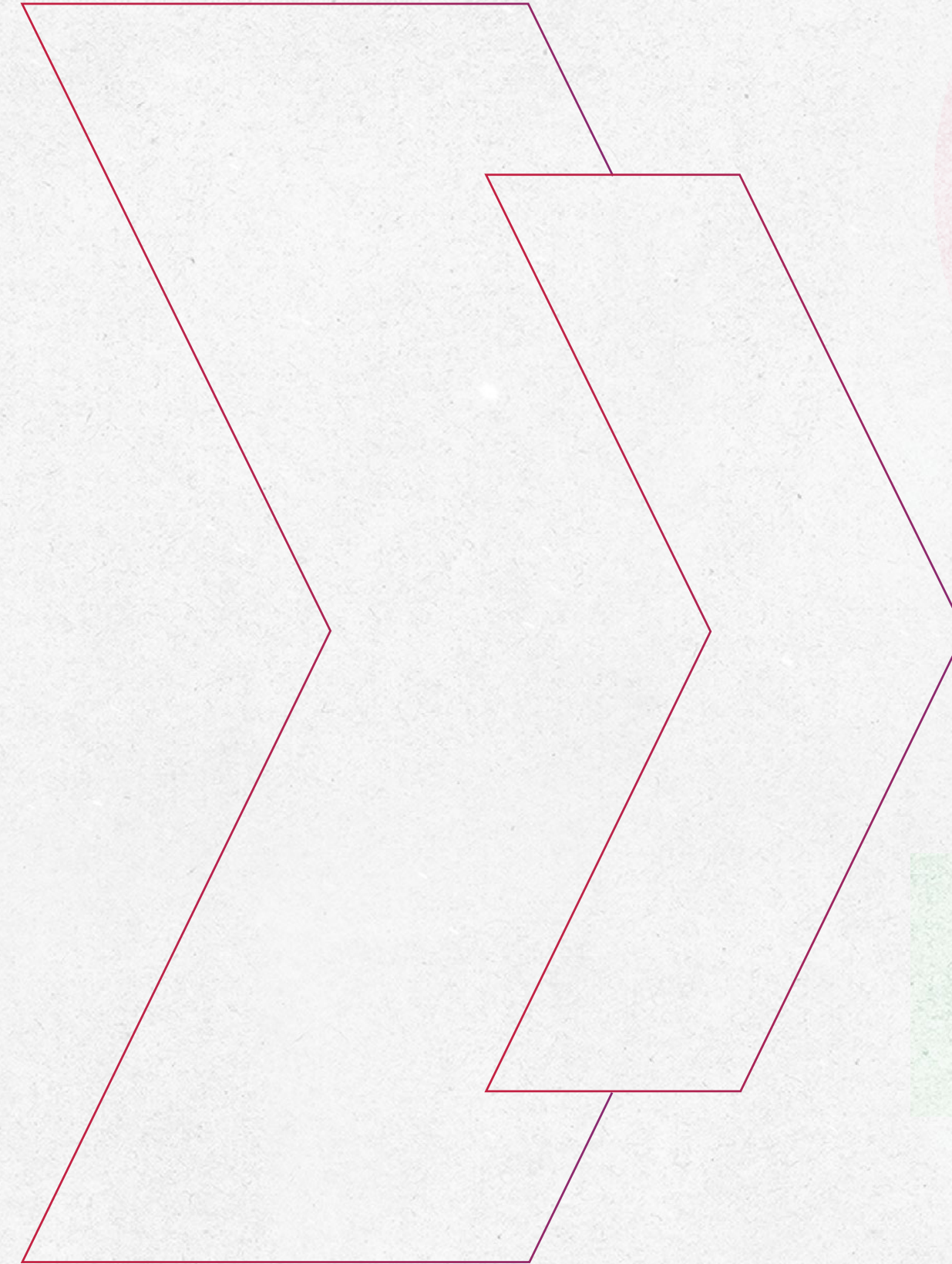
Meta Nikel has intensified its efforts to obtain value-added products through accelerated R&D studies on Scandium (Sc), a rare earth element with diverse applications, including alkaline batteries. The installation works for the facility, designed to produce 10 tons of Scandium Hydroxide ( $\text{Sc}(\text{OH})_3$ ) per year using the developed process, are currently in progress. The facility is scheduled to be commissioned in the first quarter of 2024.

As part of its mission to reduce foreign dependency on raw materials, Meta Nikel has successfully manufactured lithium-ion batteries, marking a first-of-its-kind accomplishment in Turkey. Intensive studies conducted at Meta Nikel's R&D Center have led to the development of a battery with cathode components consisting of Nickel, Cobalt, and Manganese elements, enabling the extraction of pure, high-quality products from the existing Mixed Hydroxide Precipitate (MHP) material.

MHP, the final product of the plant, serves as an intermediate material that can undergo further enrichment processes to enhance its nickel and cobalt content. Current studies are focused on achieving a purity exceeding 99.95% for metallic nickel and cobalt, extracted from end products with higher added value and economic benefits. In the pursuit of this objective, pilot-scale applications have been successfully conducted, resulting in the attainment of products with the desired purity levels. Based on the ongoing studies and projections, there are plans to establish a pilot metallic nickel plant in the near future, with a production capacity of 1 ton per day.



# HUMAN-ORIENTED ECOSYSTEMS



## HUMAN-ORIENTED ECOSYSTEMS

In a rapidly evolving world, the workforce is experiencing continuous transformation, driven by technological advancements, digitalization, and automation. These factors are reshaping the landscape of work as well as working methods. The advent of new technologies and artificial intelligence is not only automating certain jobs but also giving rise to the emergence of new skill sets and competencies. The rapid pace of changing trends and the transformative impact of the global agenda underscore that future success for companies hinges on the adoption of human-oriented ecosystems. Companies that fail to take action in response to evolving employee expectations following the pandemic are encountering challenges with their workforce. As shifting employee demographics bring younger generations into the workforce and elevate middle generations to senior positions, the introduction of new values within the corporate culture can give rise to inter-employee conflicts. Following the widely discussed “Great Resignation” wave triggered by the pandemic, companies are now increasingly acknowledging the concept of “Quiet Quitting”. The prevalence of these concepts, particularly among Gen Z, in companies that fail to adapt to evolving workforce trends, highlights the clash between generational work cultures and business practices.<sup>15</sup>

Employers anticipate a 23% structural shift in the labor market within the next five years. By the year 2027, it is projected that 69 million new job opportunities will be created, while 83 million existing jobs are expected to disappear. This means a 2% decline in employment worldwide. Environmental, technological, and economic

trends stand out when analyzing the causes of emerging and disappearing jobs. Various factors, including investments that support companies’ green transition, the broader adoption of ESG standards, and the localization of supply chains, significantly contribute to job creation. The advancement of technology and the expansion of digital access are simultaneously generating new job opportunities while also displacing certain existing roles.<sup>16</sup>

In the midst of this transformative process, we are actively monitoring the shifting dynamics of the workforce and striving to comprehend their implications on our business. In response to the evolving expectations of our employees, we are proactively developing new strategies to adapt as an employer and equip our workforce with the necessary skills and resources for the future. Embracing a human-oriented approach, we prioritize the emerging trends in employee empowerment by implementing programs aimed at attracting, retaining, and developing talent while prioritizing employee happiness. We adopt common values such as **gender equality and equal opportunity** in our Group companies and carry out programs focused on **diversity, inclusion, and accessibility**. We are committed to creating value for our employees, society, business partners, suppliers, and customers. We support the sustainable development of the regions in which we operate and carry out programs with our **shared value** and **benefit-based social investment** approach.

### Our Targets\*

- › To invest in the future of business and to become a leader of inclusion and diversity
- › To be among the best employers in all sectors in which we operate
- › To have a 100% sustainable supply chain by 2030 (primarily strategic suppliers)
- › To become a pioneer in social investments and to allocate 1% of Zorlu Holding’s EBITDA every year to Sustainable Development Goals

\*Performance against targets is available [here](#).

15

[What is quiet quitting?, WEF](#)

16

[The Future of Jobs Report 2023, WEF](#)

# EMPLOYEES

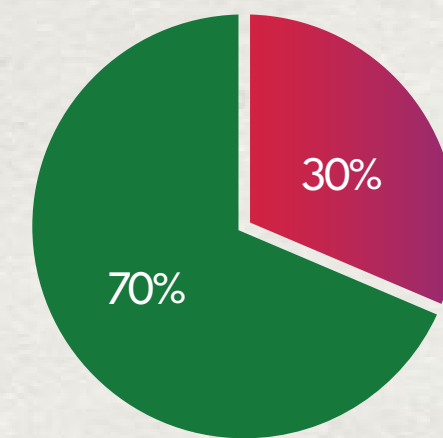
## DIVERSITY AND INCLUSION

Embracing a culture of diversity and inclusion, company employees offer innovative approaches to problem solving and innovative ideas, enhancing the company's competitive edge and contributing to its financial performance. Employees with diverse backgrounds, cultures and experiences express themselves better in the workplace, show more engagement and improve employee loyalty. Moreover, adopting these principles builds a compelling employer brand and offers an advantage in attracting and retaining talented employees. In recent years, more and more companies are making diversity and inclusion an important part of their corporate culture. 79% of companies state that these issues are included in their business strategy. <sup>17</sup>

Zorlu Group is committed to equal opportunity and non-discrimination, upholding a zero-tolerance policy against any form of discrimination based on religion, language, race, ethnic origin, gender, or sexual orientation in all aspects of our human resources practices, from recruitment to salary management, as well as throughout all our business processes. We focus on dynamism, innovation and creativity in human resources processes. Throughout the year, we organize various trainings and activities with the aim of taking a leading role in ensuring equal opportunities in the business world and society, adopting the approach of creating an inclusive corporate culture nourished by diversity.

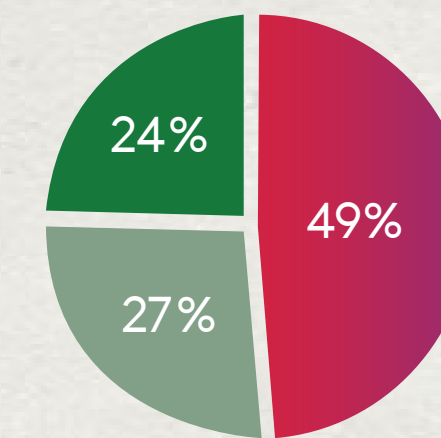
In 2022, we organized a diversity and inclusion workshop with the participation of the corporate communication and human resources teams of Group companies and identified our focus areas according to the outcomes of this workshop. Following this study, we conducted group workshops with the participation of representatives from the human resources teams of all Group companies and created action plans specific to human resources functions in line with the identified focus areas. We aim to align our efforts with these focus areas, strategies, and action plans in 2023.

EMPLOYEES by GENDER (%)



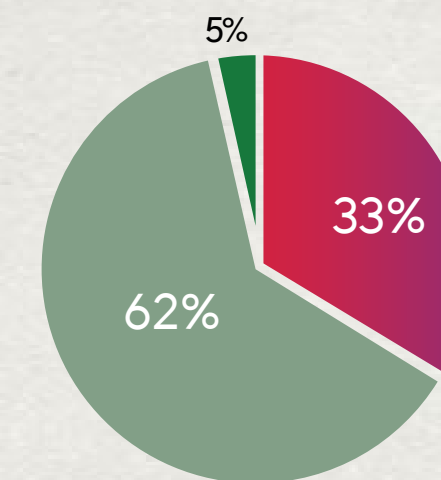
Female Male

EMPLOYEES by WORKING DURATION (%)



0 - 5 years 5 - 10 years 10 years and above

EMPLOYEES by AGE (%)



Under 30 years 30 to 50 years 50 years and above

17

Diverse and inclusive companies perform better, but many companies have yet to connect it to business, DNV

## GENDER EQUALITY

In recent years, women, as a more vulnerable group compared to men, have faced disproportionate impacts from various events such as pandemics, climate crises, natural disasters, and social conflicts. It is estimated that it will take 132 years for the world to achieve gender equality. Women's participation in the workforce had fallen sharply in the wake of the pandemic. The crisis resulting from the escalating cost of living is projected to further reduce women's earning potential and exacerbate the gender equality issue.<sup>18</sup> It is of great importance for companies to build their corporate culture on equality in order to achieve gender equality.

We consider gender equality as one of the most important elements in building a sustainable society. At Zorlu Group, gender equality is one of the areas we focus on within the scope of our Smart Life 2030 sustainability vision. We render gender equality a corporate policy and carry out all our human resources processes within our companies in line with this vision. We support the empowerment of women in social and economic life as well as their increased participation in the workforce. At all Zorlu Group companies, we engage in activities to increase the number of female role models and leaders within our organization and to ensure equal representation of women in senior management. To this end, we contribute to raising awareness among all our stakeholders on gender equality. We focus on developing a more inclusive business culture by considering equal opportunity in the main areas of discourse, work environment and cooperation with stakeholders. We aim to raise corporate awareness and trigger change in this area through workshops, training and communication campaigns, cooperation platforms and representations we structure and support. We advocate gender equality in all areas of life and continue our work with a vision that guides the sectors



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[Global Gender Gap Report  
2022, WEF](#)



## Eşit bi' hayat

in which we operate together with our Group companies. We created the Eşit Bi'Hayat (An Equal Life) approach to support gender equality. We have built this framework to create value in the focus areas of Employees and Community Relations in line with the Smart Life 2030 discourse in Zorlu Holding's journey to achieve its sustainability goals. Our goal was to reinforce action areas that will promote gender equality and empower women in society in general and in working life in particular. The Eşit Bi'Hayat (An Equal Life) approach is based on Zorlu Holding's leadership mentality that extends from senior management to the grassroots. In this context, we carry out projects together with the Gender Equality Committee, which consists of the managers of our Group companies, and the Gender Equality Working Group, which we formed with the voluntary participation of employees.

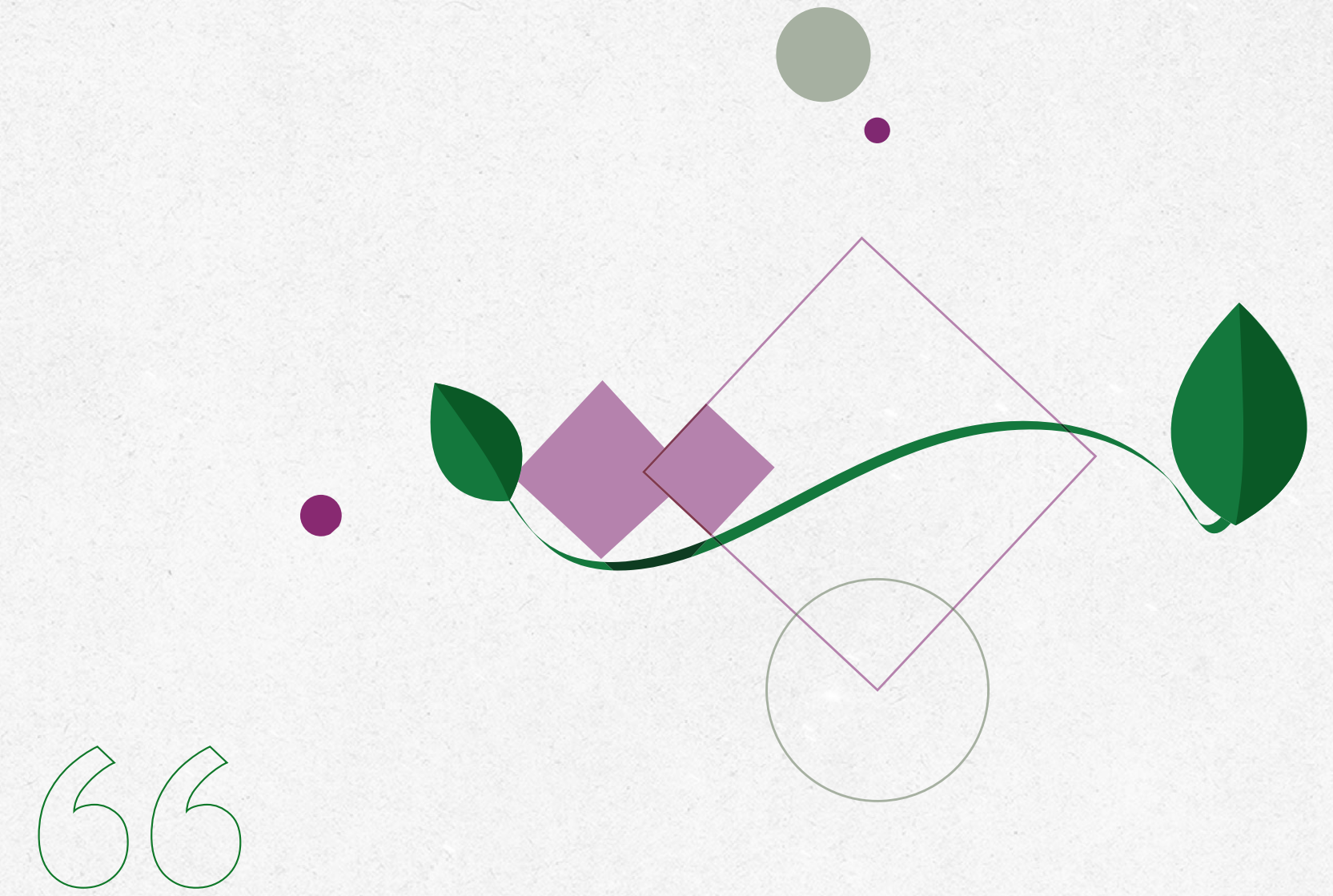
The Manifest of "An Equal Life" , through which we share our commitments and gender equality approach, is available [here](#).

### Gender Equality E-Training:

In 2022, we implemented mandatory gender equality training for all Zorlu Group employees, aiming to enhance their awareness. Through this training program, our goal is to empower employees with enhanced knowledge and heightened sensitivity towards gender equality.

With our responsibility to ensure gender equality, we strive to maximize added value by collaborating with local and international platforms. As a signatory of the United Nations Women's Empowerment Principles (WEPs) since 2015, we are committed to enhancing the conditions that facilitate women's participation in corporate decision-making mechanisms.

Since 2020, we have been supporting İKSV Istanbul Film Festival's "No More Flowers" selection, which focuses on women and equality, as part of the Eşit Bi'Hayat (An Equal Life) approach.



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WITHIN THE FRAMEWORK OF OUR SMART LIFE 2030 VISION, AT ZORLU GROUP WE VIEW GENDER EQUALITY, AS OUTLINED IN THE 5TH SUSTAINABLE DEVELOPMENT GOAL (SDG), AS A CRUCIAL ELEMENT IN OUR SUSTAINABILITY-DRIVEN TRANSFORMATION JOURNEY. WE BELIEVE THAT PROMOTING GENDER EQUALITY PLAYS A PIVOTAL ROLE IN ADDRESSING THE CHALLENGES OUTLINED IN THE 17-POINT SUSTAINABLE DEVELOPMENT GOALS (SDGS). OUR APPROACH, WHICH WE'VE COINED AS "EŞİT Bİ' HAYAT" (AN EQUAL LIFE) REFLECTS OUR COMMITMENT TO THIS CAUSE WITH UNWAVERING AWARENESS.

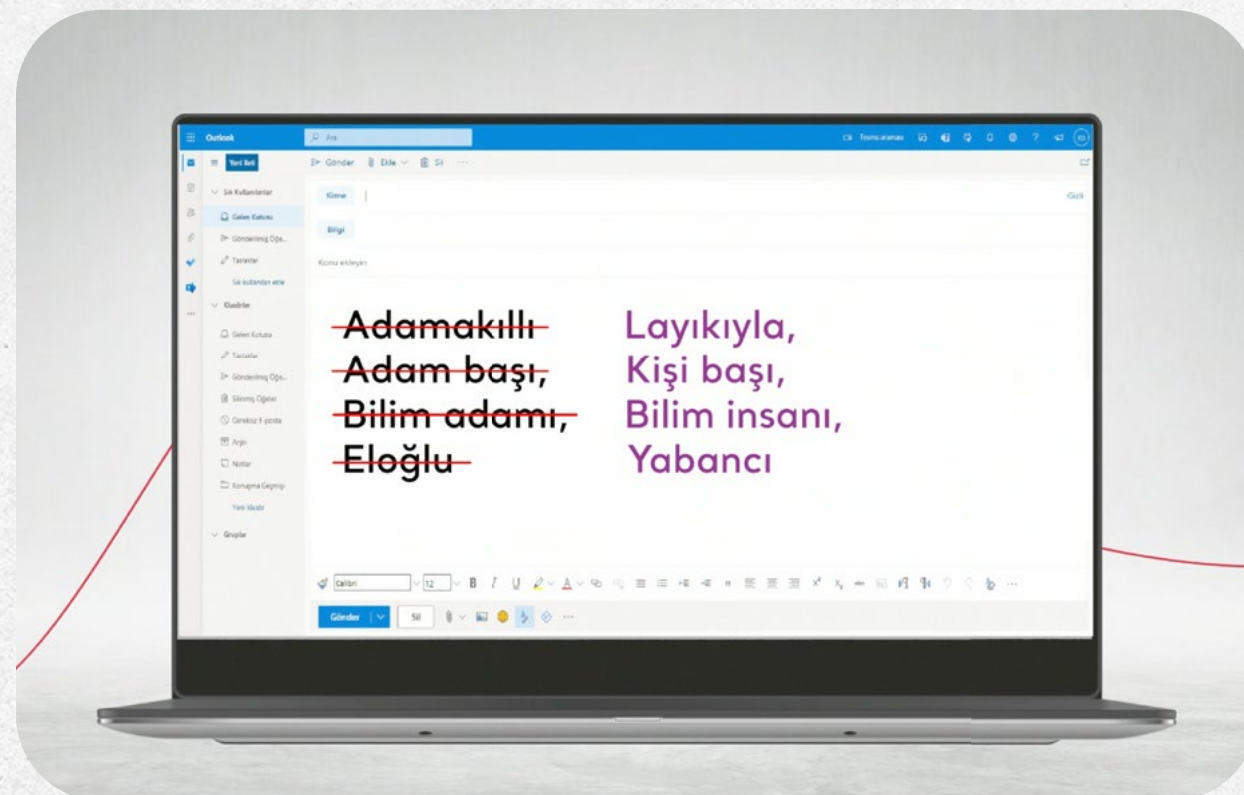
SELEN ZORLU MELİK  
BOARD MEMBER  
SUSTAINABILITY COMMITTEE MEMBER

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## Eşit Bi'Hayat (An Equal Life) Dictionary

We recognize that using inclusive language is one of the most important steps we can take to achieve equality. In line with this approach, we took a concrete step in 2020 and prepared the Eşit Bi'Hayat (An Equal Life) Dictionary in order to eliminate sexist expressions and to easily access discourses that we can use instead from an equality and inclusion perspective. The dictionary, which is open to the use of all our stakeholders, serves as a guide to help us avoid sexist phrases and idioms deeply ingrained in our language. In 2022, we transformed the idioms and expressions in the Eşit Bi'Hayat (An Equal Life) Dictionary into an application that can perform self-control in all Microsoft Office programs. With the practice we call "Discourse Control Mechanism", we ensure that sexist expressions are replaced with more inclusive alternatives in all internal correspondence and presentations.

You can explore the Eşit Bi'Hayat (An Equal Life) Dictionary [here](#).



## Combating Domestic Violence

At Zorlu Holding, we stand against all forms of violence and discrimination. In 2020, we participated in the Business Against Domestic Violence (BADV) initiative organized by Sabancı University Corporate Governance Forum in collaboration with TÜSİAD and supported by the United Nations Population Fund (UNFPA) and Sabancı Foundation. With the insights we gained from this event, we published our [Domestic Violence Prevention Policy](#). This policy encompasses various forms of violence and outlines internal and external communication channels available to our colleagues and their children for reporting and seeking support, along with relevant human resources policies.

We have established support and assistance mechanisms where our colleagues and their children who have been subjected to violence can safely and confidentially share their situation. In this context, we have developed mechanisms to ensure that our colleagues who are subjected to violence receive legal and psychological support.

We have signed a protocol with the Federation of Women's Associations of Turkey (TKDF) to raise awareness on the Domestic Violence Emergency Helpline within Zorlu Group. We support UN Women's 16 Days of Activism Campaign against gender-based violence every year.

In 2021, we created an informative film aimed at raising awareness about violence in society and providing individuals with guidance on available channels for seeking help and support if they experience violence. We initiated a communication campaign titled "That's Not What Love Is" focusing on various examples to highlight different types of violence and raise awareness about their harmful nature. We continued the campaign throughout 2022.

You can watch our informative film [here](#).

You can reach our Domestic Violence Prevention Policy [here](#).





## EMPLOYEE ENGAGEMENT AND SATISFACTION

Employee engagement and satisfaction play a crucial role in fostering the growth of employees' skills and career advancement, thereby enhancing the company's competitive edge and ensuring long-term success. Creating a positive work environment and implementing supportive programs that cater to employees' needs are instrumental in employee retention and attracting new talent.

We position employee engagement and satisfaction as a critical priority in our strategic roadmap. We aim to maximize the added value our employees offer by ensuring they work in a safe environment. To this end, we offer our employees a transparent communication environment and carefully evaluate the feedback provided by creating an environment of mutual trust.

We are working to increase employee satisfaction in our Holding and Group companies. We identify areas for improvement through research and surveys. We conduct sector-specific assessments to identify areas for improvement, and based on the findings, we develop customized improvement roadmaps for each company.

We conduct biennial evaluations of our initiatives aimed at enhancing employee satisfaction and engagement, and based on the results, we implement continuous improvement measures. In 2021, Zorlu Group's overall employee satisfaction rate stood at 72%, while the employee engagement rate was 56%.

## THE FUTURE OF WORK AND WORKFORCE MANAGEMENT

The dynamic business landscape driven by advancing technology, globalization, and demographic shifts is fostering the emergence of new trends that shape the expectations and demands of the modern workforce. To sustain their competitive advantage, companies are recognizing the strategic imperative of identifying the essential competencies required by the workforce, as well as attracting, developing, and retaining the right talent that aligns with these competencies.

With a close focus on the future of the business world and global workforce trends, we conduct purpose-driven

studies that encompass employee demographics and expectations across all our Group companies. As of 2022, we have more than 29,000 employees we are committed to supporting their growth by providing opportunities to enhance their skills and develop the competencies necessary for the future. We take care to provide a decent, fair, equal, and inclusive working environment for all our employees.

## TALENT MANAGEMENT

As technology advances and digitalization becomes more widespread, companies are faced with the increasing challenge of finding, recruiting, and retaining the talent necessary to navigate and thrive in the digital age. This makes the competition for talent even fiercer, especially in Science, Technology, Engineering and Mathematics (STEM) fields.<sup>19</sup> Companies face the risk of a talent shortage. Upskilling the existing talent pool and promoting internal candidates to fill positions aligned with the required skills are increasingly crucial elements of company strategies. This strategy, called quiet hiring, has been practiced by more and more companies in recent years.<sup>20</sup> Quiet hiring involves prioritizing existing employees who have demonstrated success and have taken on additional responsibilities when filling open positions. This approach not only supports employees' career development but also helps to identify and nurture potential talents within the company. Keeping abreast of rapidly changing trends in workforce management is crucial to ensure successful talent management. On the other hand, in response to global trends, it is crucial to accurately analyze talent requirements and thoroughly understand the demands and expectations of prospective employees.

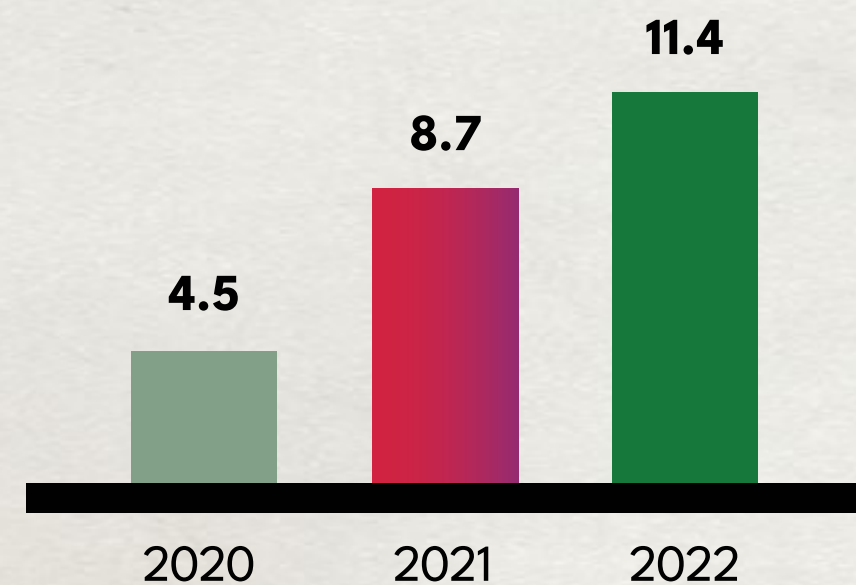
We recognize the significance of competencies in achieving our strategic objectives and ensuring the long-term sustainability of our business. We develop diverse career paths to cultivate future business leaders who will have a positive impact, and we implement

talent management programs to attract and nurture the next generation of talented individuals. **Our goal is to become a top choice for employees across all sectors.** We highly value our employees' innovative ideas that will improve our business models, fostering an environment that supports their entrepreneurial spirit and problem-solving skills through dedicated platforms for idea sharing.

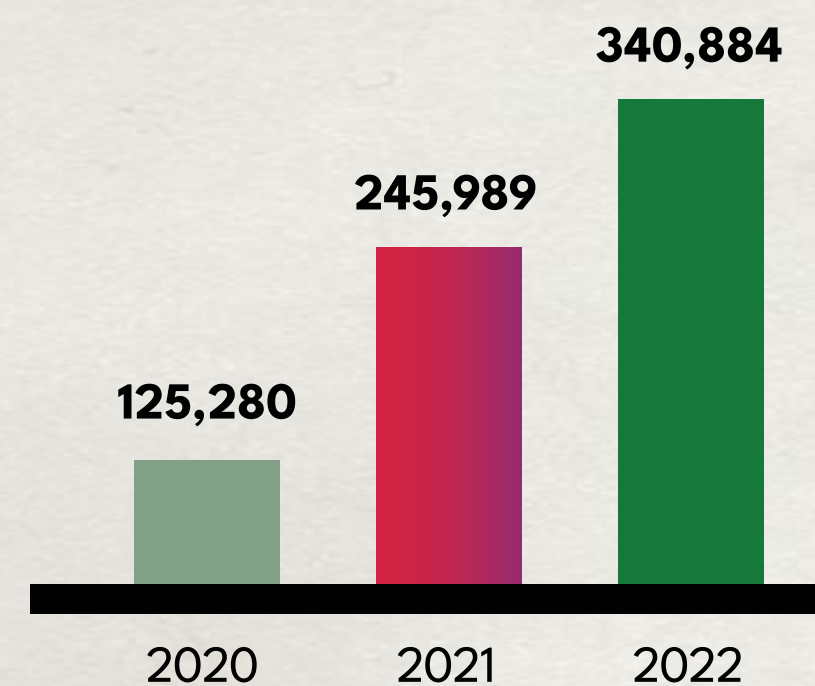
We organize various training and development programs throughout the year to encourage employees to improve their skills. In 2022, we provided a total of 340,888 person\*hours of training to our employees, reaching 11.4 hours of training per person.

We support our employees in planning and navigating their career paths, enabling them to leverage their existing talents and adapt to the evolving global trends. We offer a wide range of horizontal and vertical career development opportunities throughout our Group companies, enabling employees to advance their careers and strategically rotate between roles that align with the changing needs of our organizations. In addition, we actively use the **Human Resources Information Systems** infrastructure, which we developed by focusing on digital transformation processes, and conduct employee performance appraisal through this platform.

Average Training per Employee (hours)



Total Training Hours (person x hour)



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[Megatrends 2022, PwC](#)

20

[Why Quiet Hiring is a Win-Win for Employers and Employees, Gartner](#)

# Parlak bi' fikir!

## (A Bright Idea)

At Zorlu Holding, we foster a culture of innovation by empowering employees to leverage their corporate experience and entrepreneurial mindset through our intrapreneurship program, Parlak Bi'Fikir (A Bright Idea). This program aims to strengthen our corporate culture and fuel innovation within the organization. The Parlak Bi'Fikir (A Bright Idea) program at Zorlu Holding encompasses our intrapreneurship and open innovation initiatives, aimed at cultivating an entrepreneurial mindset, fostering an innovative corporate culture, and developing key competencies such as resilience and agility in response to the rapidly changing business landscape. Through this program, we collaboratively prepare for the evolving conditions of today's business world.

We are currently in the process of preparing for the third cycle of the Parlak Bi'Fikir (A Bright Idea) program, following the successful completion of the first two cycles. Our goal is to launch the new cycle in 2023.

On the other hand, AbilityPool, ConectoHub, BRB, Geliver and Ne Ekersen teams, which received investments from Vestel Ventures in the first two cycles, continue to work as a venture in partnership with Zorlu Holding, while Selffix continues to work as an internal project within Vestel.

You can access our innovation portal [here](#).

## Vestel Management Trainee Program

In 2022, Vestel continued its Management Trainee (MT) Program, launched in 2009 to train future managers, with the academic support of Turkey's leading universities. The program, in partnership with Koç University, empowers management candidates by providing them with academic and professional training opportunities that foster their professional and personal growth. Within the scope of the program, candidates have the opportunity to do internships in different units of Vestel Group, as well as work with managers at various levels and experience the corporate culture and ways of doing business.

A total of 18 graduates from Turkey's leading universities completed the program and started working at Vestel.

## Akıllı Hayat Akademisi



## Smart Life Academy

Aligned with our Smart Life 2030 vision, Zorlu Group prioritizes human-oriented systems and regenerative business models to generate significant value across ESG areas, fostering sustainable growth and benefiting all stakeholders involved. We organize trainings and various events to support the Smart Life Architects who lead sustainability efforts within Zorlu Group. In cooperation with Boğaziçi University Lifelong Learning Center (BÜYEM), we have been organizing training programs since 2019. These trainings cover the latest developments, new concepts, and approaches in the field of sustainability.

The fourth semester of "Sustainability 101" trainings was held in 2022. Approximately 300 Zorlu Group employees participated in Smart Life Academy's 5-week Sustainability 101 training. The training included lectures on the fundamentals of sustainability, entrepreneurship and innovation, corporate sustainability, inclusion, and diversity. BÜYEM awarded certificates of achievement to participants who were successful in the evaluation conducted at the end of the training.

# Geleceğe bi'adım

## Geleceğe Bi'Adım (A Step into the Future) Zorlu Group Internship Program

Every year, we organize the Geleceğe Bi'Adım (A Step into the Future) internship program for university students as a way to inspire and support young individuals across various platforms. The four-week program was held in August 2022 with the participation of 137 students from 56 universities. Participants had the opportunity to work in 81 different departments during their internship, guided by 112 internship coaches.

In addition to theoretical information, the program was supported by webinars with the participation of experts. The program included orientation events, presentation skills and Excel efficiency trainings, Vestel Retail Academy and Zorlu Academy trainings, KATA Workshop, webinars, online meetings with managers from different departments, intern-coach meetings, project work and quiz competitions. Upon successful completion of the internship program, participants were awarded digital certificates based on criteria such as active participation, completion of training modules, and project work, as evaluated by the program organizers.

## Geleceğe Bi'Adım (A Step into the Future) Information Technologies New Graduate Program

Through the “Geleceğe Bi'Adım (A Step into the Future) Information Technologies New Graduate Program”, we strive to provide comprehensive training to young individuals, fostering creativity, innovation, and dynamism, with the ultimate goal of integrating them into Zorlu Holding. Within the scope of the program, new graduates work in different teams under Zorlu Holding Information Technologies Group.

The program aims to contribute to adaptation to business life by focusing on business areas for young people, aligning with the ecosystem for strong communication and creating a common language. To this end, we designed a detailed training program in collaboration with Sabancı University. The program encompasses a range of modules, including technical and personal development-oriented trainings such as data science fundamentals, business life 101, innovation, and transformation. Furthermore, we have ongoing projects dedicated to the recruitment and career development of new graduates in functions such as information technologies, internal control, and audit within Zorlu Group. The recruitment process for young talents was successfully concluded in February 2022, and the training program was subsequently completed by April.

# YÖNETİM AKADEMİSİ

## Management Academy

Zorlu Holding, in alignment with its Smart Life 2030 vision, actively takes significant strides towards a sustainable future, embracing an innovative approach to effectively manage transformation processes. By putting people at the center of transformation, we support talent development through an agile, dynamic, and innovation-oriented work culture. In this context, we launched our development program, which aims to provide new competencies and skills.

In July, we successfully concluded the second cycle of the Management Academy development program, empowering our managers to become influential role models driving change and transformation, thereby fostering sustainable success across our Group. The Management Academy, which was held with the participation of 44 executives with the title of Manager, was implemented in cooperation with Boğaziçi University. The program was structured in 3 modules under the themes of “New World Order”, “Effective Management” and “Agile Leadership”.

The third cycle of the program started in October with the participation of 42 executives and is expected to be completed in 2023. The fourth cycle is planned for 2023. The Management Academy is designed to enhance the leadership competencies of managers within our Group and support their ongoing development on their leadership journey.

## CORPORATE VOLUNTEERING

Corporate volunteering harnesses the skills, energy, and dedication of employees to make a positive impact and contribute to a better world, playing a crucial role in addressing the diverse global challenges we encounter today.<sup>21</sup>

We aim to improve our social impact and contribute to society through volunteering activities, and we encourage our employees to do the same. Aligned with our Smart Life 2030 vision, we collaborate with non-governmental organizations through our employee volunteering program, Kivilcimlar (Sparks) Movement, to carry out impactful projects that contribute to creating a better future.

Since 2018, we have engaged in volunteering work for eliminating inequalities to contribute to the solution of social problems and to work towards our focal areas identified for the environment with the help of our 2,300 volunteers under “Kivilcimlar (Sparks) Movement”, our corporate volunteering program. In 2022, we performed approximately 3,700 hours of volunteer work. Throughout the year, we implemented more than 41 volunteering projects in collaboration with civil society organizations that are members of the Açık Açık platform. We maintain our corporate volunteering approach in a more effective and systematic way with the AbilityPool platform, where we report all volunteering activities.

Together with volunteers (Sparks) and the Kivilcimlar (Sparks) Movement Executive Board, we implemented the Career Talks Project, the Discovery Workshops Project, and A Spark in Koruncuk Village project. In our **Career Talks** project, we shed light on the career journeys of Zorlu professionals and Mehmet Zorlu Foundation (MZV) scholarship holders and KAÇUV scholarship holders by matching them one-to-one based on the department they studied at university and the field of work they want to get information about. In our **Discovery Workshops** project, we aim to create science, art and environmental awareness while having fun with the Discover Science, Discover Art, and Discover the Environment modules we designed for 3<sup>rd</sup> and 4<sup>th</sup> grade primary school students. As part of our **A Spark in Koruncuk Village** project, in collaboration with the Koruncuk Foundation, we aim to bring students together with Zorlu professionals on an online platform to inspire their career selection process.

With AbilityPool, our volunteer management platform, we manage corporate volunteering programs in an effective and organized manner. Through the **Discovery Workshops** volunteering project, one of the projects developed by Sparks, more than 80 Sparks have conducted workshops with more than 300 children so far. In 2022, we were deemed worthy of the “Most Successful E-Volunteering Award” with the Discovery Workshops project in the 15<sup>th</sup> Gönülden Ödüller program organized by the Private Sector Volunteers Association (ÖSGD).

In addition, Zorlu Holding received an award in the “Employee Engagement” category with its corporate volunteering program Kivilcimlar (Sparks) Movement at the 9<sup>th</sup> Sustainable Business Awards held in 2022 to encourage and reward projects that create environmental, social, and economic benefits. We received an award in the “Private Sector” category at the Red Vest International Volunteering Awards, which aims to popularize the culture of volunteerism and bring it together with society. In the upcoming period, we will remain committed to implementing the projects initiated by the Kivilcimlar (Sparks) Movement.

“SINCE 2018, WE HAVE BEEN CARRYING OUT VOLUNTARY WORK WITH MORE THAN 2,300 VOLUNTEERS UNDER THE “KIVILCIMLAR (SPARKS) MOVEMENT”. WE PERFORMED 3,705 HOURS OF VOLUNTEER WORK IN 2022. THIS YEAR, WE RECEIVED AN AWARD IN THE “EMPLOYEE ENGAGEMENT” CATEGORY AT THE 9<sup>TH</sup> SUSTAINABLE BUSINESS AWARDS.”

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[Global Corporate](#)

[Volunteerism Research Project,](#)

[IAVE](#)

## OCCUPATIONAL HEALTH AND SAFETY

Given our diverse portfolio of companies operating in sectors such as energy, consumer durables, and textiles, we recognize the presence of various occupational health and safety (OHS) risks inherent in our operations. Ensuring the health and safety of our employees is our utmost priority, and we diligently analyze the OHS risks they may encounter. We are fully committed to upholding OHS standards and providing our employees with a safe working environment. We continuously make improvements for the health and safety of our employees. Our OHS management approach revolves around the identification of OHS priorities, the establishment of a sustainable safety culture, and the promotion of zero accident awareness among all employees.

We continue our work in line with the targets of zero accidents and zero occupational diseases. We prioritize creating a work environment that fully complies with all relevant legislation, particularly OHS regulations. Zorlu OHS Standards guide all our Group companies. We take various measures for continuous development and improvement in occupational health and safety. We regularly organize OHS trainings to raise awareness among our employees. In 2022, we provided an average of 6.9 hours of OHS training per employee at Zorlu Holding and Group companies.



“IN 2022, WE PROVIDED AN AVERAGE OF 6.9 HOURS OF OHS TRAINING PER EMPLOYEE AT ZORLU HOLDING AND GROUP COMPANIES.”





## INCLUSIVE VALUE CHAIN

The global crises we have witnessed in the environmental, social, political, and economic realms highlight the urgent need for innovative approaches to redesign global systems. The current fragile structure of the supply chain, which plays a critical role in the value chain, has been causing disruptions in global systems. Supply chain problems, which have many different negative impacts, especially on production processes, pose potential risks for the private sector. On the other hand, supply chain challenges bring different opportunities. Investments in innovative technologies in supply chain management, along with supplier relationships and localization efforts, provide opportunities to ensure business sustainability and maintain a competitive advantage. Industry 4.0 technologies, including artificial intelligence, robotics, and automation, enhance the resilience of the supply chain against risks, while data science-powered systems enable a proactive management approach by delivering measurable results.<sup>22</sup>

At Zorlu Holding and Group companies, we adopt a comprehensive management approach that covers the entire value chain, closely monitoring potential risks and opportunities in the supply chain. To ensure the sustainability of our business, we prioritize creating a positive impact within our sphere of influence by aligning with the dynamics of the different sectors in which our Group companies operate, and we actively seek critical collaborations with our suppliers.



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[Supply Chain Trends](#)

[2023: Risk Resilience Beats](#)

[Transformation Every Day of](#)

[The Year, Forbes](#)

## SUSTAINABLE SUPPLY CHAIN

In order to minimize disruptions in the global supply chain and proactively manage potential risks and opportunities, we prioritize sustainable investments to increase supply chain resilience. By investing in robust infrastructure systems, fostering a culture of digitalization, and implementing proactive procurement processes, we enhance the resilience of our supply chains, drive productivity, and maintain a competitive advantage in the market.<sup>23</sup>

At Zorlu Holding and Group companies, we position localization efforts at the heart of our supply chain approach. We minimize our exposure to global supply chain risks through strategic partnerships with local suppliers. In 2022, 71% of the total 10,104 suppliers we worked with were local suppliers. Payments to local suppliers accounted for 32% of the total.

At Zorlu Group, we prioritize the adherence of our suppliers to international environmental, social, and ethical standards and principles as they play a crucial role in our value chain and are essential stakeholders in ensuring the sustainability of our business. [Zorlu Holding Procurement Principles](#) serve as a guiding framework for all Group companies, emphasizing the prevention of child labor and forced labor, non-discrimination, humane treatment, fair remuneration and working hours, freedom of association and the right to collective bargaining, occupational health and safety, environment, and ethics.

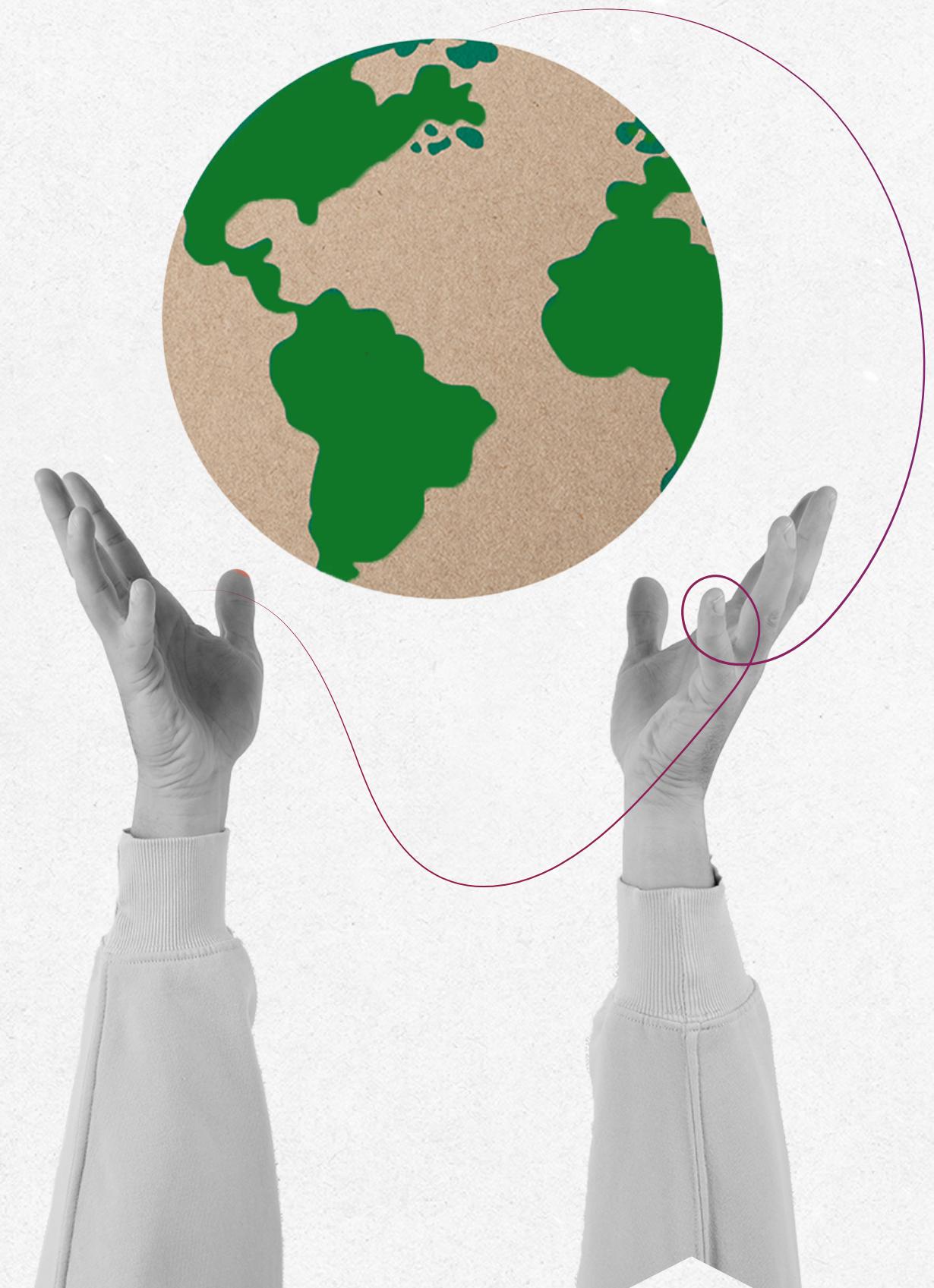
We actively monitor the compliance of our suppliers with these principles and standards and conduct various awareness-raising activities and training programs to support their development. To this end, we provided a total of 4,996 person\*hours of training on environmental, social, technical and management systems in 2022 to support the development of suppliers, dealers, and distributors.

We aim to ensure that the collaborations we establish with our suppliers are sustainable through supplier selection based on environmental and social criteria, and in this context, we subject our suppliers to regular audits. In 2022, we conducted a thorough assessment of our critical suppliers who are vital to the uninterrupted operation of our business. Our audit processes, which encompass environmental and social criteria, are currently ongoing.

Global crises make it imperative to design resilient supply chain systems. In this context, digitalization efforts stand out due to process efficiency and traceability. In 2021, we launched the implementation of vSRM (Virtual Supplier Relationship Management), our new procurement system, which aims to digitize processes, improve communication with business partners, and enhance efficiency and effectiveness in evaluating procurement proposals. With our new digital system, we aim to create corporate memory, create a transparent environment where suppliers can enter bids, measure supplier performance through the system, and save time and output costs by digitizing all approvals.

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[Keys to resilient supply chains,](#)  
[OECD](#)



## COMMUNITY RELATIONS

Addressing the environmental, economic, and social crises requires collective responsibility and collaboration among governments, public institutions, academia, individuals, and the private sector. The 2023 Global Risks Report by the World Economic Forum (WEF) highlights the significance of environmental risks associated with the climate crisis in the long term, alongside the short-term impacts of social and economic crises. The escalating environmental, economic, and social risks, along with their interconnected nature, pose the threat of multiple crises (polycrisis).<sup>23</sup> In a world marked by global crises, companies have a crucial role to play in shaping their own future and promoting the well-being of their communities. Building radical and multi-stakeholder collaborations, adopting an inclusive and positive impact-oriented corporate citizenship approach, and embracing a holistic business model that goes beyond the profit motive are essential.

Guided by our Smart Life 2030 strategy, we are strengthening our purpose-driven responsible investment holding structure every day and adopting a social benefit- and value-oriented business model. We are also committed to allocating 1% of EBITDA to efforts to contribute to the UN SDGs by 2030. We create human-oriented ecosystems that care for the welfare of all our stakeholders; we adopt an approach that is inclusive, leaves no one behind and creates solutions to today's problems. We are strengthened by the cooperation and partnership of our stakeholders and focus on creating the highest value in ESG areas. In 2022, the budget for our efforts to support the Sustainable Development Goals amounted to TL 116 million, 0.7% of annual EBITDA.

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[The Global Risk Report 2023,](#)  
[WEF](#)



We identify our areas of social benefit and responsibility, including social innovation, entrepreneurship, quality education, reducing inequalities, gender equality, creative industries, culture and arts, sustainable cities, and communities, by analyzing the needs and expectations of our stakeholders in a way that directly contributes to sustainable development. By measuring the impact of the social benefit projects we undertake, we promote a value creation culture that focuses on development and change.

We are aware that a collaborative and participatory company culture plays an important role in developing innovative ideas. With the input of our internal and external stakeholders, we contribute to the solution of today's problems through strategic collaborations and partnerships based on social benefit and social transformation.

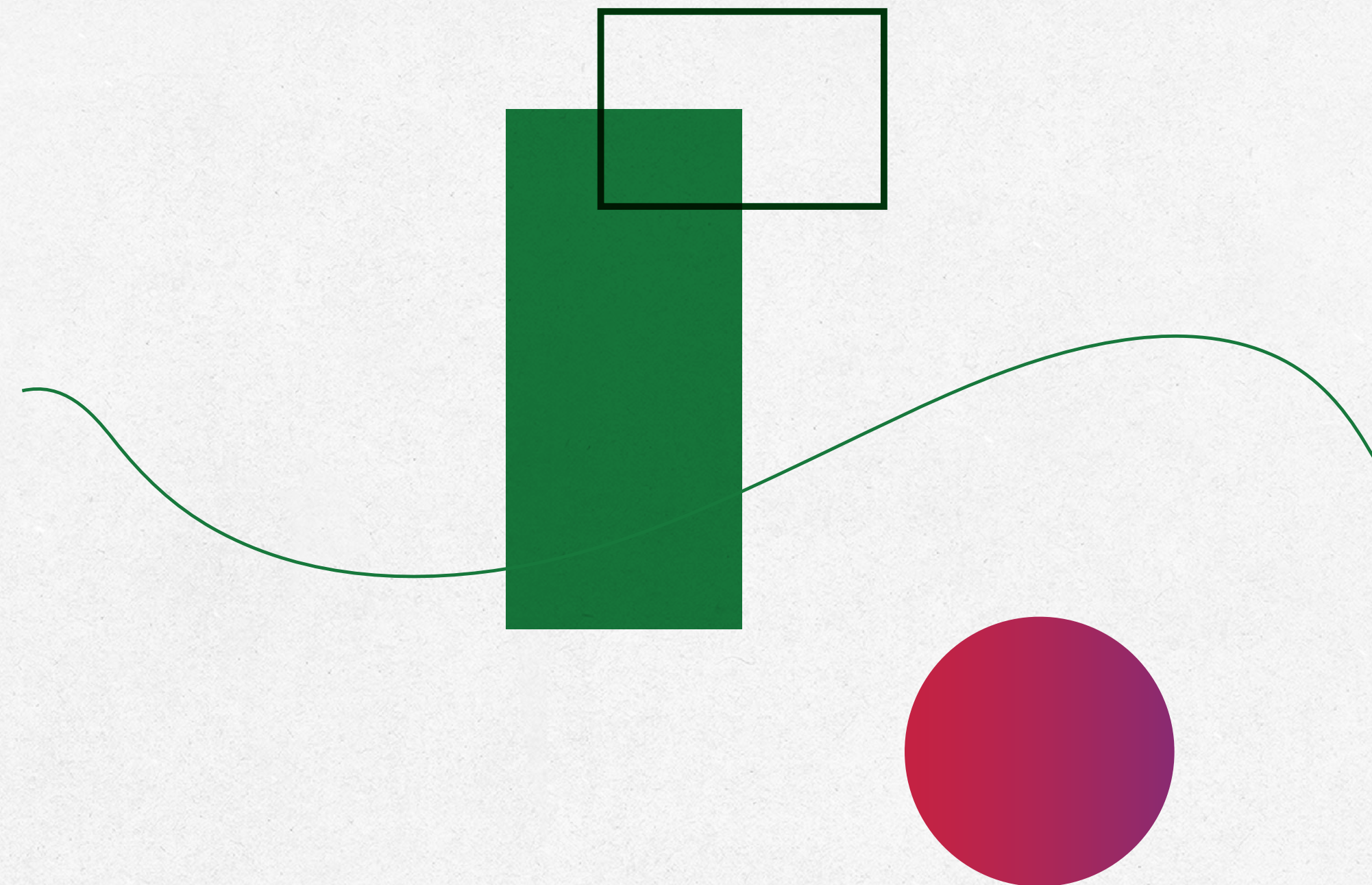
Through **Mehmet Zorlu Foundation**, we implement projects that contribute to social development with a focus on benefit and impact, particularly in the fields of education, culture and arts, sports, and health. In addition to our scholarship program for young people and building educational institutions, we also support educational programs developed for young people. As a stakeholder in the **MZV-MEF YetGen 21st Century Competencies Training Program** since 2015, we aim to

equip young people with the competencies required by the new world order. Through this program, we contribute to the development of qualified human resources, creating lasting benefit and value for our country. We see teachers as leaders who move society forward, and we support the **Education Reform Initiative**, which works for the development of the next generation and society, and the **Teachers Network**, which seeks to support and empower teachers.

We believe that social enterprises operating in the field of quality education make great contribution to the change of the ecosystem. In this context, we attach importance to cooperating with institutions such as Mektepp, Imagination Center, Village Schools Exchange Network in various projects.

We believe that social entrepreneurship brings innovative and sustainable solutions to social problems. With **imece**, the social innovation platform we have co-founded, we are advancing the social entrepreneurship and impact ecosystem in Turkey.

Through **Digilogue**, we actively promote the development and widespread adoption of technology and creativity-based thinking in society, while encouraging advanced thinking about everything that may be associated with digitalization.



## MEHMET ZORLU FOUNDATION (MZV)

Since 1999, Mehmet Zorlu Foundation has been working to raise self-confident and hopeful generations with a vivid imagination. In this direction, we carry out activities that create value for society, particularly in the fields of education, health, sports, culture and arts.

With Mehmet Zorlu Foundation's education scholarships, we support an average of 2,000 students every year and share the journeys of young people who are building the future. We provide long-term contribution to our scholarship recipients, 40% of whom are primary and high school students and 60% of whom are university students and continue our support until they graduate based on their success and needs. In this context, we have provided scholarship support to more than 30 thousand students to date, including the 2021-2022 academic year.

Through our foundation, we offer medicine, medical product, and material aid to people in need, and deliver necessary materials to disaster zones in case of disasters such as earthquakes and floods in Turkey as well as the various parts of the world.

## Zorlu Children's Theater

Through Zorlu Children's Theater, we unite children with culture and arts all over Turkey with the goal of stimulating their imagination. Since its establishment in 2003, Zorlu Children's Theater has reached over 900,000 children through approximately 2,100 performances of 15 different plays in a span of 19 years. With Zorlu Children's Theater, we are organizing the "A Dream, A Play" story contest to engage with more children and create a platform for them to unleash their creativity and pursue their dreams. The project aims to nurture children's talents, foster their imagination, and support them in realizing their full potential. The selected stories are adapted into scripts and brought to life through performances on the stage of Zorlu PSM, with the involvement of a jury comprised of renowned theater actors, writers, and industry professionals. Following the pandemic, we premiered the production titled "Perfect World Musical" at Zorlu Children's Theater in 2022, which is an adaptation of Elif Sude Dobra's story "Bizarre Technological Tales", the winning entry of the 3<sup>rd</sup> edition of "A Dream, A Play" in 2020.

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THROUGH THE MEHMET ZORLU FOUNDATION, WE ARE DEDICATED TO NURTURING RESILIENT AND IMAGINATIVE FUTURE GENERATIONS, INSTILLED WITH SELF-CONFIDENCE AND EQUIPPED WITH 21<sup>ST</sup> CENTURY COMPETENCIES, ALL WITH A HOPEFUL OUTLOOK TOWARD THE FUTURE. WE WORK WITH THE AWARENESS THAT NURTURING GLOBALLY CONSCIOUS INDIVIDUALS WITH A STRONG SENSE OF RESPONSIBILITY TOWARDS BOTH THE PLANET AND SOCIETY IS THE MOST IMPORTANT PREREQUISITE FOR A SUSTAINABLE FUTURE.

OLGUN ZORLU  
DEPUTY CHAIRMAN OF THE BOARD  
SUSTAINABILITY COMMITTEE MEMBER

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## MZF-MEF YetGen 21<sup>st</sup> Century Competencies Education Program

In response to the influence of global megatrends and the ongoing global crises, companies and organizations are undergoing transformational changes, leading to a continuous evolution in the skills required. Research reveals that due to the resulting “talent gap”, companies are struggling to find talented workforce. We continue to support the MZF-MEF YetGen 21st Century Competencies Training Program to enable young people to adapt to the requirements of the current age and acquire the life skills and adaptability competencies demanded by the 21st century. Within the framework of the program led by Prof. Erhan Erkut, Vice Rector of MEF University and Founder of YetGen, we provide support to equip young people not only with academic, technical, and professional knowledge but also with the skills and competencies required by the 21st century. We support young people with courses such as “Career Planning, Presentation Techniques and Teamwork”, “Presentation and Written Content Preparation”, “Introduction to Algorithmic Thinking”, “Modeling with Excel”, “Technology Literacy”, “21st Century Literacies”, “Self-Development and Active Citizenship”, “Entrepreneurship”, “Sustainability and Social Innovation”, “Leadership”, “GirişGen” and “Transition to the Business World”. At the conclusion of the program, we organize the Youth Summit at Zorlu PSM, where we bring participants together with experts and opinion leaders in Turkey. In order to increase the accessibility of the

program, we make the trainings available to young people in different regions of Turkey via live broadcast. As of 2022, the number of high school and university students who graduated from the program has exceeded 8 thousand. In 2022, we made the MZF-MEF YetGen 21st Century Competencies Training Program available for participation by teachers. The program engaged over a thousand teachers, with 465 successfully completing and receiving certificates. At the end of the program, we organized the Teachers’ Summit, where nearly 700 teachers had the opportunity to enhance their competencies and awareness in line with the needs of the new world. The summit brought together experts in various fields, covering topics such as 21st century literacy, self-development, leadership, algorithmic thinking, educational technologies, entrepreneurship, and sustainability. The Teachers’ Summit was also broadcast live on the ‘Yetkin Gençler’ YouTube channel to teachers and education volunteers across Turkey.



## Education Reform Initiative

As part of our mission of making quality education accessible and sustainable, Mehmet Zorlu Foundation has been supporting the Education Reform Initiative (ERG) since 2011. ERG is an independent and non-profit initiative that focuses on the structural transformation of education, utilizing quality data, fostering constructive dialogue, and facilitating a collective understanding among diverse perspectives to promote the development of children and society.

ERG advocates for data-driven decision-making, stakeholder engagement, and equitable access to quality education as the fundamental elements for driving structural transformation in the education sector. ERG, supported by prominent foundations in Turkey, serves as a model for civil society organizations, conducting its work through the Education Observatory and Education Laboratory units to drive innovation and research in the field of education.

You can access the Education Monitoring Report 2022, which evaluates the developments in the field of education in the 2021-22 academic year, [here](#).

## Teachers Network

We believe that quality education and successful students who love to learn depend on teachers, and we support the Teachers' Network led by ERG. BAYETAV, Aydın Doğan Foundation, Enka Foundation, Mehmet Zorlu Foundation, Sabancı Foundation, and Vehbi Koç Foundation are key supporters of Teachers' Network, an exchange and cooperation platform fostering personal and professional growth for educators through collaboration with colleagues, individuals, and institutions across diverse disciplines.

Teachers' Network develops solutions to teachers' needs "together with teachers, not on behalf of teachers" and brings together the resources needed in the field of education with a community approach. In collaboration with various stakeholders, including non-governmental organizations, universities, and local governments, Teachers' Network has made significant impact by reaching 665 Change Ambassador teachers from 57 different cities, engaging more than 350 individuals and institutions, and benefiting over 40 thousand participants across 81 provinces through a multitude of face-to-face and online events, resulting in a positive influence on more than 300 thousand students. As a stakeholder of Teachers' Network, we continue to contribute to the development of teachers and, through them, to the quality of education. MZV also served as the main partner of the Creative Self-Confidence Festival, organized to enhance, and reinforce teachers' skills in developing creative solutions to the problems they face every day. The Creative Self-Confidence Festival generated over 100,000 impressions through online trainings and events.



## ZORLU HOLDING

### imece

In this era of crises, we know that creating innovative and sustainable solutions to social problems depends on the development of social innovation. Accordingly, we attach importance to collaborations that contribute to the development of the social innovation ecosystem in Turkey. On the journey we embarked on with the question of “How can we collectively find innovative and sustainable solutions to social issues?” Zorlu Holding became one of the founders of the social innovation platform imece. We believe in the power of generating solutions through imece platform, where people and institutions creating the change meet and work together to find solutions to social, ecological and cultural issues. We enhance the capacities of young people and social entrepreneurs through education, mentorship, and communication networks, while contributing to triggering systemic transformation through created content and communities. Since 2017, we have been supporting imece’s programs aimed at entrepreneurs.

imeceLAB, the open innovation laboratory within imece, offers a program where high school and university students can acquire competencies in social benefit and innovation, and collectively develop solutions addressing economic, ecological, social, and cultural issues. In processes where the resources and expertise of many stakeholders such as civil society, academia, private sector, and public institutions come together, imeceLAB provides know-how and experience transfer to young people with its interdisciplinary mentor network.

You can find out more about imeceLAB’s collaborations and programs in 2022 [here](#).

In 2021, we hosted the imece summit: Future Impact Summit, which was shaped around the themes of “Impactful Communities”, “Impactful Leadership”, “Impactful Finance”, “Impactful Organizations” and “Impactful Business”. You can find our report on the outcomes and insights of this event [here](#).

“WE STRONGLY BELIEVE THAT THE ACTIVE PARTICIPATION OF YOUNG PEOPLE IS CRUCIAL FOR CREATING A BETTER FUTURE, AND WE ARE COMMITTED TO SUPPORTING THEM IN SHAPING THEIR OWN FUTURES.”

### Training for a Sustainable Future

Based on the raised awareness among participants during the Smart Life Academy conducted for our Group employees, we reached the conclusion that these trainings would also serve as an important development opportunity for young people who will shape our future.

Under the main partnership of Zorlu Holding and imeceLAB, we have launched the “Training for a Sustainable Future” program with the aim of providing young people with a platform to actively participate in problem-solving. The “Training for a Sustainable Future” program has established partnerships with academic institutions such as Boğaziçi University Lifelong Education Center (BÜYEM) and Sustainable Development Solutions Network (SDSN) Turkey, as well as collaborating with S360 as the information and content partner. 975 university students from various cities in Turkey applied to the program. We provided comprehensive training and hands-on experience to 150 university students who are passionate about sustainability, covering topics such as sustainability leadership, systems thinking, design thinking, impact measurement, climate crisis, and diversity and inclusion, aiming to enhance their knowledge and skills in addressing sustainability-oriented issues.

In 2022, our goal was to expand our reach to a larger audience of young people through the second edition of the program. We received applications from 43 different cities and 230 young people who successfully completed the second semester were entitled to receive certificates of participation.

In the second semester, we enhanced the curriculum to empower young people as agents of change and encourage them to prioritize impact-driven careers in their future choices. The program offered not only training sessions but also inspiring conversations, bringing together young participants with their peers in the sustainability field, as well as professionals from the business world, social enterprises, and new media platforms. The program incorporated community meetings and a book club, creating spaces for dialogue and interaction among the participants, fostering a sense of community among the young people involved. Our aim is to expand the program each year and reach a greater number of young people by continuously evolving and tailoring it to meet their needs and expectations.



## Eşit Bi'Hayat (An Equal Life)

We advocate equality in all areas of life and believe that an equal life is possible for everyone. We care about women's full and effective participation in decision-making processes and equal representation in economic and social life, and we implement practices that support equal participation in the workforce. We have been a signatory to the United Nations Women's Empowerment Principles since 2015. Together with the business world, we strive to ensure equality throughout the society, and aim to create an ecosystem in which women participate more actively in all areas of life.

We reflect our awareness of gender equality in our discourses and working environment and focus on contributing to the awareness of all our stakeholders with whom we work. You can watch our Eşit Bi'Hayat (An Equal Life) manifesto, which includes our commitments to create an inclusive corporate culture nourished by diversity and to take a step closer to achieving equality in the business world and society in general, [here](#).

You can find the details of the work we carry out within the scope of our Eşit Bi'Hayat (An Equal Life) approach under the [Gender Equality section](#) of the report.

## Digilogue

Through Zorlu Performance Arts Center, we support technology and creativity-oriented thinking and creation with the Digilogue platform under which we act as the coordinator. Among the goals of the Digilogue platform are to raise curiosity about digitalization, ask questions and develop interdisciplinary dialogue. We bring together professionals of the creative industry at Digilogue, which encourages individuals to think, interpret and represent art, history, architecture, fashion, cinema, and global issues, such as the climate crisis, with digital means. We organize Digilogue panels and summits to bring together opinion leaders who develop new approaches to the future of art and technology, and those who are engaged in research and production. We also coordinate exhibitions and projects that make digital transformation of art visible and real by utilizing advanced techniques.

As part of Digilogue Summit'22, we focused on the theme of "Creating in the light of technological developments" and hosted numerous Turkish and foreign artists and technology professionals who are experts in areas such as human behavior in the metaverse, Web 3.0, artificial intelligence, and creative potentials, in panels and discussions. The report pertaining to the summit, organized for the first time in 2017, can be found [here](#).

In February 2022, Digilogue and SALT organized an international conference in collaboration with L'Internationale as part of the research project "Stage, Record, Archive: Performance" focusing on performance art in Turkey. The conference on performance art documentation and accessibility was complemented by an exhibition at SALT, supported by Digilogue, showcasing the importance of archiving, and making this art form more accessible.

In Voice Notes, a video series on climate crisis and technology, we engaged experts through questions. We had 231,200 views on Instagram with the [series](#) featuring speakers' own voices and images.

Sónar Istanbul, which consists of audio-visual shows that blend music, creativity, and technology, brought new media artists to the audience at Sónar Screen in March 2022. Through Sónar+D, the creativity and technology platform of Sónar Istanbul, which we support through Digilogue, 5 panels, 2 installations, 6 performances, 6 live Sónar Screen shows were organized with a total of 41 artists. Through Sónar+D, we provided new media artists and art enthusiasts with exciting opportunities to delve into the realms of digital art, expanding their horizons and fostering personal growth at the intersection of technology and art.



## Awareness Projects with a Focus on Sustainability

### **Nereye Kadar (How Far) Podcast Series:**

In collaboration with Zorlu Performing Arts Center, we introduced the podcast series “Nereye Kadar? (How Far?)” hosted by journalist Mirgün Cabas. Through the podcast series “Nereye Kadar? (How Far?)”, our goal was to delve into the complex and multi-faceted global challenges of our ever-evolving world, emphasizing the importance of collective action in finding solutions and mutual learning.

In our podcast series, available on the Smart Life 2030 Spotify channel and Vestel Radio, we featured 26 expert guests who shared their insights and experiences on pressing sustainability issues that pose threats to our planet, including global warming, climate crisis, social inequalities, resource scarcity, desertification, and drought, as well as potential solutions to address them. Our podcast series reached over 6,000 listeners, serving as a platform to enhance societal awareness and consciousness regarding sustainability issues, and inspiring individuals and corporations to adopt sustainable practices for the greater good.

### **Smart Life 2030 Blog:**

Under our Smart Life 2030 sustainability strategy, our primary focus is on generating the utmost value in ESG domains for the benefit of our stakeholders, society as a whole, and future generations. We are actively engaged in efforts to raise awareness among our stakeholders and foster their understanding and embrace of this approach and mindset. As part of our commitment, we provide a platform for all our stakeholders to gain new perspectives on the global sustainability agenda and raise awareness by exploring best practices through the accessible Smart Life 2030 Blog.

The Smart Life 2030 Blog has attracted over 120,000 visitors who have engaged with a wide range of content, including news, articles, and agenda summaries related to sustainability, Zorlu Holding and Group companies’ sustainability projects and principles, advancements in innovation, technology, and entrepreneurship, initiatives in corporate volunteering and quality education, as well as updates on diversity and inclusion efforts.

As part of the “Smart Life Cinema Days” initiative, we provided free access to 728 sustainability-oriented films that tackle important topics such as gender equality, environment, climate, and biodiversity crisis. The screenings took place on Thursdays over a span of 5 weeks at Vestel Amfi, the open-air venue of Zorlu PSM, attracting 728 moviegoers and aiming to raise public awareness on these critical issues through the power of cinema.



## ZORLU GROUP COMPANIES

### Vestel Group

Developing future-oriented social projects centering on the environment and people, Vestel implemented projects to benefit the society, especially disadvantaged groups, in 2022. The company continues to carry out social investment projects in the field of women's employment and gender equality. In addition, the company works to support the development of sports in Turkey through sponsorships and campaigns that encompass various sports disciplines. It continues to support athletes and teams in many different branches of sports such as volleyball and gymnastics, diving, handball, and sailing.

Vestel, which considers support for sports among its main responsibilities, became the main sponsor of the Turkish Gymnastics Federation and the Gymnastics National Teams. It also continues to support the development of volleyball in Turkey and increase interest in volleyball through communication campaigns such as "We Are a Country of Volleyball". The International Vestel Manisa Half Marathon, organized for the first time in 2022 in cooperation with Vestel and Manisa Metropolitan Municipality, was run on a route covering Vestel City and different locations in Manisa.

In 2019, Vestel launched the Women Technician Training Project within the Vestel Service Academy, which aims to contribute to women's employment. Vestel provides technician training to customer representatives working in authorized service centers and offers them the opportunity to work in after-sales technical support teams. As of the end of 2022, 18 out of a total of 68 female technician candidates who successfully completed their practical technical training are actively working in the field.

Launched in 2021, "Elim Sende (You Have My Hand)" Project is implemented under the cooperation of the Gender Equality (GE) Working Group, Vestel, Provincial Directorate of Family Labor and Social Services, Women's Guest House Directorate and Violence Prevention

and Monitoring Centers (ŞÖNİM). Elim Sende (You Have My Hand) Project aims to improve the quality of life of women staying at women's shelters and accompanying children, strengthen public-private sector collaboration in the solution of social problems, offer social and corporate support to women survivors of violence, contribute to their plans to lead an independent life, improve their qualifications through vocational training, integrate them into working life and, thus, ensure equal opportunities and gender equality.

Executing projects for animals in need of help and care, Vestel designs walkers for disabled animals from the parts of household appliances that have reached the end of their useful life under the "Walker" project. In the 2018-2022 period, Vestel Beyaz Eşya produced and donated a total of 35 walkers for disabled animals. With the project, Vestel won the Green Dot Industry Award in the ÇEVKO "Social Responsibility Practices on Environmental Issues" category in 2022.



## Zorlu Energy Group

Zorlu Energy Group develops projects primarily in the field of education, particularly in the regions where it operates, supports imece and Mehmet Zorlu Foundation, and contributes to the Eşit Bi'Hayat (An Equal Life) program. With the “We Channel Our Energy to Education” project, Zorlu Energy Group provides scholarship support to successful university students with limited financial means living in regions where it is engaged in electricity generation and has been meeting the energy needs of the Tohum Autism Foundation since 2013 with the “We Channel Our Energy to the Education of Children with Autism” project. The Steptember project, which Zorlu Holding has been supporting since 2016, contributes to the treatment and education processes of spastic children.

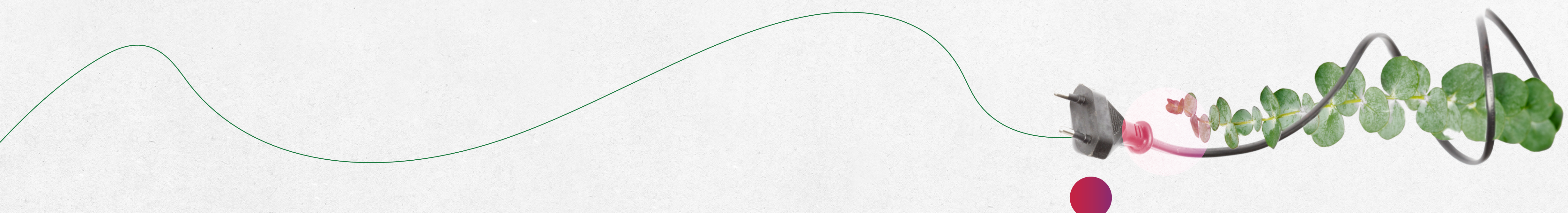
In cooperation with Boğaziçi University Lifelong Education Center (BÜYEM) and under the leadership of imece, Zorlu Energy Group Experience program was launched for Zorlu Energy Group scholarship holders. Seeking to increase the value it creates, the company contributes to the personal and professional development of young people with the goal of establishing a community where they learn together according to their interests. The fellows participate in online training sessions on weekends for a duration of two months, covering various content areas including energy, climate and sustainability, technology, and communication.

Every year, Zorlu Energy Group provides scholarships to more than 300 university students for 9 months as part of its scholarship program. It offers assistance to universities in investment regions to support the social and educational needs of students. The group provides various forms of

support, including seminars, special events, and technological equipment. Zorlu Energy Group offers support to the Maveria Technology Team, the first electric vehicle team of Osmangazi University, in their R&D and innovation-oriented work. Additionally, it undertakes the main sponsorship of the İTÜ Solar Car Team, which aims to combine alternative energy sources and advanced automotive technologies. These initiatives are aimed at empowering young people and enabling them to develop the technology of the future.

Launched in 2022, the “Women’s Power, Power of the Future” program aims to increase women’s employment in technical fields in the industry. The project aims to promote gender equality and empower female students studying at vocational high schools in Gaziantep by providing them with theoretical and practical training. 11 high school students and 14 vocational school students continue to receive education in the program launched in 3 schools. The project aims to support the graduation of 24 female students from the program and facilitate their successful integration into the workforce.

In Gaziantep, Zorlu Energy Group launched an awareness-raising campaign on the use of natural gas and prepared content on safe natural gas use and utilization of the whistleblower hotline. In cooperation with public institutions, Zorlu Energy Group is conducting awareness-raising activities for citizens living in its operational area. Following the pilot project in Gaziantep, the project is expected to be rolled out to other provinces where it operates.



## Zorlu Gayrimenkul Group

Zorlu Gayrimenkul is committed to ensuring that its real estate activities are accessible to everyone, in alignment with the concept of inclusion, which is essential for creating sustainable towns and cities.

The “No Barriers at Zorlu” project aimed to transform Zorlu Center into a barrier-free living space, while the “Blue Light for Autism” campaign helped raise awareness on autism by turning all the lights of Zorlu Center blue. Throughout October, the breast cancer awareness month, Memorial Health Group collaborated with the Zorlu Center to increase the impact of the awareness efforts by hosting many events such as breast cancer awareness talks, yoga activities, mirror positioning and turning the Zorlu Center lights pink.

Zorlu Gayrimenkul continues to create awareness by offering new stories and experiences with programs that reflect its sustainability perspective. The company launched Eco Love Fest to support local and entrepreneurial brands that care about issues such as art, upcycling and recycling, efficient use of resources, raising environmental awareness, the climate crisis and making sustainability a business principle. It brought together brands and visitors that create change in sustainability at Zorlu Center. Zorlu Gayrimenkul plans to expand the scope of Eco Love Fest, which has reached more than 16 million people and now has a registered name thanks to all communication efforts, and to organize it every year by enriching it even further with content that includes sustainability talks with experts, ecological workshops for children and adults, and inspiring documentaries from the Life Film Festival selection.

“ECO LOVE FEST WAS HONORED WITH THE SILVER AWARD IN THE “CORPORATE SOCIAL RESPONSIBILITY” CATEGORY AT THE 2022 SOLAL MARKETING AWARDS, A DISTINGUISHED EVENT HOSTED BY THE EUROPEAN COUNCIL OF SHOPPING PLACES (ECSP). THUS, THE NUMBER OF NATIONAL AND INTERNATIONAL AWARDS THE EVENT RECEIVED IN 2022 REACHED 5.”

## Meta Nickel

Meta Nickel actively supports the education of young people in its operational region by offering educational scholarships through the Mehmet Zorlu Foundation. In 2022, Meta Nickel dedicated a total of TL 400 thousand towards educational scholarships.

## No Barriers at Zorlu

At Zorlu Gayrimenkul, we take care to ensure that our activities are accessible to everyone so that every segment of society can benefit equally from the opportunities created by sustainable development. Recognizing that accessibility is a right, we boost the physical accessibility of our spaces. To this end, we aim to create a barrier-free living space at Zorlu Center with the “No Barriers at Zorlu” project. In 2017, we initiated a collaboration with the Guide Dogs Association, the first and only association in this field in Turkey, to launch the No Barriers at Zorlu project with the aim of transforming Zorlu Center into a fully accessible living space. As we continued to expand our scope of cooperation and support, we provided sign language training to employees in all food and beverage areas at Zorlu Center. With the support of the Turkish Association for the Visually Impaired (TURGED), we prepared the menus of all restaurants in a way to include the BRAILLE alphabet.

Thanks to the Yol Arkadaşım AVM feature on the Hayal Ortağım application brought to life by Turkcell and Young Guru Academy (YGA), we help people with visual disabilities to participate in social life more actively and independently. With this feature, the visually impaired guests of Zorlu Center can easily reach any place they want by getting information about the places around them. In collaboration with Blindlook, selected under the 3rd Support Program of imece, we have made Amfi Pub, Cheers, and the jazz club touché accessible for visually impaired individuals. This initiative aims to provide a comfortable experience for visually impaired guests, both during concerts and in the food and beverage areas within Zorlu PSM. With its “No Barriers at Zorlu” project, Zorlu Center was deemed worthy by the International Council of Shopping Centers of the “Social Support” Award in Europe and the “ICSC Foundation Albert Sussman” Award across the world. With the prizes won, the association received USD 25,000 in financial support.

## Zorlu Performing Arts Center

Zorlu Performing Arts Center (Zorlu PSM) serves as a hub for cultural, artistic, and entertainment activities, hosting festivals, Broadway musicals, concerts featuring local and international musicians, as well as theater performances. Organizing events for each segment of the society and serving as a unique intercultural bridge between the East and the West, Zorlu PSM has hosted more than 5 million art enthusiasts to date.

“My Last-Minute Seat” initiative, implemented by Zorlu PSM after consulting with young people, aims to create social benefits by enhancing access to events and inclusiveness. This initiative allows customers to reserve no-show seats for students at the last minute in return for a donation of TL 1 to the Community Volunteers Foundation (TOG). More than 23,000 students have benefited from the initiative so far.

In 2021, Zorlu PSM launched the PSM Workshop program, targeting individuals in the 18-30 age group who aspire to build a career in the theater industry. This initiative aims to foster the sustainability of the culture and arts ecosystem while providing opportunities for emerging talents to enter the sector. The program is free of charge and accepts participants through an open call. The 7-month program offers in-depth theoretical and practical training in various disciplines such as “Dramatic Writing”, “Theatre Directing”, and “Theatre Production” aiming to cultivate a diverse group of directors and producers while contributing to the development of Turkey’s theatrical repertoire through the inclusion of plays by local playwrights. After successfully completing the project with 25 participants last year, the PSM Workshop is currently providing training to 24 new participants for the current semester.

As an institution that has been fostering cultural and artistic endeavors for a decade, Zorlu PSM is dedicated to enhancing the accessibility of diverse communities to high-quality cultural and artistic events. In its 10th season, Zorlu PSM initiated the “My First Concert, My First Theater Performance at PSM” project, which collaborates with expert non-governmental organizations SosyalBen and TOG to provide adults and children from disadvantaged areas of İstanbul with the opportunity to attend concerts and theater performances for the first time in their lives.

# REGENERATIVE BUSINESS MODELS



## REGENERATIVE BUSINESS MODELS

The impacts of the climate crisis is intensifying with each passing day. The varying impacts of the climate crisis are contingent upon different temperature scenarios, and the failure of global mitigation efforts is regarded as one of the most significant global risks in the coming decade.<sup>25</sup> Nevertheless, the climate crisis is anticipated to have far more severe and catastrophic consequences than previously anticipated, even with relatively modest increases in temperature.<sup>26</sup>

The adverse environmental effects resulting from the climate crisis also have significant repercussions on social life. Research indicates that if the temperature change is limited to 1.5°C, it is projected that by 2030, approximately half of the global population will experience direct consequences from the environmental impacts of the climate crisis, such as limited access to natural resources, water scarcity, extreme weather events, droughts, floods, and detrimental effects on agriculture and forestry, leading to biodiversity loss.<sup>27</sup>

Considering the environmental and social dimensions of the climate crisis, it is crucial for the business world to embrace regenerative business models that draw inspiration from nature in order to sustain their competitive advantage and enhance their preparedness and resilience to mitigate potential risks. In order to design business processes that align with the needs of society and natural ecosystems, it is essential for the business world to integrate the climate crisis into its strategic decision-making mechanisms. For widespread adoption of regenerative business models, it is crucial to prioritize shared value creation, inclusiveness, and develop new management approaches that integrate sustainability and societal considerations throughout the value chain.

### Our Targets\*

- › **Net zero emissions** in Scope 1-2 by 2030 and across the entire value chain (Scope 1-2-3) by 2050.
- › 50% reduction in waste by 2030, **zero waste** by 2050.
- › To recover 50% of the water used by 2030 and all of it by 2050.

\*Performance against targets is available [here](#).

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IN LIGHT OF THE ENVIRONMENTAL AND SOCIAL IMPLICATIONS OF THE CLIMATE CRISIS, THE BUSINESS WORLD MUST EMBRACE REGENERATIVE BUSINESS MODELS INSPIRED BY NATURE. THIS SHIFT IS ESSENTIAL TO NOT ONLY SUSTAIN COMPETITIVE ADVANTAGES BUT ALSO TO TRANSITION TOWARDS A RESILIENT AND PREPARED STRUCTURE THAT CAN EFFECTIVELY MITIGATE POTENTIAL RISKS. THIS APPROACH IS ONE OF THE PILLARS OF OUR SMART LIFE 2030 STRATEGY.

ÖMER YÜNGÜL  
CEO

SUSTAINABILITY COMMITTEE MEMBER

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- 25 [The Global Risk Report 2023, WEF](#)
- 26 [AR6 Synthesis Report 2023, IPCC](#)
- 27 [How climate change affects people and populations: A research preview, McKinsey](#)





## ENVIRONMENTAL MANAGEMENT

Aligned with our responsible investment holding approach, we prioritize the adoption of regenerative business models addressing the climate crisis and circular economy across all our Group companies, ensuring that our investment decisions are guided by these principles. We transform society and our ecosystem within our sphere of influence by involving all stakeholders along our value chain.

We carry out our environmental management in the light of international standards that we take as reference. We closely monitor our performance in line with the targets set in our sustainability strategy, and we proactively share and promote best practices, particularly those implemented by our Group companies.

The Holding and Group companies have made significant progress in environmental management, with 76% of enterprises/factories receiving ISO 14001 certification, 49% obtaining ISO 14064 certification, and 47% achieving ISO 50001 certification. Meta Nikel aims to obtain ISO 50001 Energy Management System certification in 2023. In addition to sustainability and integrated annual reports, our Group companies also transparently share their performance through the Carbon Disclosure Project (CDP). As the first energy company to participate in CDP, Zorlu Enerji reports its governance structure, risks and opportunities, corporate strategies and targets regarding climate change and water security every year. Vestel Beyaz Eşya has been responding to CDP's climate change and water security programs since 2012 and Vestel Elektronik since 2013.

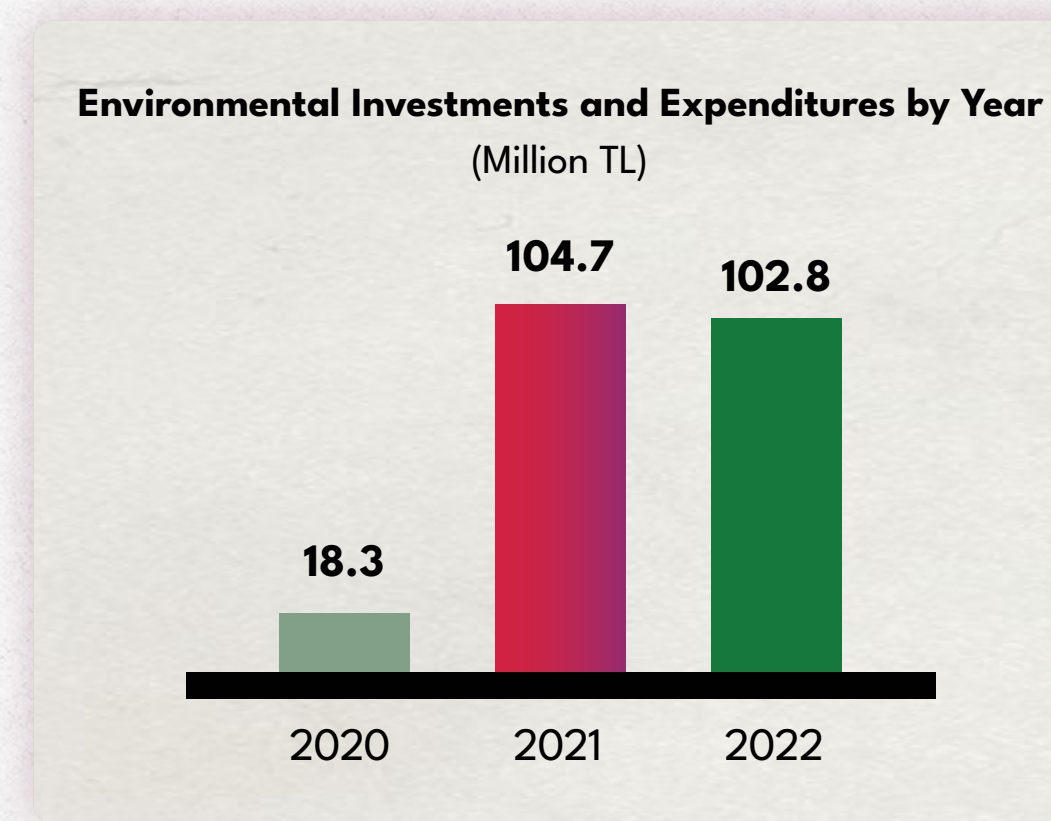
At Zorlu Holding, we annually report our environmental investments and expenditures, which we regularly monitor, for the entire Group. In alignment with our environmental policies, we closely managed our investment and expenditure budget in 2022, nearly maintaining it at the previous year's level, with approximately TL 102.8 million invested and spent.



**“GROUP COMPANIES ZORLU ENERJİ,  
VESTEL ELEKTRONİK AND VESTEL BEYAZ  
EŞYA RESPOND TO THE CARBON  
DISCLOSURE PROJECT'S CLIMATE CHANGE  
AND WATER SECURITY PROGRAMS  
ON AN ANNUAL BASIS.”**



Company	ISO 14001 Environmental Management System	ISO 50001 Energy Management System	ISO 14064 Greenhouse Gas Inventory Standard	ISO 14046 Water Footprint Standard
Zorlu Enerji	✓	—	✓	✓
Vestel Beyaz Eşya	✓	✓	✓	✓
Vestel Elektronik	✓	✓	✓	✓
Zorluteks	✓	✓	—	—
Korteks	✓	—	✓	—
Meta Nikel	✓	—	—	—
Zorlu Gayrimenkul	—	✓	—	—



\*The 2021 data has been revised due to an expansion in the scope of environmental investments carried out at the Meta Nikel plant.

## The European Green Deal and Zorlu Group

The Green Deal, introduced by the European Commission in 2019, encompasses a wide range of strategies, policies, and initiatives aimed at transforming the European Union into a carbon-neutral continent by 2050. It includes a comprehensive range of measures, spanning clean energy, circular economy, food and agriculture strategies, buildings, and the development of action plans, regulations, and codes of conduct. The Green Deal, being one of the EU's largest initiatives, presents both risks and opportunities that are closely relevant to Turkey and its companies due to their strong trade relations with the EU. Zorlu Group has actively monitored the European Green Deal and its associated roadmaps since their announcement, taking a proactive approach to manage risks and seize opportunities within this framework.

The energy sector has a great responsibility in the fight against climate change and the journey to net zero. While carbon-intensive power generation companies need to undergo a rapid and costly transformation, there are opportunities for companies investing in renewable energy. Zorlu Energy Group is actively pursuing its goal of achieving 100% renewable energy in total

electricity generation by 2030, while also making strides in the establishment of an electric vehicle charging station network in collaboration with Zorlu Energy Solutions (ZES). We maintain a close monitoring of the Carbon Border Adjustment Mechanism (CBAM), which is expected to have a low short-term impact and probability on our Group companies and align our actions with our emission reduction targets to address potential long-term risks.

The Circular Economy Action Plan, a key focus of the Green Deal, aims to introduce new regulations in various sectors including electronics, batteries, and textiles. Vestel and Zorlu Textiles Group companies, with a significant portion of their sales in Europe, maintain close and regular monitoring of new regulations relevant to their sectors. Compliance with regulations within the sustainable product framework is crucial as it encompasses various aspects such as product design, packaging, and labeling, and any delays in compliance can pose financial and reputational risks for businesses. That is why we encourage our Group companies to develop business strategies in line with the European Green Deal.



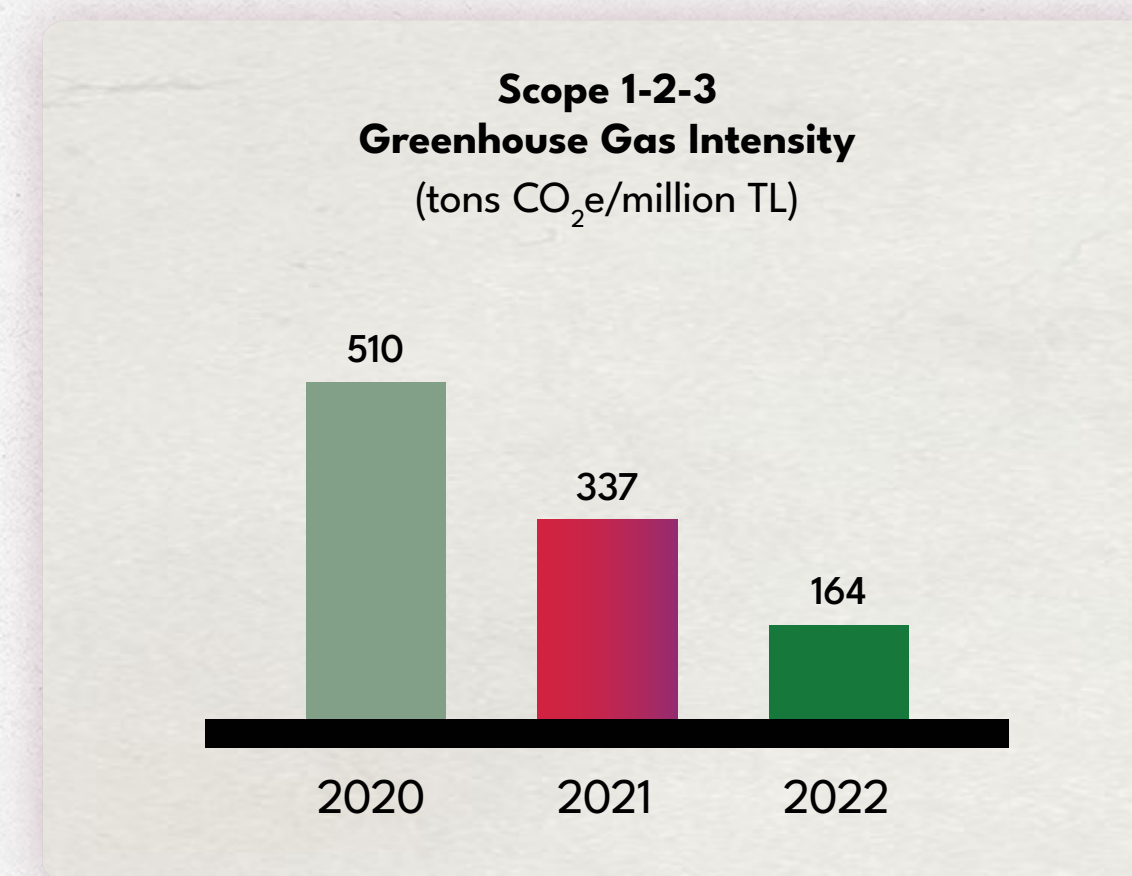
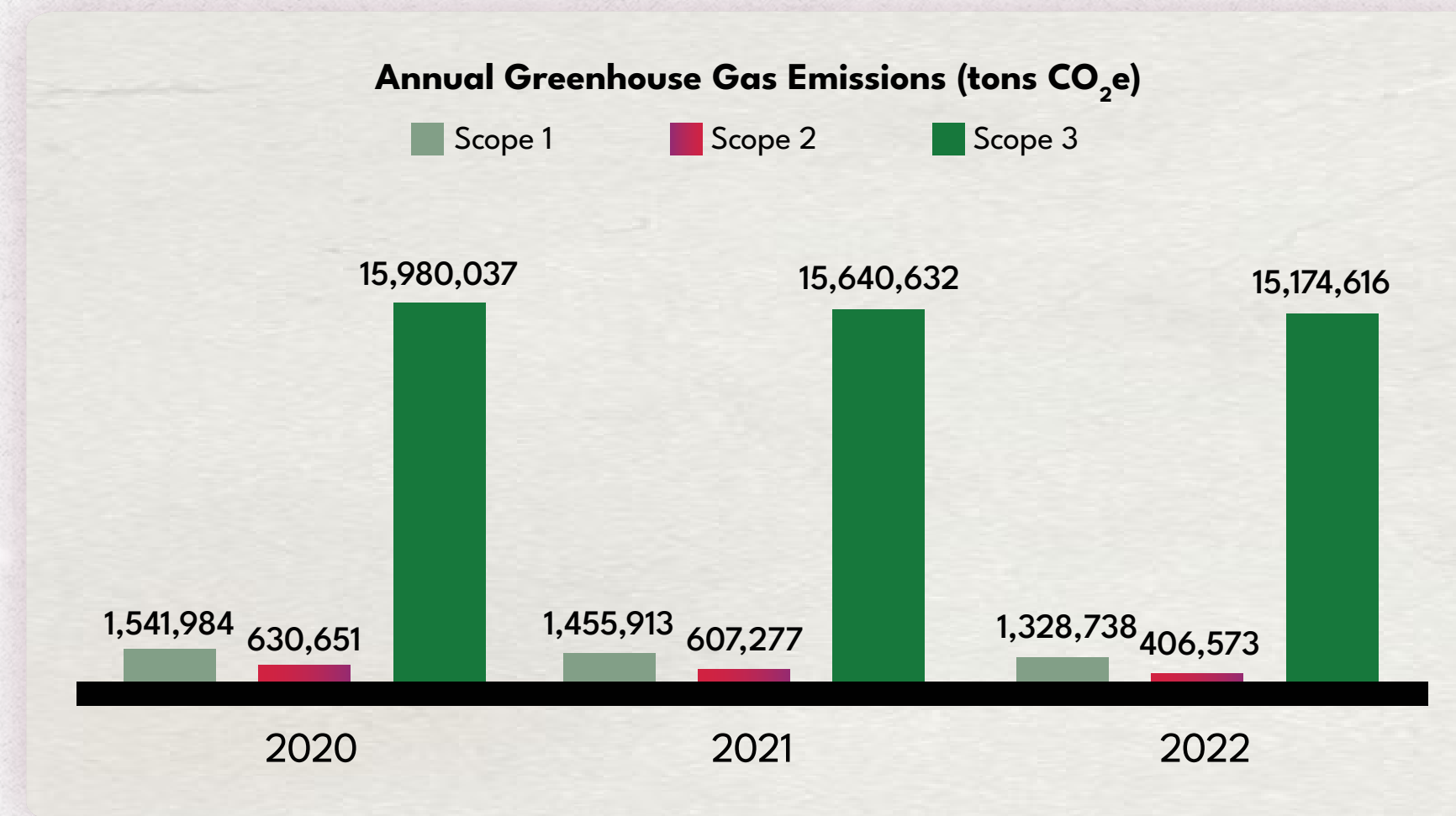
## COMBATING THE CLIMATE CRISIS

The temperature has increased by 1.1°C above pre-industrial levels due to the extensive use of fossil fuels, inefficient energy supply, and land use practices over the past century, highlighting the significant impact of the climate crisis. The escalating threats posed to ecosystems and humanity by the rising temperatures necessitate collective global efforts and a shared commitment to a common objective. This situation increases the importance of all stakeholders that make up social and economic structures acting together.<sup>28</sup>

At Zorlu Holding, we experience the impacts of the climate crisis in diverse ways through the energy, textiles, consumer electronics, mining, and real estate sectors in which we operate. Our Group companies are taking the necessary actions for mitigation and adaptation, which play the most important role in combating the climate crisis. We support the transition to regenerative business models along the value chain and work to minimize the impact of the climate crisis on our stakeholders. We recognize the importance of collaborations in combating the climate crisis, and we manage the risks and opportunities brought by the climate crisis through partnerships with the public and private sectors, taking the European Green Deal and the Sustainable Development Goals as reference.

Recognizing the importance of regenerative business models in combating the climate crisis, we invest in innovative technologies and increase the use of renewable energy sources in our operational activities. We strive to create a positive impact throughout our value chain, supporting our customers to adopt a responsible consumption approach and other stakeholders to reduce their environmental and social footprint in the fight against the climate crisis.

In 2022, Scope 1-2-3 greenhouse gas emissions were measured at a total of 16,909,927 tons CO<sub>2</sub>e. In total, our Scope 1-2 emissions decreased by approximately 16% compared to the previous year and 20% compared to the base year of 2020, reaching a value of 1,735,331 tons CO<sub>2</sub>e. Scope-3 emissions, for which we expanded the scope of calculation in 2022, were measured at 15,174,616 tons CO<sub>2</sub>e.<sup>29</sup>



28

[A liveable future for all is possible, if we take urgent climate action: flagship UN report, UN](#)

29

The annual greenhouse gas emission amounts can vary based on improvements in calculation methods and expansions in scope. The presented data represents the most recent information available.

## Climate Efforts at Zorlu Holding Companies

In line with its goal of achieving net zero emissions by 2050, Vestel Elektronik is working on a decarbonization plan as part of its commitment to set targets in accordance with the Science-Based Targets initiative (SBTi). Thanks to the installation of 142 kWp solar panels on the facility's roof, which supplies energy to the refrigerator and washing machine factories, a total of 175 MWh of energy was generated in 2022, resulting in the prevention of 85 tons of greenhouse gas emissions.

In line with the [Nuclear Standoff Commitment](#) it published in 2021, Zorlu Enerji continues to increase its renewable energy investments and states that it will not include nuclear energy projects in its generation portfolio. At the same time, it supports the transition to a low carbon economy by promoting and investing in electric vehicles, electric vehicle charging stations, and electric vehicle rental services, which are rapidly gaining popularity in Turkey.

Zorlu Enerji has made a public commitment through the Science-Based Targets Initiative (SBTi) to establish a science-based and traceable roadmap by 2024 in order to limit the global greenhouse gas (GHG) emissions increase to 1.5°C, aligning with the targets set in the Paris Climate Agreement. The company also demonstrates its environmental responsibility by complying with all environmental regulations and regularly conducting environmental risk assessments. It prioritizes minimizing environmental impacts in all its activities, including construction, maintenance, and repair processes, and takes measures to prevent or minimize direct and indirect impacts on the environment and human health. These measures include managing waste through proper disposal procedures, using natural resources efficiently, and preparing for accidents and disasters that could harm the environment. Emission values from Zorlu Energy Group's power plants, including environmental risks, are monitored, and reported in accordance with local and international expectations.

At Zorlu Group, in line with our net zero target, we request each sector in which we operate to prepare decarbonization roadmaps, and we aim to complete the plans for the energy, consumer electronics and textile sectors by the end of 2023.



## ENERGY MANAGEMENT

The intensive use of fossil fuels globally leads to an increase in greenhouse gas emissions, the most important cause of the climate crisis. The decarbonization of energy production, which is carried out globally as part of the fight against the climate crisis, focuses on increasing the use of renewable energy sources and alternative energy sources. With the increasing use of renewable energy sources, which are critical for reducing greenhouse gas emissions, renewable energy sources such as nuclear, solar and wind energy are projected to meet on average more than 90% of global demand growth by 2025.<sup>30</sup> However, the combination of energy market instability, security concerns, and changing consumer behaviors is propelling a rapid increase in clean energy investments and driving a transformative shift towards renewables, presenting a unique opportunity to expedite the transition.<sup>31</sup>

Zorlu Holding and its Group companies remain committed to investing in renewable energy sources and enhancing operational efficiency as part of their efforts to shift towards clean energy and reduce greenhouse gas emissions from their operations. In 2022, our efforts to improve energy efficiency resulted in significant accomplishments, including a total energy savings of 6,681 MWh and financial savings amounting to approximately TL 19 million.

### Renewable Electricity Practices at Zorlu Holding and Group Companies

Zorlu Holding received the prestigious LEED Gold Certification for its sustainable practices, and in the last quarter of 2021, we successfully integrated renewable energy into our operations at Levent 199, the largest A+ office project in Turkey, through the International Renewable Energy Certificate (I-REC) program. Zorlu Gayrimenkul and Zorlu Tekstil continue to improve their ESG performance by putting sustainability at the core of their operations as per the Smart Life 2030 strategy. In line with this understanding, Zorlu Center and Zorlu Tekstil, in cooperation with Zorlu Energy Group, certified the electrical energy they use with I-REC.

This certificate shows that the energy needs of Zorlu Tekstil Kirklareli Campus, Zorlu Center Shopping Mall, Zorlu PSM and Raffles İstanbul are met with the green energy produced by Zorlu Energy Group's Alaşehir Geothermal Power Plant. In addition, we minimize the environmental impact of electric vehicles with the clean energy supplied to electric vehicle charging stations at Zorlu Center.

Zorlu Energy Group, through its electric vehicle charging stations network Zorlu Energy Solutions (ZES) and the hourly electric vehicle rental platform electrip, participates as a partner in the eCharge4Drivers Project in Europe, which is part of Horizon 2020. Aiming to significantly improve the electric vehicle charging experience in urban and intercity journey, the eCharge4Drivers Project is intended for developing pilot projects in 10 areas within Europe including cities and the Trans-European Transport Network in line with the expectations of users on charging options, mobility, and parking habits. You can find the Our Stories video about Zorlu Energy Group's eCharge4Drivers project [here](#). Zorlu Energy Group is actively involved in the establishment of an electric vehicle charging station network in various cities of Montenegro, as part of a project led by the United Nations Development Program (UNDP). This initiative includes the supply, installation, and support services for 15 double socket electric vehicle charging stations across 13 cities in Montenegro, along with application integration efforts. Through the [Renewable Energy Commitment Letter](#) issued in 2021, Zorlu Enerji sets a target to achieve 100% renewable energy in its total electricity generation by 2030, while also focusing on expanding and enhancing its renewable energy portfolio. It continues its investments to accelerate the transition to renewable resources such as geothermal, wind and solar.

30

[Electricity Market Report  
2023, IEA](#)

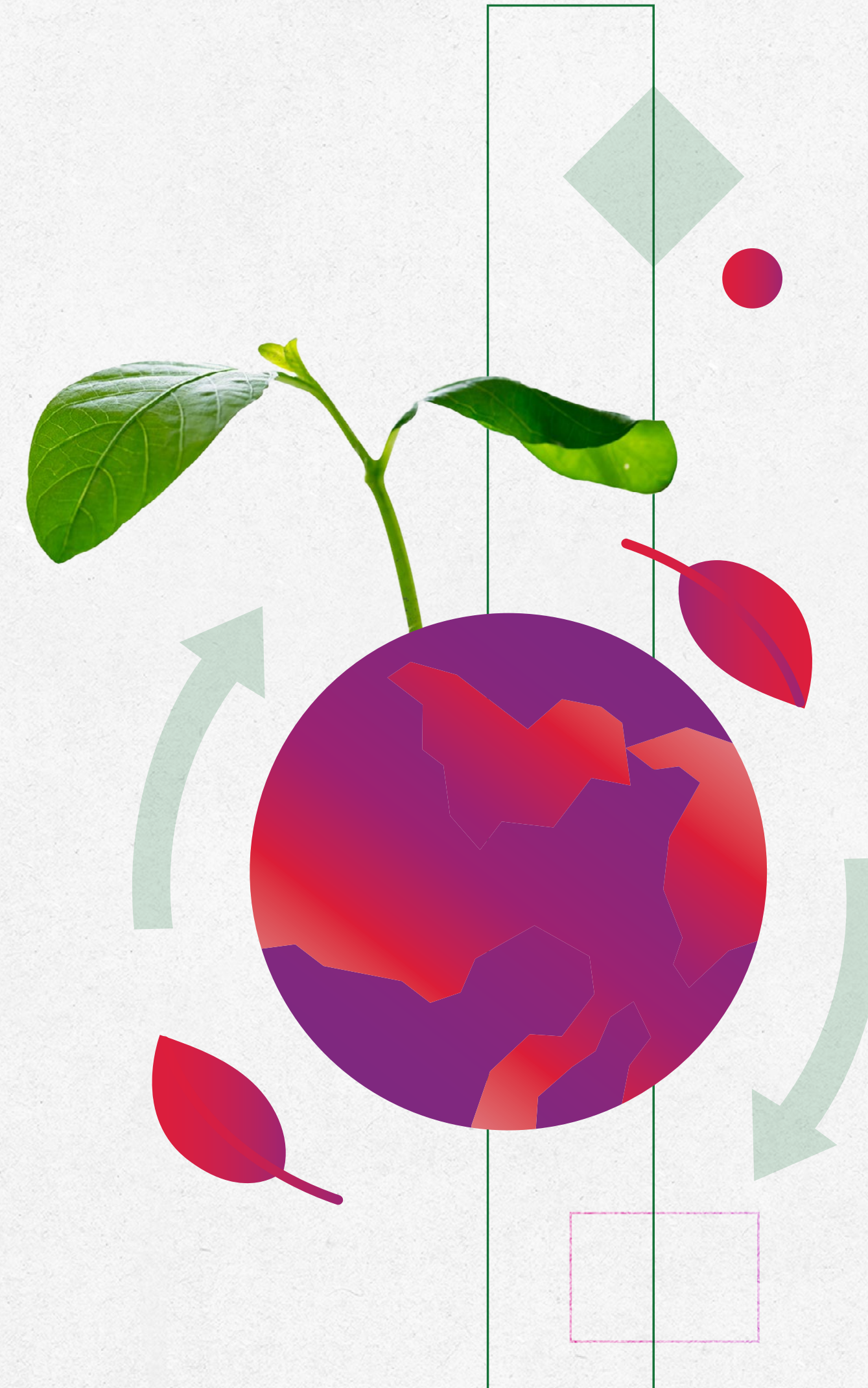
31

[Fostering Effective Energy  
Transition 2022 Edition, WEF](#)

## CIRCULAR ECONOMY

The existing business models based on the linear economy, characterized by the “take-make-dispose” approach, have led to global challenges including resource scarcity, waste generation, and environmental pollution. Recent efforts to address the climate crisis have been increasingly influenced by the principles of the circular economy, which prioritize resource efficiency, the circular flow of materials, and the restoration of natural ecosystems. However, research indicates that the global circularity rate declined from 9.1% in 2018 and 8.6% in 2020 to 7.2% by the end of 2022. This means that 90% of all materials used globally end up as waste or are produced in a non-reusable form.<sup>32</sup> This makes it imperative that the transition to a circular economy is carried out much more proactively, with circular business models seen as the most important tool in the transition process. The adoption of regenerative business models by all stakeholders within social and economic structures presents significant opportunities for the global circularity rate to increase, particularly within the business world.

At Zorlu Holding and Group companies, we embrace the circular economy approach as a fundamental pillar of our innovative business model. Our aim is to minimize resource consumption in our production processes, incorporate circular economy principles from the design stage to extend product lifecycles, and foster shared value throughout our value chain through a “waste = raw material” mindset. Through collaborative efforts, we implement innovative circular business models and sustainable systems across all sectors of our operations, generating positive impacts for society, the environment, and our business.



32

[The Circularity Gap Report  
2023, Circle Economy](#)

## NATURAL RESOURCE AND WASTE MANAGEMENT

The final products and services produced and consumed are largely derived from the use of natural resources. The global increase in material consumption and resource utilization surpasses the rate of population and economic growth. This means that we use more materials much more inefficiently. In a business-as-usual scenario, global resource use is projected to increase by 110% by 2060.<sup>33</sup>

The escalating global challenges concerning water resources, a vital natural asset crucial for the sustainability of life on Earth, are growing at an alarming rate. Water scarcity, which already impacts over 40% of the global population, is further compounded by the effects of climate change, leading to disrupted hydrological cycles, heightened water unpredictability, and a surge in the frequency and severity of both floods and droughts.<sup>34</sup>

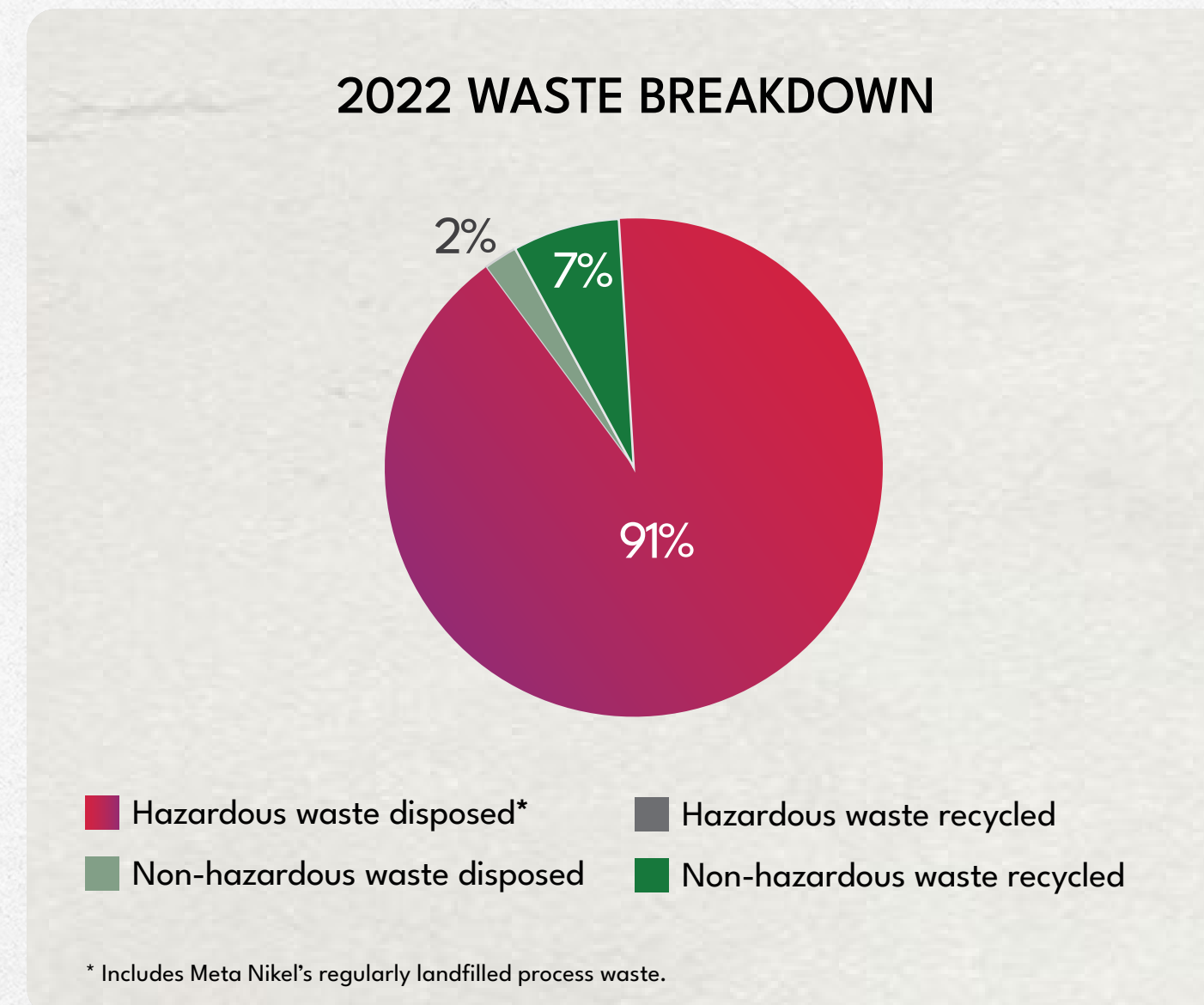
Out of the approximately 2.24 billion tons of municipal solid waste generated worldwide each year, only 55% is properly managed through controlled waste management facilities. This figure is projected to rise to 3.88 billion tons per year by 2050. The resulting waste causes greenhouse gas emissions and loss of biodiversity, especially in cities. However, around 931 million tons of food is wasted every year, while up to 37 million tons of plastic waste is forecasted to enter the oceans every year until 2040.<sup>35</sup>

At Zorlu Holding and Group companies, we prioritize the efficient use of natural resources, especially water. In order to reduce our operational impact in the mining-metallurgy and energy sectors in which we operate, we focus on the efficient and clean use of resources and strive to reduce the amount of natural resources we use through recycling practices.

In the textiles, consumer electronics and household appliances sectors, our Group companies leverage innovative technologies, notably Industry 4.0, to produce efficient and cost-effective products that meet the evolving needs of consumers.

By prioritizing efficient energy and water usage in our production processes, we not only minimize our environmental footprint but also enable our customers to reduce their energy and resource consumption through the efficient use of our products. We conduct product lifecycle analyses while still in the design phase, preventing potential environmental impacts before they occur.

In line with our zero-waste target, we adopt a proactive waste management approach, particularly for plastics, and turn the financial and environmental gains of waste into value. We prioritize the prevention of waste generation, followed by efficient recovery and recycling processes.



**33**  
[Natural-Resource Use And Environmental Impacts, One Planet Network](#)

**34**  
[Water Resources Management, The World Bank](#)

**35**  
[International Day of Zero Waste 2023, UNEP](#)

## Zorlu Group's Business Plastic Initiative Commitments

As part of the **Business Plastic Initiative (BPI)**, Zorlu Holding, Vestel Beyaz Eşya, and Vestel Elektronik have pledged to reduce and eliminate the use of plastics by the end of 2023. As part of our commitment, we have prioritized hygiene conditions and employee satisfaction, exploring alternative options such as glass bottles and purified water dispensers in our offices to eliminate the use of single-use plastic bottles. Accordingly, we have stopped purchasing bottled water as of May 2022. As of August, when stocks were exhausted, the use of bottled water in our headquarters ended. Considering employee satisfaction, we started using carboys and dispensers in offices and glass bottles of water at events.

Vestel Beyaz Eşya aims to use recycled and alternative plastic materials by collaborating with domestic and foreign suppliers and initiatives, and by recycling the waste generated in the production processes. Starting from 2021, the goal is to use a total of 4,344 tons of recycled plastic in products and components by the end of 2022, and a total of 7,081 tons by the end of 2023. Besides, the company will improve the product and packaging designs of all major household appliances and reduce the use of plastics by 1,000 tons by the end of 2023 when compared to the base year 2020 through the activities to be performed under the cooperation of its R&D and Production units. Throughout 2022, the company avoided a total of 28 tons of plastic by preferring cardboard boxes for packaging materials. Vestel Beyaz Eşya has exceeded its commitments for the 2021-2022 period, resulting in 232 tons of plastic reduction in packaging materials and 2,689 tons of plastic reduction in products. It used 5 tons of bio-based plastic materials and 4,573 tons of recycled plastic. Thus, the company prevented the use of 7,499 tons of unprocessed plastics in total.

Vestel Elektronik, on the other hand, plans to recycle production and engineering waste and residues generated in all processes in cooperation with the production, R&D and quality control teams. Accordingly, it is committed to using a total of 1,887 tons of recycled plastic, 629 tons for each of the years 2021, 2022 and 2023. In line with this commitment, it exceeded targets, using 1,532 tons of recycled plastics in 2021 and 704 tons in 2022. Besides, it aims to improve TV product and packaging designs without compromising on quality and durability and reduce the use of plastics by 831 tons by the end of 2023 when compared to the base year 2020 through the activities to be performed under the cooperation of its R&D and Production units.



## Zorlu Group's Circular Economy Practices

### Vestel Group

Vestel Elektronik primarily focuses on preventing, reducing, recycling, and recovering waste generation in all its activities carried out within the scope of the Zero Waste Management System. We categorize the waste generated at various stages of production at the source and store them in temporary waste storage areas. We transfer all collected waste to licensed waste companies in accordance with the Regulation on Waste Control. We conduct regular audits of waste companies to ensure that waste is recycled or recovered in an appropriate manner. Vestel Elektronik recycles or recovers 91% of the waste generated by production with its zero-waste approach. As per the Zero Waste Regulation, we ensure that the waste in the facilities is separated in an appropriate manner, and we train our employees on waste. Vestel Elektronik, which also makes use of food waste within the scope of the Zero Waste practice, composted 1,747 kg of food waste in 2022 and donated 99.4 tons of food waste to stray animals.

As of 2021, Vestel started using FSC (Forest Stewardship Council) certified and 100% recycled cardboard in the packaging of their refrigerators and dishwashers, making it the first company in Turkey to do so. In 2022, the practice was implemented for all Vestel-branded major household appliances in the domestic market. This initiative resulted in the use of a total of 14,624 tons of recycled cardboard, which helped prevent the cutting down of 248,608 trees. In 2022, we prevented 376,635 trees from being cut down by using a total of 22,155 tons of recycled cardboard across Vestel Group.

The details of the efforts to combat plastic pollution and deforestation undertaken by Vestel Group can be found [here](#).

With the Household Recycling project launched by Vestel Elektronik in 2022 to involve customers in waste recovery processes, all unused technological waste, regardless of its usability or brand, is collected free of charge. Vestel Elektronik provides customers with free collection services for recycling technological waste, managing all procedures from product retrieval to disposal as customers submit their requests through multiple communication channels. The income generated from recycling the collected products is donated to the AHBAP Association, while in collaboration with ecording, seed balls are distributed in remote and inaccessible areas for environmental restoration. In 2022, a total of 5,136 waste products were successfully recycled through the Household Recycling project, and in partnership with ecording, 500,000 seed balls were dispersed using various innovative methods, including unmanned aerial vehicles.

### Zorlu Energy Group

Zorlu Energy Group maximizes the reuse of cable waste from its electrical and electronic operations and prioritizes the recycling of metal waste as scrap, transforming it into valuable raw materials within the circular economy framework. It delivers recyclable waste, including polyethylene pipes and plastic materials, to licensed recycling facilities, effectively contributing to the circular economy by ensuring their transformation into valuable resources. The company has also developed and approved Industrial Waste Management Plans for power plant operations.

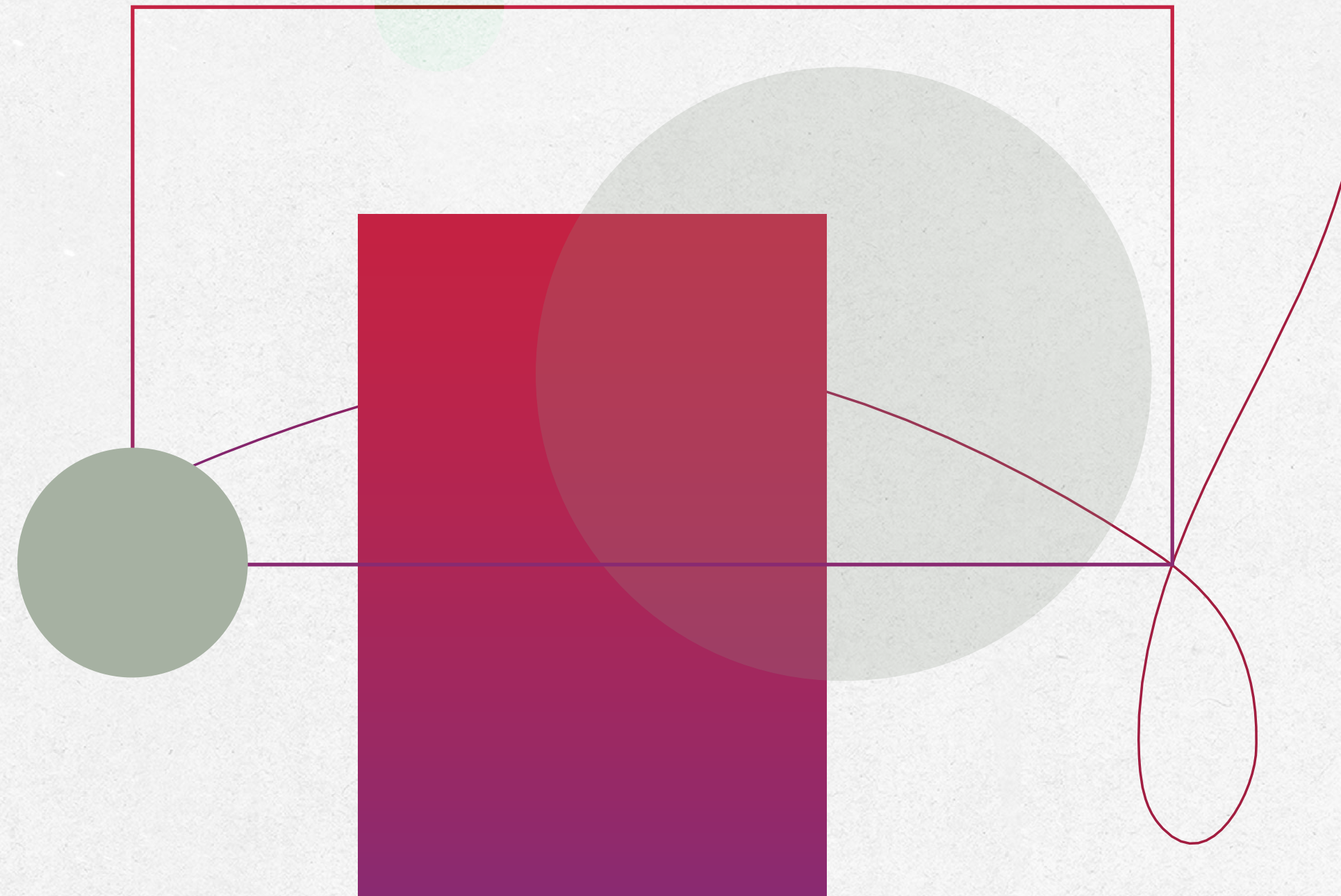
Zorlu Energy Group's R&D project, JIDEP (Joint Industrial Data Exchange Pipeline), spearheads initiatives to repurpose wind turbine blades that have reached the end of their lifespan or have been damaged and become waste. The "Blade Repair and Maintenance Workshop", which was established in the vicinity of Kizildere power plants, was successfully completed in 2022.

## Zorlu Textiles Group

The Korteks Polymer Recycling Facility, a pioneering initiative in Europe and Turkey, commenced production at the end of 2020 and is dedicated to recycling plastic waste into the circular economy. By transforming plastic bottles and other production waste yarns, the facility produces RPET Chips, a vital raw material for polyester yarn. Operating with a daily capacity of 20 tons and a monthly capacity of 600 tons, the Korteks Polymer Recycling Facility utilizes a combination of post-consumer and post-industrial raw materials to produce polymer chips. The Virgin PES yarn facility, operating with zero waste, has the capability to recycle approximately 110 thousand non-biodegradable plastic bottles, which are categorized as consumer waste, in order to produce 1 ton of recycled yarn. Korteks, as a pioneer in recycling plastic bottles and polyester-based yarn waste, has performed Life Cycle Analyses (LCA) on its three varieties of R-PPET chips. The outcomes of these analyses have validated that the production of these chips significantly reduces greenhouse gas emissions, energy consumption, and natural resource utilization in comparison to traditional manufacturing methods. Zorluteks places a strong emphasis on supporting the zero-waste policy, and this commitment is backed by its adherence to ISO 9001, 14001, 27001, and 45001 standards. They also support customers' projects related to waste recovery.

## Zorlu Gayrimenkul Group

A 5-function mixed-use project, Zorlu Center received a Zero Waste Certificate from the Ministry of Environment and Urbanization with the Zero Waste Management System it established in 2021. The waste collected from 622 different areas in Zorlu Shopping Mall, Zorlu PSM, Raffles İstanbul, residences and offices is sorted in 12 sections and transferred to licensed companies, enabling the recycling and recovery of approximately one thousand tons of waste annually. In 2022, more than 500 tons of paper waste and 178 tons of plastic waste were separated and sent for recycling.



## BIODIVERSITY

Human activities pose a significant threat to the biodiversity on Earth, the sole known planet with optimal conditions for supporting diverse life forms within the biosphere, encompassing not only humans but countless other species as well. The Global Risks 2023 report by the World Economic Forum (WEF) highlights biodiversity loss and ecosystem collapse as a critical global risk that is projected to deteriorate at an alarming rate over the next decade. Today, over 1 million species are currently facing the risk of extinction, primarily due to the adverse impacts of food production, infrastructure development, energy consumption, and mining activities. Inefficient land use practices have far-reaching consequences, diminishing the productivity of approximately 25% of the world's land, impacting the well-being of around 3.2 billion individuals, and resulting in economic losses equivalent to roughly 10% of the global gross domestic product each year.<sup>36</sup>

Zorlu Holding and Group companies prioritize the responsible management of their operations, taking great care to minimize their impact on biodiversity and striving to implement restorative and remedial measures. In order to proactively manage and mitigate the impacts of our activities in the mining and energy sectors on biodiversity, we place a strong emphasis on conducting comprehensive flora and fauna surveys. Within our sphere of influence, we actively engage in monitoring and conservation activities to protect vulnerable species and restore ecosystems, demonstrating our commitment to preserving biodiversity. Aligned with our vision of achieving a net positive impact, we proactively identify environmental risks, enabling us to swiftly implement preventive measures and mitigate any potential adverse effects.

### Biodiversity and Ecosystem Management System

Zorlu Enerji's operations throughout Turkey undergo thorough evaluation, encompassing literature reviews and field studies, in accordance with the performance standards and requirements set forth by internationally recognized organizations such as the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD). This assessment process ensures that our activities are aligned with best practices, fostering the protection of biodiversity, and promoting the sustainable management of living natural resources. Recognizing this as a fundamental condition for global sustainability, Zorlu Enerji demonstrates its stance on this issue with its [Biodiversity Conservation Commitment Letter](#). As part of the initiative launched in 2021, literature review studies

continued, and by mid-2022, with the completion of fieldwork, training sessions were conducted to implement the developed plans and procedures. Furthermore, biodiversity action plans are planned to be monitored and reported through the Zorlu Energy Group QDMS Document Management System. There are fish channels at the entrance and exit of the regulator for İkizdere HEPP, classified as a river-type hydroelectric power plant, and fish movements are regularly monitored. Zorlu Energy Group aims to invest a total of TL 10 million by 2030 to conserve and enhance biodiversity. As part of this objective, the company allocated a budget of TL 1.5 million for biodiversity conservation in 2022.

### Zorlu Enerji Zero Carbon Footprint Forests Project

Since 2010, Zorlu Energy Group has been monitoring its operations and conducting afforestation activities in response to its carbon footprint. Through the Zero Carbon Footprint Forests Project, Zorlu Enerji remains dedicated to its ongoing commitment of returning 1.2 million tons of carbon dioxide to the soil by 2075. This goal is being pursued by planting a total of 1.2 million saplings, with an annual planting target of 90,000 saplings until 2030. By the end of 2022, Zorlu Enerji successfully conducted afforestation initiatives in the regions where it operates, planting a total of 520 thousand saplings in accordance with the Regulations on Commemorative Forests outlined by the General Directorate of Forestry. The project received the silver award at the Sustainable Development Goals Awards organized by the Corporate Social Responsibility Association of Turkey and the "Our Energy is Our Future" award at the Turkish Energy and Natural Resources Summit.

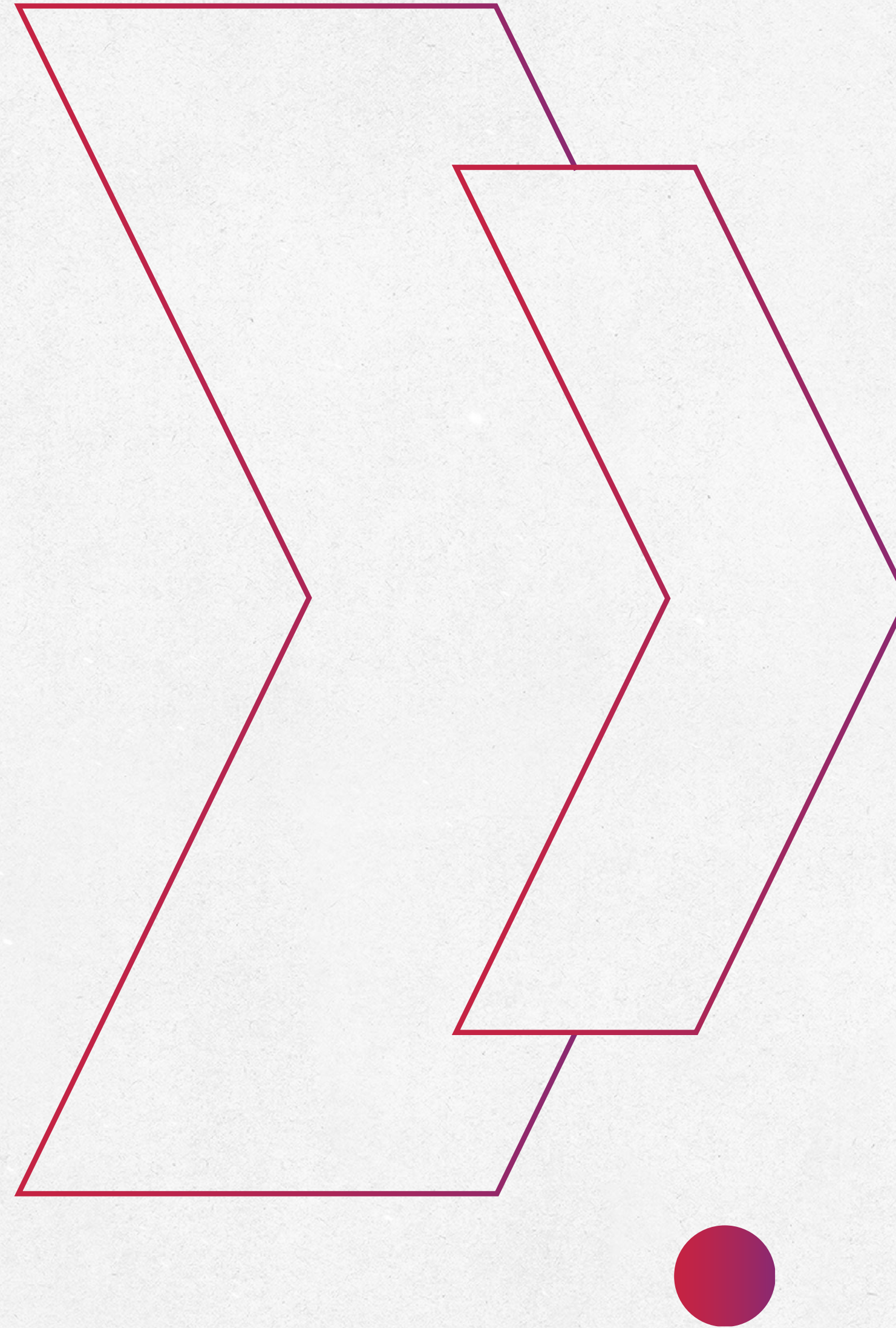
### Project for Identifying the Agricultural Impacts of Zorlu Enerji Kızıldere Geothermal Power Plants

In collaboration with Ege University Faculty of Agriculture, Department of Soil Science and Plant Nutrition, and Ekogen consultancy firm, Zorlu Enerji conducted a comprehensive study to assess the impacts of emissions from geothermal power plants on agricultural production and biodiversity in the regions where these plants operate. Through extensive plant, fruit, soil, and water analyses, critical and at-risk species were identified, and subsequent planning and action plans were developed to implement necessary measures.

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[Land Degradation Neutrality  
for Biodiversity Conservation,  
UNCCD](#)

# APPENDICES



## MEMBERSHIPS AND COLLABORATIONS

- 30 Percent Club
- Aegean Industrialists and Businessmen Association (ESİAD)
- APPLiA
- Association of Artificial and Synthetic Yarn Manufacturers (SUSEB)
- Association of Corporate Communicators (KİD)
- Association of Private Sector Volunteers (ÖSGD)
- Association of Turkish Home Textile Industrialists and Businessmen (TETSİAD)
- Authorized Economic Operator Association
- Automotive Suppliers' Association of Turkey (TAYSAD)
- Babadağlı Industrialists and Businessmen Association (BASİAD)
- Business Council for Sustainable Development Turkey (BCSD Turkey)
- Business Plastics Initiative
- CIRFS: European Man-Made Fibres Association
- Community Volunteers Foundation (TOG)
- Connectivity Standards Alliance (CSA)
- Corporate Governance Association of Turkey (TKYD)
- Corporate Social Responsibility Association of Turkey
- E-mobility Operators Association (E-MOD)
- Education Reform Initiative (ERG)
- Educational Volunteers Foundation of Turkey (TEGV)
- Electrical and Electronics Recycling and Waste Management Association (ELDAY)
- Electronic Device Manufacturers Association (ECİD)
- Endeavor Association
- Entrepreneur Institutions Platform
- EuroTex
- Foreign Economic Relations Board of Turkey (DEİK)
- Foreign Trade Association of Turkey (TURKTRADE)
- Geothermal Energy Association (JED)
- Good Cotton Practices Association (İPUD)
- Green Hydrogen Producers Association (H2DER)
- Guide Dogs Association
- Home Connectivity Alliance (HCA)
- Hydrogen Technologies Association
- imece
- Integrated Reporting Turkey Network (ERTA)
- International Competition and Technology Association (URTEB)
- International Patent Association (UPB)
- İstanbul Ferrous and Non-Ferrous Metals Exporters' Association
- İstanbul Foundation for Culture and Arts (İKSV)
- İstanbul Textile and Apparel Exporters' Associations (İTKİB)
- Quality Association of Turkey (KalDer)
- Sabancı University İstanbul International Energy and Climate Center (IICEC)
- Social Innovation Exchange (SIX)
- Teachers' Network
- Technology Development Foundation of Turkey (TTGV)
- The European Technology Platform for the Future of Textiles and Clothing (Textile ETP)
- Turkey Artificial Intelligence Initiative (TRAI)
- Turkish Entrepreneurship Foundation (GİRVAK)
- Turkish Ethics and Reputation Society (TEİD)
- Turkish Foundation for Combating Erosion, Reforestation and Protection of Natural Habitats (TEMA)
- Turkish Industry and Business Association (TÜSİAD)
- Turkish Institute of Internal Auditing (TİDE)
- Turkish Public Relations Association (TÜHİD)
- Turkish Solar Energy Industry Association (GENSED)
- Turkish Wind Energy Association (TWEA)
- Uludağ Exporters' Associations (UİB)
- Uludağ Textile Exporters' Association (UTİB)
- UN Global Compact Network Turkey
- Union of Chambers and Commodity Exchanges of Turkey (TOBB)
- University-Industry Partnership Centers Association R&D Economic Enterprise
- White Goods Manufacturers' Association of Turkey (TÜRKBEŞD)
- Women Entrepreneurs Association of Turkey (KAGİDER)
- Women on Board Association
- Yanındayız Association
- YenidenBiz Association
- Young Guru Academy (YGA)
- Zero Discharge of Hazardous Chemicals (ZDHC)

## SOCIAL PERFORMANCE INDICATORS

Breakdown of Employees by Gender and Category	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
White-collar	2,410	4,897	2,592	5,137	2,830	5,831
Blue-collar	5,930	14,574	5,966	14,555	6,086	15,117
<b>Total</b>	<b>8,340</b>	<b>19,471</b>	<b>8,558</b>	<b>19,692</b>	<b>8,916</b>	<b>20,948</b>

Breakdown of Employees by Age	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Under 30 years	3,387	6,099	3,414	5,952	3,413	6,325
30 to 50 years	4,820	12,486	4,993	12,838	5,293	13,340
50 years and above	133	886	151	902	210	1,283

Breakdown of Employees by Working Duration	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
0 to 5 years	5,072	9,953	4,878	9,070	4,953	9,683
5 to 10 years	2,352	4,842	2,498	5,260	2,580	5,398
10 years and above	916	4,676	1,182	5,362	1,383	5,867

Breakdown of Executives by Gender and Age	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Total	267	850	376	959	446	1,093
Under 30 years	18	18	13	23	15	27
30 to 50 years	235	715	341	794	397	915
50 years and above	14	117	22	142	34	151

Breakdown of Former Employees by Gender and Age	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Under 30 years	1,056	2,500	1,115	2,486	1,120	2,231
30 to 50 years	714	1,216	747	1,492	838	1,396
50 years and above	18	124	31	146	42	177
<b>Total</b>	<b>1,788</b>	<b>3,840</b>	<b>1,893</b>	<b>4,124</b>	<b>2,000</b>	<b>3,804</b>
<b>Employee turnover rate</b>	<b>21%</b>	<b>20%</b>	<b>22%</b>	<b>21%</b>	<b>22%</b>	<b>18%</b>

## SOCIAL PERFORMANCE INDICATORS

Parental Leave	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Employees benefiting from parental leave	357	789	331	790	383	775

Employees with Disabilities	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Employees with disabilities	151	522	152	543	163	555

Breakdown of Training Hours by Year (Excluding OHS Trainings)	2020		2021		2022	
	Total training hours	Training hours per employee	Total training hours	Training hours per employee	Total training hours	Training hours per employee
Total training hours	125,280	4.5	245,989	8.7	340,884	11.41

Breakdown of OHS Training Hours by Year	2020		2021		2022	
	Total hours of OHS training provided to employees	Training hours per employee	Total hours of training provided to subcontractors	Number of subcontracted employees trained	Total hours of OHS training provided to employees	Training hours per employee
Total hours of OHS training provided to employees	165,914	6.0	234,490	749	215,056	6.9
Training hours per employee	6.0	8.3	4,945	3,087	6.9	6.9
Total hours of training provided to subcontractors	5,714	4,945	13,276			
Number of subcontracted employees trained	978	749	3,087			

OHS Performance of Employees	2020		2021		2022	
	Accident frequency rate*	Occupational disease rate**	Accident frequency rate*	Occupational disease rate**	Accident frequency rate*	Occupational disease rate**
Accident frequency rate*	29.2	0	40.9	0	40.6	0
Occupational disease rate**	0	0	0	0	0	0
Number of fatal accidents	0	0	0	0	4	0

\* Accident Frequency Rate = Total number of accidents involving injuries x 1,000,000 / Total hours worked  
 \*\* Occupational Disease Rate = Total number of occupational disease cases x 1,000,000 / Total hours worked

## ENVIRONMENTAL PERFORMANCE INDICATORS<sup>37</sup>

Greenhouse Gas Emissions* (tons CO <sub>2</sub> e)	2020	2021	2022
Scope 1	1,541,984	1,455,913	1,328,738
Scope 2	630,651	607,277	406,573
Scope 3	15,980,037	15,640,632	15,174,616
<b>Total</b>	<b>18,152,673</b>	<b>17,703,822</b>	<b>16,909,927</b>

\*Annual greenhouse gas emission amounts may vary in line with the improvements made in the calculation and scope expansions. The data presented are the most recent data available in the records.

Purchased Energy (MWh)	2020	2021	2022
<b>Renewable Energy (MWh)</b>	<b>342,735</b>	<b>376,816</b>	<b>851,177</b>
Wind	0	0	0
Solar	0	0	0
Hydroelectric	0	0	0
Other	342,735	376,816	851,177
<b>Non-Renewable Energy (MWh)</b>	<b>13,387,078</b>	<b>15,159,031</b>	<b>15,690,027</b>
Electricity	537,230	592,840	226,948
Coal	0	0	0
Natural gas	12,849,848	14,566,190	15,463,079

Energy Sold (MWh)*	2020	2021	2022
Renewable Energy (MWh)	2,551,522	2,561,522	2,397,033
Non-Renewable Energy (MWh)	12,921,191	14,624,355	15,169,698

\* Includes Zorlu Energy Group data only.

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Annual data may vary due to calculation improvements and scope expansions. The data presented are the most recent data available in the records.



## ENVIRONMENTAL PERFORMANCE INDICATORS<sup>37</sup>

Water Consumption (m <sup>3</sup> ) <sup>38</sup>	2020	2021	2022
<b>Total Water Withdrawn</b>	<b>2,250,381,029</b>	<b>1,841,222,400</b>	<b>1,978,630,351</b>
Surface Water	2,169,381,714	1,746,699,071	1,878,699,091
Groundwater	79,043,254	92,595,961	98,042,162
Sea Water	0	0	0
Third-Party Water Suppliers	1,956,061	1,927,368	1,336,105
Water Produced	0	0	552,993
<b>Total Water Discharged</b>	<b>2,126,377,562</b>	<b>1,738,642,722</b>	<b>1,873,908,335</b>
Surface Water	2,061,778,820	1,660,140,831	1,785,263,685
Groundwater	62,537,574	76,648,205	86,827,767
Sea Water	0	0	0
Third-Party Water Suppliers	2,061,168	1,853,686	1,816,883

Amount of Waste (tons)	2020	2021	2022
<b>Total Hazardous Waste</b>	<b>1,936,697</b>	<b>1,174,562</b>	<b>1,303,790</b>
Sent to Landfill	1,914,745	1,151,926	1,298,898
Recovered for Energy Purposes	930	948	1,003
Incinerated (Not for Energy Purposes)	201	1,957	1,052
Reused	5	6	927
Recycled	20,817	19,725	1,798
<b>Total Non-Hazardous Waste</b>	<b>131,376</b>	<b>124,574</b>	<b>133,368</b>
Sent to Landfill	15,330	14,687	28,076
Recovered for Energy Purposes	2,747	3,347	3,411
Other Disposed	33,379	14,038	1
Reused	8,302	10,336	21,789
Recycled	58,901	70,010	66,554
Other Recycled	12,717	12,156	13,535

<sup>37</sup>

Annual data may vary due to calculation improvements and scope expansions. The data presented are the most recent data available in the records.

<sup>38</sup>

Water consumption data includes water withdrawn and discharged from Zorlu Enerji's Geothermal Power Plants (GPP) and Hydroelectric Power Plants (HPP). Domestic water consumption from OEDAŞ and GAZDAŞ is neglected.

## GRI CONTENT INDEX

<b>Statement of use</b>	Zorlu Holding has reported in accordance with the GRI Standards for the January–December 2022 period.
<b>GRI 1 used</b>	GRI 1: Foundation 2021

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>General Disclosures</b>		
<b>GRI 2: General Disclosures 2021</b>	2-1 Organizational details	3; <a href="#">2021 Zorlu Holding Annual Report</a> s:3, 8, 14-27
	2-2 Entities included in the organization's sustainability reporting	3
	2-3 Reporting period, frequency and contact point	3
	2-4 Restatements of information	10-12, 67, 80, 81
	2-5 External assurance	For the reporting period, external audit has not been conducted.
	2-6 Activities, value chain and other business relationships	<a href="#">2021 Zorlu Holding Annual Report</a> s: 14-27
	2-7 Employees	39, 78, 79
	2-8 Workers who are not employees	-
	2-9 Governance structure and composition	22-23
	2-10 Nomination and selection of the highest governance body	<a href="#">2021 Zorlu Holding Annual Report</a> s: 38-39

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>General Disclosures</b>		
<b>GRI 2: General Disclosures 2021</b>	2-11 Chair of the highest governance body	<a href="#">2021 Zorlu Holding Annual Report</a> s: 38
	2-12 Role of the highest governance body in overseeing the management of impacts	14, 30
	2-13 Delegation of responsibility for managing impacts	14, 23, 26-30
	2-14 Role of the highest governance body in sustainability reporting	14
	2-15 Conflicts of interest	30; <a href="#">Zorlu Holding Ethical Principles</a>
	2-16 Communication of critical concerns	14, 22-23, 30
	2-17 Collective knowledge of the highest governance body	<a href="#">2021 Zorlu Holding Annual Report</a> s: 38-39
	2-18 Evaluation of the performance of the highest governance body	No evaluation is being made.
	2-19 Remuneration policies	This information is not shared because Zorlu Holding is not publicly traded.
	2-20 Process to determine remuneration	This information is not shared because Zorlu Holding is not publicly traded.
	2-21 Annual total compensation ratio	It is not being calculated.
	2-22 Statement on sustainable development strategy	9-14, 16-20
	2-23 Policy commitments	25; <a href="#">Zorlu Holding Human Rights Policy</a>

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>General Disclosures</b>		
<b>GRI 2: General Disclosures 2021</b>	2-24 Embedding policy commitments	25, 26, 30
	2-25 Processes to remediate negative impacts	26-29
	2-26 Mechanisms for seeking advice and raising concerns	25, 26
	2-27 Compliance with laws and regulations	24-30
	2-28 Membership associations	77
	2-29 Approach to stakeholder engagement	15
	2-30 Collective bargaining agreements	-
<b>Material Topics</b>		
<b>GRI 3: Material Topics 2021</b>	3-1 Process to determine material topics	16-20
	3-2 List of material topics	16, 18-20
	3-3 Management of material topics	18-20

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>Anti-Corruption</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	24
<b>GRI 205: Anti-Corruption 2016</b>	205-3 Confirmed incidents of corruption and actions taken	24
<b>Energy</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	69
<b>GRI 302: Energy 2016</b>	302-1 Energy consumption within the organization	80
	302-4 Reduction of energy consumption	69
	302-5 Reductions in energy requirements of products and services	69
<b>Water and Effluents</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	71

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>Water and Effluents</b>		
<b>GRI 303: Water and Effluents 2018</b>	303-1 Interactions with water as a shared resource	71
	303-3 Water withdrawal	12, 81
	303-4 Water discharge	81
	303-5 Water consumption	12, 81
<b>Biodiversity</b>		
<b>GRI 304: Biodiversity 2016</b>	3-3 Management of material topics	75
	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	75
	304-2 Significant impacts of activities, products and services on biodiversity	75
	304-3 Habitats protected or restored	75

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>Emissions</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	67-68
<b>GRI 305: Emisyonlar 2016</b>	305-1 Direct (Scope 1) GHG emissions	67, 80
	305-2 Energy indirect (Scope 2) GHG emissions	67, 80
	305-3 Other indirect (Scope 3) GHG emissions	67, 80
	305-4 GHG emissions intensity	67
	305-5 Reduction of GHG emissions	68
<b>Waste</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	71-74

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>Waste</b>		
<b>GRI 306: Waste 2020</b>	306-1 Waste generation and significant waste-related impacts	71-72
	306-2 Management of significant waste-related impacts	71-74
	306-3 Waste generated	71, 81
	306-4 Waste diverted from disposal	73-74, 81
	306-5 Waste directed to disposal	11, 71, 81
<b>Supplier Environmental Assessment</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	49-50
<b>GRI 308: Supplier Environmental Assessment 2016</b>	308-1 New suppliers that were screened using environmental criteria	49-50



GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>Employment</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	43-46
<b>GRI 401: Employment 2016</b>	401-1 New employee hires and employee turnover	78
	401-2 Benefits provided to full-time employees that are not provided to temporary or parttime employees	43-46
	401-3 Parental leave	79
<b>Labor Management Relations</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	38
<b>GRI 402: Labor Management Relations 2016</b>	402-1 Minimum notice periods regarding operational changes	We comply with legal notice periods in case of critical operational changes.

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>Occupational Health and Safety</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	48
	403-1 Occupational health and safety management system	48
<b>GRI 403: Occupational Health and Safety 2018</b>	403-2 Hazard identification, risk assessment, and incident investigation	79
	403-5 Worker training on occupational health and safety	48
	403-6 Promotion of worker health	48
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	48
	403-9 Work-related injuries	79
	403-10 Work-related ill health	79

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>Training and Education</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	44
<b>GRI 404: Training and Education 2016</b>	404-1 Average hours of training per year per employee	44, 79
	404-2 Programs for upgrading employee skills and transition assistance programs	44-46
	404-3 Percentage of employees receiving regular performance and career development reviews	44-46
<b>Diversity and Equal Opportunity</b>		
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	22, 39
<b>GRI 405: Diversity and Equal Opportunity 2016</b>	405-1 Diversity of governance bodies and employees	22, 39, 40, 78, 79

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
<b>Local Communities</b>		
<b>GRI 413: Local Communities 2016</b>	3-3 Management of material topics	51-52
	413-1 Operations with local community engagement, impact assessments, and development programs	51-62
<b>Supplier Social Assessment</b>		
<b>GRI 414: Supplier Social Assessment 2016</b>	3-3 Management of material topics	49, 50
	414-1 New suppliers that were screened using social criteria	49, 50