

With Tomorrow's
Responsibility...

ENERJİSA ÜRETİM

2022 Annual Report



We have experienced the pain of massive earthquakes in Kahramanmaraş, which took place in 2023 and caused great damage in 11 provinces with the death of thousands of our citizens. We express our condolences to all our citizens who have lost their loved ones, especially our colleagues who have lost their relatives in the earthquake region in which we operate, and wish God's mercy on those who have passed away.

We will follow the needs closely until all wounds are healed; and as a company that bears the responsibility of tomorrow, we will continue to work in unity in the region, as we have done since the first hours of the earthquake.



We act with the same consciousness
in every step we take into the future;
With Tomorrow's
Responsibility

We see the future as a real responsibility, not just a discourse, and shape all our activities with this awareness in mind. At Enerjisa Üretim, we are working for a world that will enable us to leave a legacy to our children.

During the preparation of our annual report, our most valuable partners were the children of our colleagues. The excitement and sparkle in their eyes inspired us to turn our Annual Report into a hopeful manifesto for the future.

We thank all our children and promise them once again that:
We will continue to generate non-stop for a better future by being aware of our responsibility to people, nature and all the resources our world offers.

The financial consolidated figures and tables mentioned in our report have been audited by PWC and are presented truthfully in all material respects in accordance with Turkish Financial Reporting Standards.



PARTNERSHIP STRUCTURE

Enerjisa Üretim carries out its operations with the strength it derives from Sabancı Holding, one of the leading companies of Türkiye, and E.ON, one of the world's largest electricity and natural gas supply companies.

ENERJİSA ÜRETİM SANTRALLERİ A.Ş.



Toprak and Aras, sons of Firat Duman from our Head Office



MISSION

We generate energy for a better future by respecting life.

GOAL

To be an energy company that continuously develops know-how, sets standards and leads the future of the industry.

PRINCIPLES

WE ARE IN PURSUIT OF EXCELLENCE

We do not allow mediocrity, and always work for the superior.

WE EMBRACE OUR MISSION

We take responsibilities and initiative.

OUR COMMITMENTS ARE VALUABLE

We stand behind our commitments and never commit to what we cannot deliver.

WE ARE A TEAM

We win together and lose together.

ENERJISA ÜRETİM AT A GLANCE

We are the leading private sector electricity generation company with our **3,727 MW** portfolio of diversified, balanced and efficient energy resources and our high trade volume.

We incessantly generate as Türkiye's leading player in clean energy, with a **57%** share of domestic and renewable resources in our installed capacity and our operations in this field.



Vera, Sedat and Turgut, Semih Kocatürk's triplets from our Kentsa Power Plant



In 2022;

- > We have completed and commissioned the **65 MW** Erciyes Wind Energy Project in Kayseri with an addition of **14.5 MW** hybrid solar.
- > While proceeding with the permit and development processes of the **500 MW** wind project we came out top in the Aydın and Çanakkale Wind YEKA tenders, we also agreed to include the licenses of the Balıkesir and Muğla YEKA 2 projects in our portfolio with the contract we signed with Enercon.

- > Additionally, we signed the Turbine Supply Agreement with Enercon for our YEKA-2 Wind Energy investment, which has reached a total installed capacity of **1,000 MW**.
- > We strive to increase the number and capacity of our hybrid power plants. We commissioned the **41 MW** hybrid power plant investment in Tufanbeyli, Çanakkale, Bandırma and Erciyes.

> **THE ONLY COMPANY GENERATING ELECTRICITY IN 5 DIFFERENT TECHNOLOGIES**

> **EFFICIENT AND FLEXIBLE portfolio strategy**

- > Türkiye's largest private sector electricity generation company with **3.727 MW**
- > Private sector player with Türkiye's **LARGEST** renewable energy capacity
- > One of the largest hydroelectric power plant portfolios in Türkiye with **1.353 MW**
- > One of the largest natural gas combined cycle power plant operators in Türkiye with **1.583 MW**
- > **14,6 TWh** annual electricity generation
- > **%3,6** share within total installed capacity
- > **%4,7** share within the total generation volume
- > **%3,3** share within renewable generation volume
- > **26,5 TWh** total volume of electricity sales and trade both in Türkiye and Europe
- > **%36** share of total trade volume both in Türkiye and Europe

ENERJİSA ÜRETİM FACILITIES

Wind Power Plants:

Erciyes WPP **65 MW**

Dağpazarı WPP **39 MW**

Balıkesir WPP **143 MW**

Çanakkale WPP **30 MW**

Akhisar WPP **55 MW**

Wind Power Plant Projects:

Çanakkale Yeka WPP **250 MW**

Balıkesir Yeka WPP **250 MW**

Aydın Yeka WPP **250 MW**

Muğla Yeka WPP **250 MW**

Solar Power Plants:

Bandırma SPP **2 MW**

Karabük SPP **7 MW**

Total Hybrid Installed Power **41 MW**

Hydroelectric Power Plants:

Doğançay HEPP **62 MW**

Kavşakbendi HEPP **191 MW**

Köprü HEPP **156 MW**

Çambaşı HEPP **44 MW**

Arkun HEPP **245 MW**

Yamanlı II HEPP **82 MW**

Kandil HEPP **208 MW**

Dağdelen HEPP **8 MW**

Sarıgözel HEPP **103 MW**

Hacınoğlu HEPP **142 MW**

Menge HEPP **89 MW**

Kuşaklı HEPP **20 MW**

Bandırma Energy Hub

Bandırma I Natural Gas Power Plant **936 MW**

Bandırma II Natural Gas Power Plant **607 MW**

Integrated HEPP **3 MW**

2 Enercon Prototype Wind Turbine

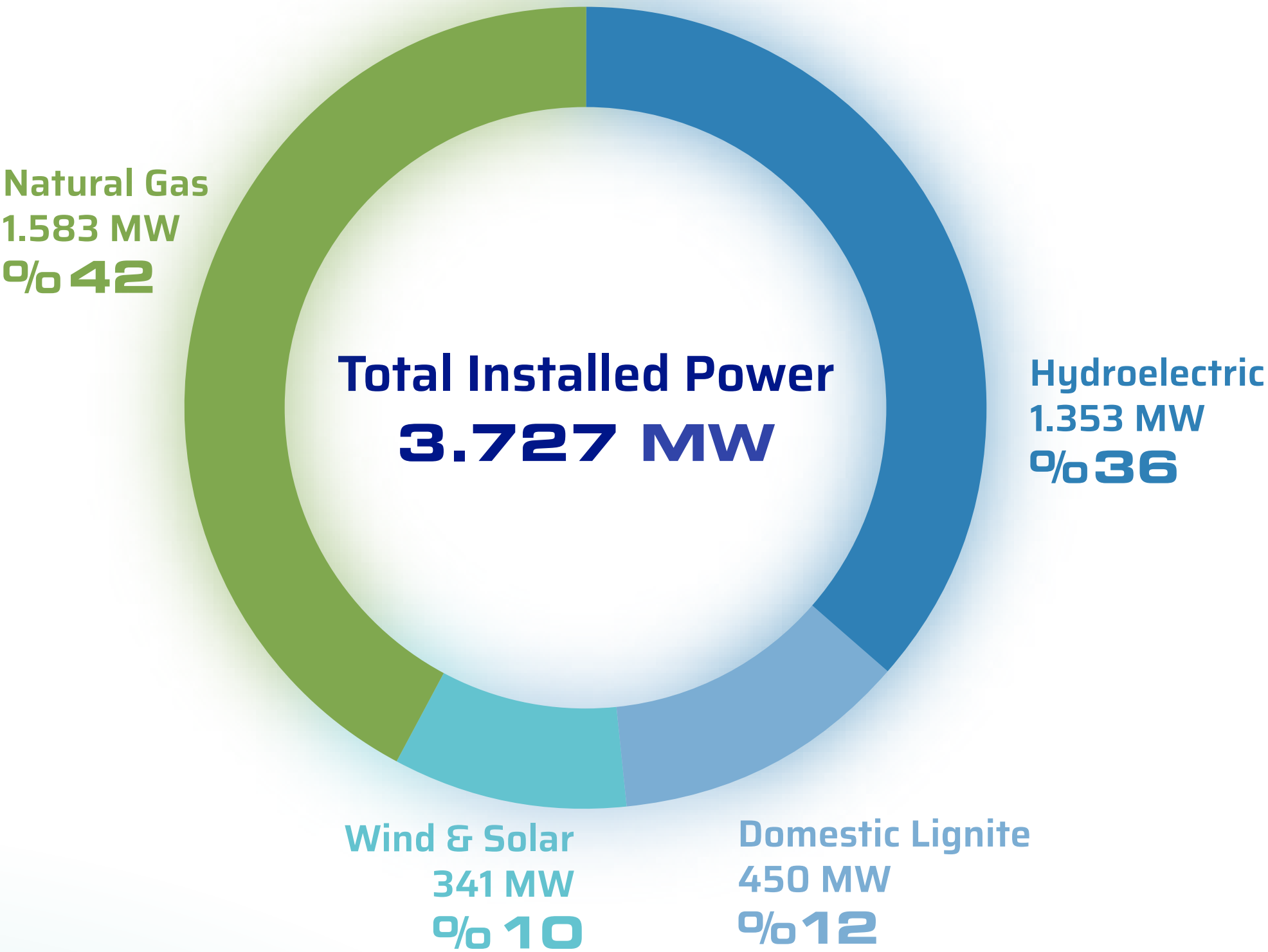
1 Green Hydrogen Production Plant

Tufanbeyli Domestic Lignite Power Plant **450 MW**

Kentsa Natural Gas Power Plant **40 MW**



ENERJİSA ÜRETİM FACILITIES



*Total Installed Power Included Hybrid & Solar

3.768 MW

OUR HYBRID SOLAR PROJECTS

We started the investment for **65 MW** in 2022 and commissioned **41 MW** before the end of the year.

We aim to have at least **150 MW** licensed, unlicensed and hybrid solar power plants by the end of 2024.

HYBRID SOLAR ENERGY INVESTMENTS

Çanakkale
Bandırma I
Bandırma II
Tufanbeyli
Erciyes

HYBRID SOLAR ENERGY POWER PLANTS

Akhisar
BARES
Kentsa
Kandil
Arkun
Çambaşı

AWARDS

 **14th Peryön Human Value Awards**
“Achievement Award” in Employer Brand Management category for Talent Acquisition

 **Brandon Hall 2022 Human Capital Management Excellence Awards**
Silver Award for our “Bilbot” project in the Best Approach to HCM Innovation category

 **Bronze Award** for our project “Manevra” in the Best Use of Virtual Worlds in the Learning and Development Programme category

 **13th Gold Collar Awards**
Grand Prize in the Customer Experience category for our “Green Transformation” project.

 **Golden Collar Award** in the “Customer Experience” category with our Green Transformation project, which makes our stakeholders our clean energy partners and contributes to the sustainability of our world.



Istanbul Marketing Awards
Sound Utilization Gold Award in the category of Brand Communication for our project “Performance with the Wind at BARES, House of the Wind”

Effective Corporate Communication Gold Award in Corporate Communication & Sustainability category for our project “TUGFO in Europe with the Power of the Wind”

Art and Brand Collaboration Honorable Mention Award in the category of Brand Communication for our project “TUGFO in Europe with the Power of the Wind”

Annual Report & Design Gold Award in Corporate Communication & Sustainability category for our Annual Report

9th ICCI Energy Awards
Natural Gas Category Award for Our Bandırma II Natural Gas Combined Cycle Power Plant

Technology, Digitalization and Innovation Special Award for Senkron



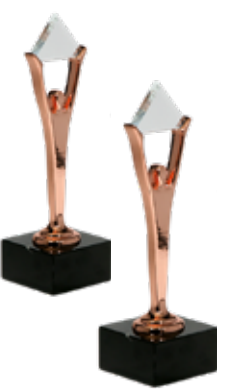
Boans, Loans & Türkiye Awards
Power Finance Deal of the Year Award for 102 million dollars financing for our Erciyes RES and Solar Hybrid Investments

 **IIRSM Risk Excellence Awards**
Barry Holt Award in the category of Outstanding Risk Management Practice

 **IDC CIO Awards**
IDC Awards
Best Change Management Project of the Year Award for our “Beyond an IT Team” approach

 **Inova Awards**
Silver Award for our 2021 Annual Report

 **The Stevie Awards 2022**
Silver Award for our Manevra project in Achievement in Learning Technology category



Bronze Award for our “We Code as a Family” project in the Best CSR Strategy category

Bronze Award for our Orion project in the “Best Use of Games and Simulations for Learning” category



Global Business Outlook Awards
2 awards in the Best Corporate Governance and the Most Innovative Risk Management Initiative categories



4. Türkiye Energy and Natural Resources Summit
Our Energy is Our Future Award
Sustainable Finance Category Award



DnA Awards
Projects that Created the Most Value Award for “WACOG Optimization”

Companies that Create the Most Value Award among Sabancı Holding companies

CHAIRMAN'S LETTER



Dear Partners,

The past year has been characterized by global political and economic uncertainties, coupled with the unprecedented challenges brought about by the global energy crisis. Despite these headwinds, Enerjisa Üretim has risen to the challenge and achieved significant successes.

Through strategic investments in renewable energy projects, particularly the YEKA project, Enerjisa Üretim has further diversified its portfolio and made significant contributions to the country's economy, sustainability targets, and society at large. This particular project also represents a major step towards Enerjisa Üretim's goal of becoming a more sustainable company with a strong focus on renewable energy production.

In addition, Enerjisa Üretim has proven to be a reliable and dependable partner and given strong operations, could deliver on its mission to generate energy for a better future.

I would like to express my sincerest appreciation to each and every Enerjisa Üretim employee for their unwavering dedication and hard work in 2022. Without their passion and commitment, none of this would have been possible.

Looking ahead, I am confident that with a continued focus on innovation and sustainability, we can overcome future challenges and continue to make a positive impact on society.

JOHAN MAGNUS MÖRNSTAM
CHAIRMAN

BOARD OF DIRECTORS

JOHAN MAGNUS MÖRNSTAM
Chairman

KIVANÇ ZAIMLER
Vice-Chairman

NUSRET ORHUN KÖSTEM
Board Member

YEŞİM ÖZLALE ÖNEN
Board Member

THORSTEN LOTT
Board Member

GUNTRAM DR. WÜRZBERG
Board Member

CEO'S LETTER

The year 2022 was marked by a number of factors such as global political and economic crises, developments brought on by high inflation, increasing commodity prices, and largest energy crisis in history which had an impact on business management decisions, while companies were put to the test in terms of their resilience and vitality. For Enerjisa Üretim, it has been a year during which we reaped the fruits of operational excellence, digitalization and human-oriented investments that we have realized in the last few years, accelerated our development both financially and operationally, realized 'firsts' by breaking new records, and strengthened our position in the sector.

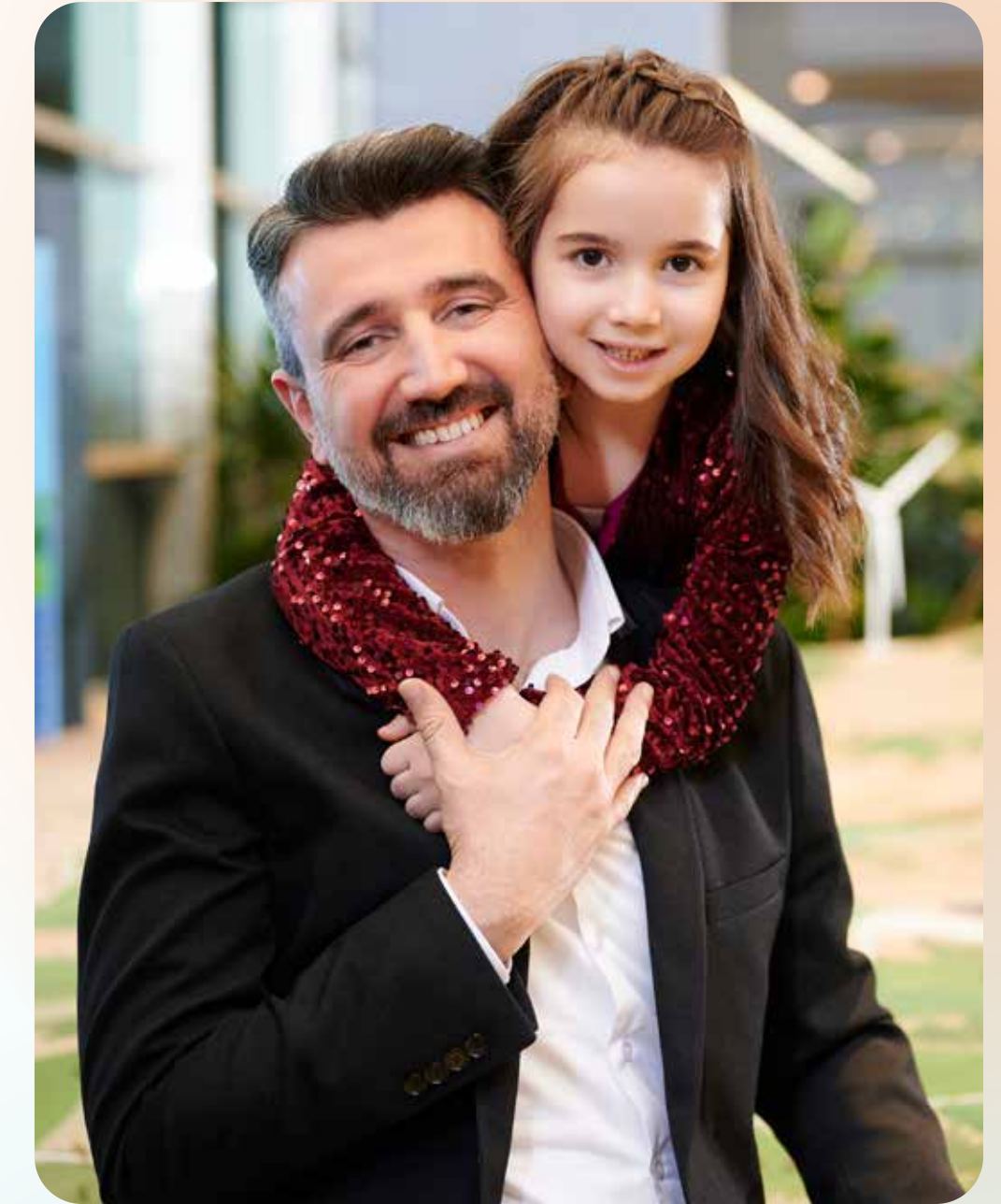
The most significant aspect of our vision is to grow using renewable energy by utilizing the solar and wind energy potential of our country. We took advantage of every opportunity to fulfill our energy and digital-based growth commitments, including creating value through cross-border and innovative trade products, being a company that produces technology rather than consumes it, and adopting an innovation culture.

We had a year gone like the wind. We increased the share of domestic and renewable energy resources to **57%** in our total installed capacity. We added Akhisar WPP to our portfolio, and commissioned the **41 MW** first part of our **150 MW** hybrid solar power plant projects and the **65 MW** Erciyes WPP. By adding **500 MW** Balıkesir-Muğla YEKA projects to the **500 MW** Aydın-Çanakkale YEKA projects, we signed a turbine supply agreement of **1,000 MW** in total. As we look our children in the eyes, we are filled with the desire to leave them a better world, and as Enerjisa Üretim, we are building our present with the responsibility of tomorrow for our children. I am happy to be a part of Enerjisa Üretim, which is ready to accomplish whatever it takes to achieve this kind of future.

I would like to take this opportunity to express my heartfelt gratitude to all of my colleagues who have embraced the awareness that defines who we are, and in whose minds and efforts I have the utmost faith.

With Regards,

İHSAN ERBİL BAYÇÖL
CEO

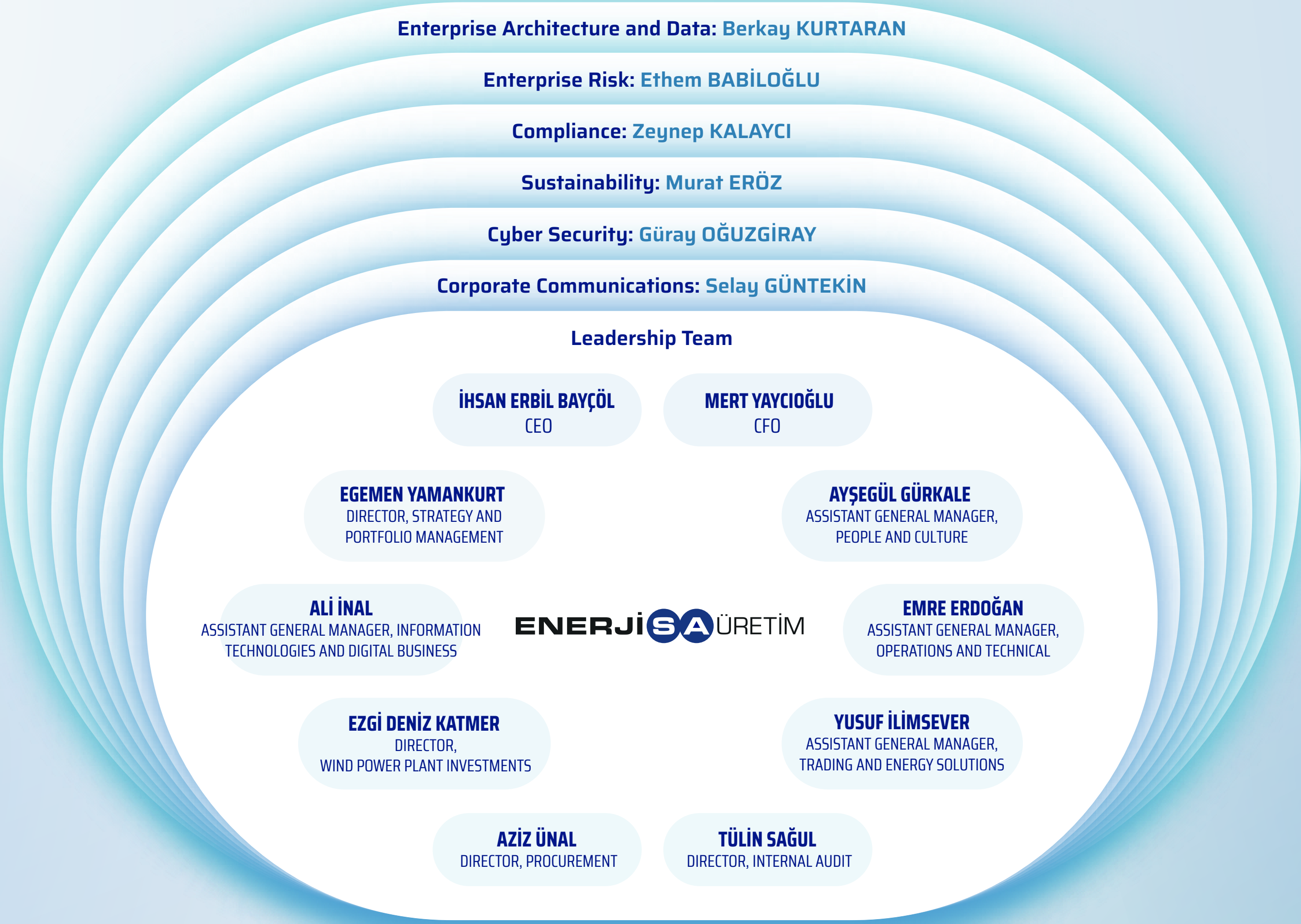


CEO İhsan Erbil Bayçöl and his daughter Ela

[Click to watch the video](#)



GOVERNANCE
TEAM



Team leaders carry out their activities in line with the CEO and Leadership Team in their areas of responsibility.



İHSAN ERBİL BAYÇÖL
CEO

İhsan Erbil Bayçöl graduated from Boğaziçi University Civil Engineering Department in 2000, followed by his MBA at Sabancı University. Bayçöl completed the Advanced Management programme at WHU Otto Beisheim School of Management. He started his career as a Project Control Engineer at Bechtel-Enka Joint Venture and joined Enerjisa in 2008. Bayçöl has been working as Enerjisa Üretim CEO since January 2020. Cycling is his greatest passion while team games and basketball are among his interests. He is married with two children.

[LinkedIn Profile](#)



MERT YAYCIOĞLU
CFO

Mert Yaycioğlu graduated from the Middle East Technical University, Department of Business Administration in 1998. Having held various positions at PricewaterhouseCoopers, PwC and Finmeccanica, Yaycioğlu joined Sabancı Holding in 2009 and has worked as the Finance Department Head of Enerjisa Enerji Group Purchasing and Business Units since 2020. Following his 22 years of work experience Yaycioğlu joined the Enerjisa Üretim team in 2022. Mert Yaycioğlu is married with one child. His hobbies include playing tennis and gastronomy.

[LinkedIn Profile](#)



AYŞEGÜL GÜRKALE
ASSISTANT GENERAL MANAGER,
PEOPLE AND CULTURE

Ayşegül Gürkale graduated from Marmara University, Department of Economics in English. She worked in different areas of responsibility such as “Commercial Banking, Product Development, Strategic Planning, Regional Management, Human Resources and Procurement Assistant General Manager at Pamukbank, Garanti Pension and Aksigorta companies in the banking and insurance sector respectively. Gürkale, who joined the Enerjisa Üretim team in 2022, is interested in horse riding and sailing. She is married and the mother of two children.

[LinkedIn Profile](#)



EMRE ERDOĞAN
ASSISTANT GENERAL MANAGER,
OPERATIONS AND TECHNICAL

After graduating from Boğaziçi University Civil Engineering Department in 2001, Emre Erdoğan completed his MBA at Koç University. Erdoğan started his career as a Planning Engineer at Bechtel-Enka Joint Venture, and following a work experience of 21 years, he joined Enerjisa Üretim in 2018 as Operations and Technical Assistant General Manager. Emre Erdoğan is interested in sailing and motor sports. He is married and has two children.

[LinkedIn Profile](#)



YUSUF İLİMSEVER
ASSISTANT GENERAL MANAGER,
TRADING AND ENERGY SOLUTIONS

Yusuf İlimsever completed his BA in Industrial Engineering from Middle East Technical University, then received his International Business degree from Kingston University in 2009. He started his career at JJ Food Service and joined Enerjisa in 2011, holding expert and managerial positions in the fields of Energy Trade and Risk Management. With 13 years of work experience, İlimsever has been the Energy Markets Director at Enerjisa Üretim since July 2019. Yusuf İlimsever is interested in football, history and travel. He is married and has one child.

[LinkedIn Profile](#)





ALİ İNAL
ASSISTANT GENERAL MANAGER,
INFORMATION TECHNOLOGIES AND
DIGITAL BUSINESS
After graduating from Doğuş University's Industrial Engineering Department, Ali İnal received his Master's degree in IT Business Solutions from Alpen-Adria University in Austria, and completed the Gold for Business Leaders programme for senior executives at HEC Business School in France. He started his career at Advancity Internet Solutions company in 2001, gaining a work experience of 21 years. He then joined Enerjisa Üretim in July 2019 as the Information Technologies Director. İnal's interests include technology, music, amateur astronomy and whiskey culture. He is married and has three children.

[LinkedIn Profile](#)



EGEMEN YAMANKURT
DIRECTOR, STRATEGY AND
PORTFOLIO MANAGEMENT
Egemen Yamankurt graduated from Anadolu University Civil Engineering and Environmental Engineering departments respectively, He then received his postgraduate education in Hydrology and Water Resources and completed the MBA programme at Sabancı University Faculty of Management. Yamankurt started his career as a Field Engineer at Eskişehir Wastewater Treatment Plant Project in 2008, and worked as a Hydraulic Engineer at DHI Slovakia in 2009. After completing his project assistant duty at Anadolu University, he started working at Enerjisa in 2011. His hobbies include travelling, swimming and movies. Yamankurt is married and has one child.

[LinkedIn Profile](#)



EZGİ DENİZ KATMER
DIRECTOR, WIND POWER PLANT
INVESTMENTS
After completing her undergraduate degree in Physics Engineering at Istanbul Technical University, Ezgi Katmer undertook her graduate studies in Economics and Finance at Boğaziçi University. She joined Enerjisa in 2007 and held important roles ranging from the development processes of the first wind and solar projects in our country to the project construction and operation processes following the privatization of the energy sector in Türkiye. Skiing and travelling are among her hobbies. Katmer is married and is the mother of one child.

[LinkedIn Profile](#)



AZİZ ÜNAL
DIRECTOR, PROCUREMENT
Aziz Ünal graduated from Yıldız Technical University, Department of Chemical Engineering and received his MBA degree from Yeditepe University. Ünal joined Enerjisa in 2008 after working at Kale Balata and Colgate Palmolive and took on various roles in the purchasing teams of both Enerjisa and Enerjisa Üretim. Aziz Ünal has 20 years of work experience in the automotive sub-industry, FMCG and energy sectors. Travelling, karting, swimming and running are among his hobbies.

[LinkedIn Profile](#)



TÜLİN SAĞUL
DIRECTOR, INTERNAL AUDIT
Tülin Sağul graduated from Marmara University, Department of Economics in English. She previously worked in various positions at Akçansa and Sabancı Holding, as well as being an auditor at EY. She joined Enerjisa Üretim in April 2019 and has 28 years of work experience. Sağul is married and has one child. Basketball, sculpture making and jewellery design are among her hobbies.

[LinkedIn Profile](#)

With the responsibility of tomorrow,
our focus is always people.

PRESENTATION

PEOPLE & CULTURE

GENERATION

TRADE

DIGITAL

FINANCE, STRATEGY & INVESTMENTS

SUSTAINABILITY



PEOPLE & CULTURE

In the new period we call Üretim Next, we aim to make Enerjisa Üretim a company that makes the best use of data, has become a benchmark with its digital competencies, expanded its commercial activities in Europe and started its operations in other continents. Our greatest strength here is our “people”.

In order to realize this journey, we implement practices and new initiatives that will contribute to our people and our industry -as we have stated in the purpose of our company’s existence- and shape them according to the conditions and requirements suitable for our age with an agile approach; as well as work on a supportive culture based on continuous development and progress. By putting the transformation at the centre of our strategy, we produce plans and projects not just for the present but for the future of our business, business environment and people

Ayşegül Gürkale, People and Culture Assistant General Manager, and her daughters Melis and Selen



[Click to watch the video](#)

At Enerjisa Üretim our greatest value is our people, who constantly generate for a better future and put forth their efforts every day. We invest heavily on each one of them, in line with their goals and dreams.



PEOPLE & CULTURE PRACTICES

We become stronger by saying “People First” in every step we take. We see our team members as values, not as resources; and create opportunities for their personal development. We develop applications that meet the needs of all our team members as well as the requirements of the future, and desire these applications to bring knowledge, experience and competent people to the sector.

At Enerjisa Üretim; we create opportunities for our people in order for them not only to specialize in a single field, but also to gain experience and develop skills in many different realms, thanks to our digital and commercial activities and brand new entrepreneurial competencies, enabling them to generate with 5 different technologies.

#WITHTOMORROW’SRESPONSIBILITY

Individual Development Plans

We focus on the potential of our team members beyond their performance and provide an environment where they can receive 360-degrees feedback for their development. With leadership potential inventories, leadership style and organizational climate inventories, and development centre practices, we implement methods where they can increase their awareness and directly determine the focus and direction for their development plans.

Organizational Success Plan

We regularly evaluate the needs and progress of the organization and our people every year. In this evaluation process, we study future plans, future expectations and development needs of each person in the organization, and make short, medium and long-term plans accordingly.

WE DEVELOP COLLABORATIONS FOR REGIONAL DEVELOPMENT AND PRIORITIZE LOCAL RESOURCES WHEN NECESSARY.

One of the areas where we support local development is employment. At Tufanbeyli Power Plant, we have increased local employment by 100% in the last five years. In this sense, we have increased the annual resource transferred to the district.

The three schools named after our company where we organize activities are Enerjisa Soysallı Middle School, Enerjisa Bandırma Science High School and Enerjisa Tufanbeyli Vocational and Technical High School. At the same time, we also create development opportunities locally. All senior students of Enerjisa Üretim Tufanbeyli Vocational and Technical Anatolian High School, which we have established under the auspices of the Sabancı Foundation, started their internship training at Tufanbeyli Power Plant.



Our appreciation-recognition system:
İyi ki Varsın (Glad to Have You)

Feedback is one of the most important tools to create awareness and improve. It is equally important to make the feedback exchange independent of time and place and work 360 degrees. Employees both appreciate each other and earn points by sending badges in the system to each other. Redeemable electronic points earned by employees can be used on the shopping portal with over 900 suppliers and brands.

Employee Data Analysis

We aim to shape our short/medium/ long-term initiatives and enhance the employee experience by identifying actions that are consistent with our Company and People and Culture strategies with analyses based on employee data.

Labour Relations

We aim to continuously improve the aspects of Occupational Safety that are open to development at the level of Human and Culture. With the studies carried out,

- We set standards and provide awareness in terms of employee rest periods.
- By constantly reviewing their overtime hours, we aim to improve the well-being of the human dimension of occupational safety.



Our Flexible Benefits Practice:
“Sana Göre” (Just For you) Programme
Our employees attain the opportunity to arrange their existing fringe benefits according to their individual needs.

CAREER MANAGEMENT AND DEVELOPMENT TOOLS

At Enerjisa Üretim, we support the careers of our employees with our ever-growing business portfolio, so that they can take the initiative to develop not only in a single area of expertise, but also in different areas, and undertake the responsibilities of career development, both by progressing in a single discipline and gaining skills in different disciplines.



Our reverse mentoring programme:
Genç Fikir (Young Ideas)

The programme, which includes our employees under the age of 30, aims to create a sharing environment where ideas can be expressed explicitly between the senior management and the new generation, by supporting generations to co-work in tandem and learn from each other.

Ahsen, daughter of Hüseyin Ufuk from our Köprü Power Plant



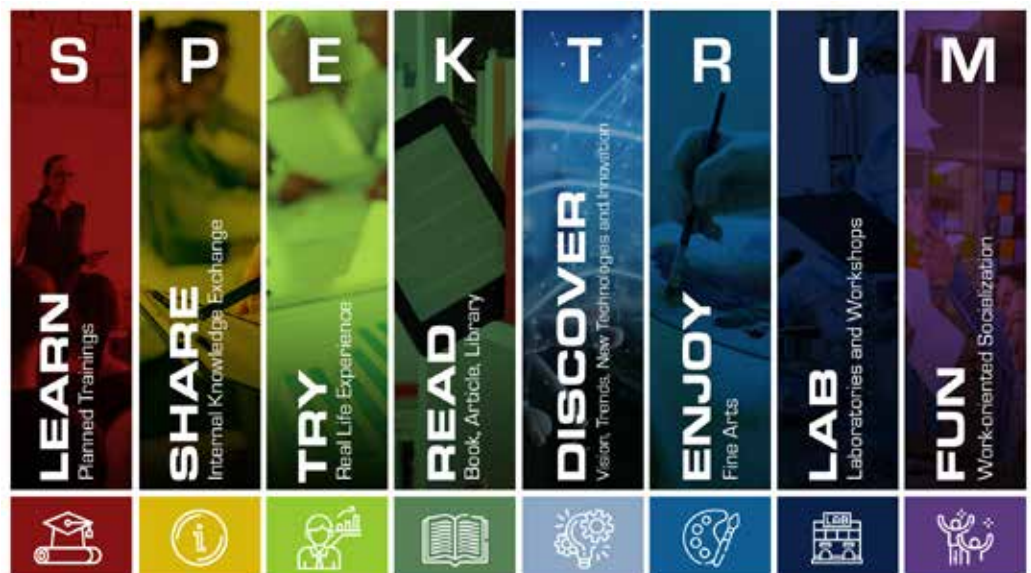
TRAINING & DEVELOPMENT

We design learning and development tools to enhance our behavioural, professional and leadership competencies in line with the strategic goals and the needs of the employees. In addition to the training, we also benefit from tools such as coaching/mentoring opportunities, foreign language training, experiential learning methods and special training tools developed by VR technologies. As well as face-to-face options, our online training platform, E-Development portal, provide innovative and rich content.

ENERJİSA ÜRETİM *Akademi*

Enerjisa Üretim Academy

By means of Enerjisa Üretim Academy, which has completed its second year, we have further developed our new generation training journey, in which our colleagues can develop their skills, follow the latest technologies and learn while having fun and gaining new perspectives, in line with our Spektrum philosophy.



We provide unique technical experiences, which are the first examples in the industry, via 712 training topics in our training catalogue, and specific training such as ManeVRa and Wind Turbine prepared with VR technology.



On our E-development platform, where the number of trainings has increased by 50% thanks to the original training contents designed by internal trainers who are experts in their fields, we offer 148 active trainings specific to Enerjisa Üretim.

In 2022, we supported the technical development of our colleagues with an average of **102 hours** of training per employee, with **27.504 hours** of technical training over the E-Development portal and **65,455 hours** face-to-face.

Master & Doctorate Study Support

“Continuous learning” and “progress” are at the forefront of the most important elements of our culture. In addition to in-house resources, we support our employees’ graduate and doctorate studies financially in order to create motivation in this regard.



Power MBA Professional Development Programme

With our Power MBA Professional Development Programme, which we carry out every year in cooperation with Sabancı University EDU, we create an important opportunity for people who want to advance their careers in the energy sector in terms of recognizing and choosing their fields of expertise and/or developing a professional perspective.

We learn from each other in a broad framework, and gain a strong perspective on the energy ecosystem, on topics such as scientific infrastructure, markets, generation technologies, financial dimensions, strategic depth and the future of energy. We offer a significant opportunity for those who want to advance their careers in this field, in terms of getting to know and choose their areas of expertise and/or improving their professional perspective.

Within the scope of the 9-month programme, our participants; have in-depth knowledge of the fundamentals of energy, management in energy, the future of the energy sector, and business and technical issues. After the programme, with the Power MBA Alumni group, we continue to contribute to the personal development of our graduates, their communication with each other and with the sector respectively.



[Click for the programme brochure](#)



Orion Experience and Development Programme

With Orion, which we have designed to prepare 4th year university students and new graduates for business life, we offer new participants a 7-month experience and development opportunity every year.



While aiming to bring the technical competencies of the relevant department to the candidates selected within the scope of the

departments determined in each phase; we provide young people with the opportunity to take a real step into their careers with various workshops, group studies, 1-1 mentoring on the career path, power plant trips, vocational and behavioural competency trainings, seminars, guest speakers and the project at the end of the programme.

[Opinions of Our 1st Term Participants ↗](#)

[Opinions of Our 2nd Term Participants ↗](#)

[Career Talks with Orion Team Members ↗](#)

University Collaborations and Events

As Enerjisa Üretim, we play a part as speakers in the following programmes with our expert colleagues from our organisation: Istanbul Technical University, the Fuel Chemistry and Technology course of the Chemical Engineering Undergraduate Programme, Energy Markets and Optimization course of the Industrial Engineering Undergraduate Programme; Boğaziçi University, Planning Aspects of Hydroelectric Power Plants course of the Civil Engineering Undergraduate Programme; and Kayseri University Yahyalı Vocational School.

At the same time, we participate in career fairs, summits, and industry-specific days at universities with our speakers and booth, and we meet with students to inform them about the energy industry and Enerjisa Üretim. In this context, we participated in **17 university events** in 2022.



Equality for Women at Work Certificate

As Enerjisa Üretim, we became the first energy company in the industry to receive the Equality for Women at Work Certificate.

The independent certification inspection was carried out by the British audit company Intertek, which provides services in many different sectors, from inspection, surveillance, testing, quality control and certification, in more than 100 countries.

At Enerjisa Üretim, we continue to contribute to the sector by continuing our efforts to ensure gender equality and prevent all kinds of discrimination.

WELL-BEING PRACTICES

Hobby Clubs

At Enerjisa Üretim, we have different hobby clubs such as Art, Games, Gastronomy, Travel and Sports. These clubs support our colleagues from different departments to come together to acquire new hobbies and socialize. We organize many social events, from cultural tours to football and bowling tournaments, from gastronomic events to art activities, and both increase them in numbers as well as diversify them every year.



Enerjine Sağlık (Bless Your Energy)

With our well-being programme “Enerjine Sağlık”, which we conduct involving our employees and their families in all our locations, we aim to raise awareness of health and well-being of our employees and to guide them towards sustainable behavioural change.

Waste Management

With the measures we have taken in our offices and fields, we have reduced our plastic consumption by **44%** in 2022 in comparison to the previous year.



OCCUPATIONAL
HEALTH & SAFETY

OHS TRAINING,
DEVELOPMENT AND CULTURE

Instead of defining Occupational Health and Safety as a priority, we consider it as an indispensable part of our corporate culture adopting the slogan “OHS At All Times”. We review our operations every year, revise the processes when necessary, and raise our standards to a higher level. All of our employees, who define themselves as OHS volunteers, play an important role in creating and maintaining safer and healthier conditions and attitudes.



5S Activities

With the 5S (Sort, Straighten, Shine, Standardise and Sustain) technique, which is the baseline level of total productive maintenance, we are moving forward with the goals of changing the thinking system and behaviour of the employees, ensuring early diagnosis of problems, creating a pleasant working environment and “Zero Accident, Zero Defect, Zero Failure”.

Mert, son of Özkan Acar from our Bandırma Power Plant

DIGITALIZATION IN OHS
MANAGEMENT

In addition to our “Always OHS” approach, which enables us to focus on the health of our employees, we are also working to be a pioneer in the sector with our digital applications.



ENSAFE (Occupational Health
and Safety and Legal Compliance
Tracking Software)

We analyse and evaluate the dangers and risks within the scope of our activities and minimise them accordingly.

YES (Integrated System for
Contractors)

It is the system we have developed to involve contractors in Enerjisa Üretim OHS processes and raise awareness.

Fark@ (Mobile OHS Software)

It is the software we use in order to ensure that both our company and contractor employees can record the dangerous situations they observe as well as the near miss events they experience so as to create immediate solutions before further serious incidents occur.

Safety Vision

Thanks to Safety Vision, a software which we developed with a start-up company including using the existing cameras in our power plants, we ensure that OHS processes are measured and reported in real time with an accuracy rate of over 90%.

ACTIVITIES ON COMPLIANCE

As a company, we accept the Universal Declaration of Human Rights, applicable international standards and the rules of Sabancı Holding and E.ON as our compass, and take the Compliance Manual as the key guide for compliance. We prepare all our compliance policies and procedures in accordance with the framework drawn up by this booklet which is announced on our company's corporate website.

- With our rules and policies on compliance, we define the company's legal responsibilities such as competition law, anti-bribery, anti-money laundering and corruption, personal data protection law, as well as our responsibilities to customers, employees, shareholders, suppliers and business partners, competitors and society respectively.

- For effective and efficient management in terms of compliance culture, we regularly provide interactive trainings to our employees in the digital environment, and follow up on their participation with physical and classroom trainings held both at our power plants and in our head office, in a supportive manner.
- Our compliance issues are followed up by our Chief Legal Counsel and Compliance Advisor. The Compliance Advisor receives a report every 6 months from all our departments regarding their compliance with the legal legislation and regulatory regulations they are responsible for. In addition, we provide support to respective departments regarding the follow-up of sanctions, export controls and adverse news that may arise by customers and suppliers through any digital application.

- The resolution of compliance violations, actions to be taken and current situation reporting are handled by the CEO, CFO, HR Assistant General Manager, General Counsel, and in the case of ethical rules, at regular meetings conducted every 6 months with our Compliance Board, including the Internal Audit Director.
- While audits and investigation activities regarding ethical issues are carried out directly by our Internal Audit Directorate, our Ethics Rule Consultant is authorized for ethical rules.
- In 2022, no case of violation of compliance, including bribery and corruption, was detected regarding our company, neither in the audits carried out nor in the complaints and notifications.

Compliance Violation Hotline

uyum.ihbar@enerjisauretim.com
0216 512 40 60

As a result of the work of the Legal and Compliance Consultancy, we have joined the **United Nations (UN) Global Compact**, the world's largest and most comprehensive sustainability initiative, and are committed to comply with the 10 basic principles determined under 4 main headings in all business processes and to report our work in this context every year accordingly.

We became a member of the **Ethics and Compliance Association (TEİD)** in 2022 and continue participating in their events.

We generate incessantly
by determining the source of our
power with the responsibility of
tomorrow.

PRESENTATION

PEOPLE & CULTURE

GENERATION

TRADE

DIGITAL

FINANCE, STRATEGY & INVESTMENTS

SUSTAINABILITY



In terms of renewable energy, we generate energy with our **5 wind**, **2 solar** and **12 hydroelectric** power plants with **45%** of our installed capacity consisting of renewable power plants.

In 2022, Gold Standard verification field audits of our 2 hydroelectric power plants, namely Dağdelen HEPP and Kuşaklı HEPP, were completed while their validation renewal audits still continue. In addition, Verified Carbon Standard (VCS) verification audits of our 3 hydroelectric power plants, namely Sarıgözel HEPP, Yamanlı II HEPP and Doğançay HEPP, are on-going. In addition, we started the Global Carbon Council (GCC) registration processes for our 3 renewable power plants, namely Karabük SPP, Bandırma SPP and Erciyes RES.

WIND POWER PLANTS

Except for Erciyes WPP and Akhisar WPP, which we acquired since the date we commissioned them in December 2022, our power plants have the “**Gold Standard**” certification given by The Gold Standard Foundation. Our processes continue for Erciyes WPP and Akhisar WPP.



Emre Erdoğan, Operations and Technical Assistant General Manager, and his sons Alp and Kaan

Click to watch the video



	INSTALLED CAPACITY	TURBINES	COMMISSIONING	LOCATION
 AKHİSAR WPP DOWNLOAD	55 MW	22	2011	MANİSA
 BALIKESİR WPP DOWNLOAD	143 MW	52	2013	BALIKESİR
 DAĞPAZARI WPP DOWNLOAD	39 MW	13	2012	MERSİN
 ÇANAKKALE WPP DOWNLOAD	30 MW	13	2011	ÇANAKKALE
 ERCIYES WPP DOWNLOAD	65 MW	12	2022	KAYSERİ

Zeynep, daughter of Dilek Güven Güngör from our Head Office

SOLAR POWER PLANTS



[Download](#)

BANDIRMA SPP

INSTALLED CAPACITY

2 MW

COMMISSIONING

2017



[Download](#)

KARABÜK SPP

INSTALLED CAPACITY

7 MW

COMMISSIONING

2017

CERTIFICATE

IREC
Clean Energy

HYBRIT SOLAR POWER PLANTS



[Download](#)

BANDIRMA-II HYBRID SPP

INSTALLED CAPACITY

12 MW

COMMISSIONING

2022

LOCATION

BALIKESİR



[Download](#)

ÇANAKKALE HYBRID SPP

INSTALLED CAPACITY

3 MW

COMMISSIONING

2022

LOCATION

ÇANAKKALE



[Download](#)

ERCIYES HYBRID SPP

INSTALLED CAPACITY

15 MW

COMMISSIONING

2022

LOCATION

KAYSERİ



[Download](#)

BANDIRMA-I HYBRID SPP

INSTALLED CAPACITY

7 MW

COMMISSIONING

2022

LOCATION

BALIKESİR



[Download](#)

TUFANBEYLİ HYBRID SPP

INSTALLED CAPACITY

6 MW

COMMISSIONING

2022

LOCATION

ADANA



[Download](#)

KENTSA HYBRID SPP

INSTALLED CAPACITY

2 MW

COMMISSIONING

2023

LOCATION

KOCAELİ





[Download](#)

BARES HYBRID SPP

INSTALLED CAPACITY

11.88 MW

COMMISSIONING

2023

LOCATION

BALIKESİR

HYDROELECTRIC
POWER PLANTS

ÇORUH > Arkun HEPP

SOLAKLI > Çambaşı HEPP

CEYHAN > Dağdelen HEPP, Kandil HEPP, Sarıgüzel HEPP, Hacınınoğlu HEPP

SEYHAN > Menge HEPP, Kuşaklı HEPP, Köprü HEPP, Kavşakbendi HEPP, Doğançay HEPP

As a first in the electricity generation sector, we have successfully completed ISO 55001 Asset Management System certification activities for all the hydroelectric power plants within our organisation.



Seyhan Basın Adana



DOWNLOAD



DOWNLOAD



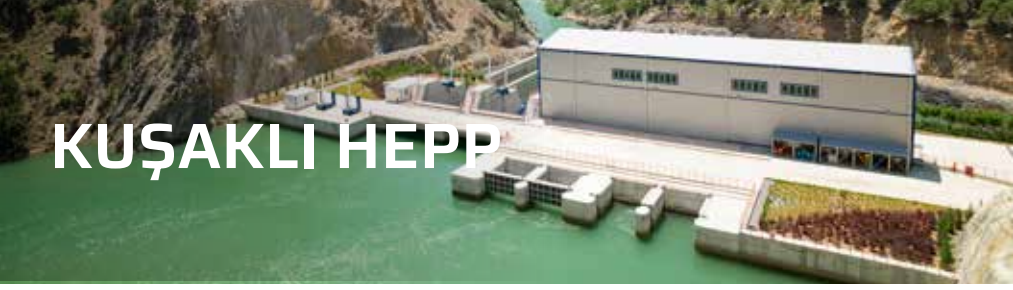
DOWNLOAD



DOWNLOAD



DOWNLOAD



DOWNLOAD

INSTALLED CAPACITY	SIZE OF RESERVOIR	COMMISSIONING	TYPE OF TURBINE	MAIN EQUIPMENT	CERTIFICATE
191 MW	30 hm ³	2014	FRANCIS	ALSTOM	VERRA VCS
156 MW	93 hm ³	2013	FRANCIS	ALSTOM	IREC Clean Energy
89 MW	51 hm ³	2012	FRANCIS	ALSTOM	VERRA VCS
82 MW	2 hm ³	2015	FRANCIS	YUNHE	VERRA VCS
62 MW	REGULATOR	2014	FRANCIS	ORIENT	VERRA VCS
20 MW	REGULATOR	2014	FRANCIS	ORIENT	GOLD STANDARD

Muhammed Kaan, son of Yusuf Çelik from our Sarigüzel Power Plant

GENERATION / CAPACITY

We use environmentally friendly and efficient energy technologies in our power plants.



#WITHTOMORROW'SRESPONSIBILITY

Ceyhan Basin Kahramanmaraş



DOWNLOAD

INSTALLED CAPACITY	SIZE OF RESERVOIR	COMMISSIONING	TYPE OF TURBINE	MAIN EQUIPMENT	CERTIFICATE
208 MW	439 hm ³	2014	FRANCIS	ANDRITZ	VERRA VCS



DOWNLOAD

142 MW	REGULATOR	2011	FRANCIS	ANDRITZ	IREC TEMİZ E.
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DOWNLOAD

102 MW	59 hm ³	2013	FRANCIS	ANDRITZ	VERRA VCS
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DOWNLOAD

8 MW	REGULATOR	2013	KAPLAN	ORIENT	GOLD STANDARD
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Çoruh Basin Artvin



DOWNLOAD

245 MW	283 hm ³	2014	FRANCIS	ALSTOM	IREC Clean Energy
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Solaklı Basin Trabzon



DOWNLOAD

44 MW	REGULATOR	2013	PELTON	VOITH	YEK-G
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PRESENTATION

PEOPLE & CULTURE

GENERATION

TRADE

DIGITAL

FINANCE, STRATEGY & INVESTMENTS

SUSTAINABILITY



THE FIRST AND THE LEADING ENERGY
BASE OF TÜRKİYE:
BANDIRMA ENERGY BASE

The Most Beautiful Power Plant in the World

- Türkiye's most efficient 2 natural gas power plants serving network security
- 1 integrated hydroelectric power plant that meets the internal needs of the power plant
- 1 Hybrid SPP project with **6.5 MW** installed power
- 2 Enercon Prototype Wind Turbines
- Preparations for the transition from natural gas to green hydrogen production in Türkiye's first green hydrogen production facility



[DOWNLOAD](#)

**BANDIRMA I NATURAL GAS
POWER PLANT**

INSTALLED CAPACITY	COMMISSIONING	MAIN EQUIPMENT
936 MW	2010	MITSUBISHI



[DOWNLOAD](#)

**BANDIRMA II NATURAL GAS
POWER PLANT**

INSTALLED CAPACITY	COMMISSIONING	MAIN EQUIPMENT
607 MW	2016	SIEMENS



[DOWNLOAD](#)

**1 INTEGRATED HYDROELECTRIC
POWER PLANT**

INSTALLED CAPACITY	COMMISSIONING
3,5 MW	2014



[DOWNLOAD](#)

1 SOLAR POWER PLANT

TOTAL INSTALLED POWER
18,38 MW



[DOWNLOAD](#)

1 HYDROGEN GENERATION PLANT

INSTALLED CAPACITY	COMMISSIONING
2 Nm³/h	2022

**TOTAL INSTALLED POWER
1.543 MW**



*We continue to provide electricity transmission to factories with our Kentsa natural gas power plant in Kocaeli.

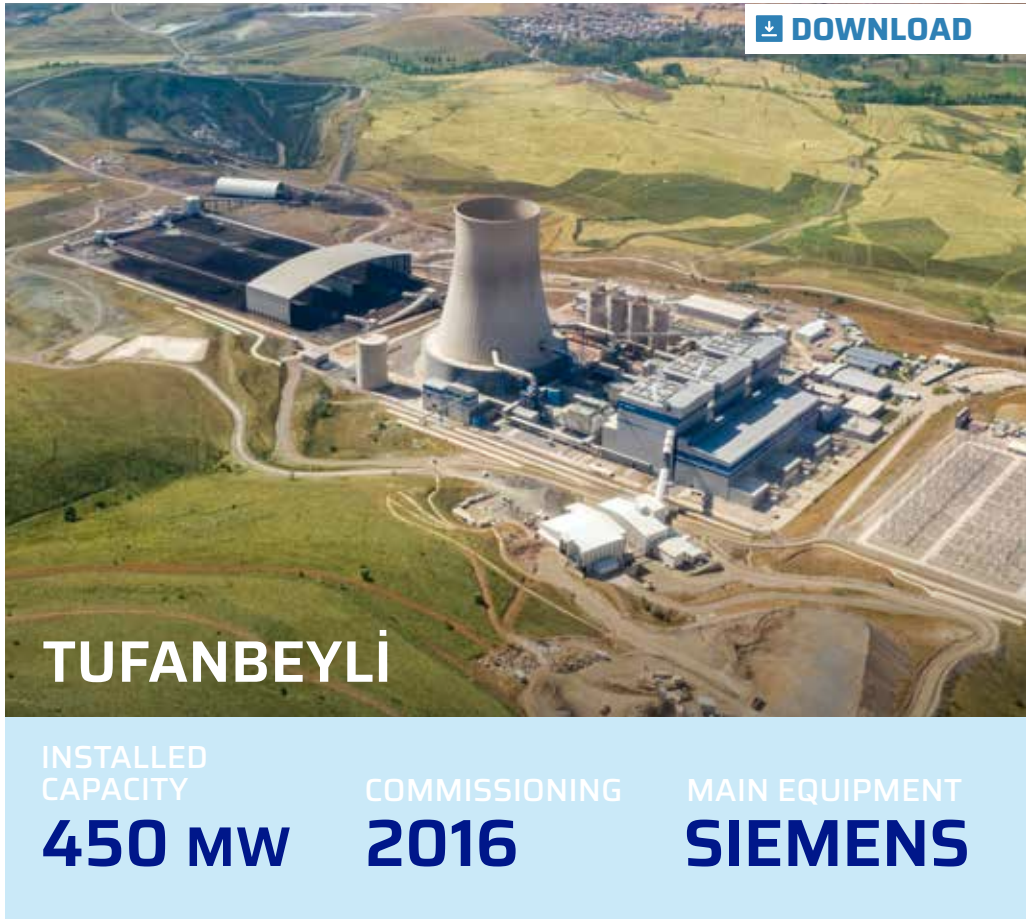
TUFANBEYLİ DOMESTIC LIGNITE POWER PLANT

Tufanbeyli: An Innovative and Integrated Model for Conversion to Renewable Energy

As a critical component of our sustainability strategy, our Tufanbeyli (TFB) power plant is in the process of evolution from thermal power generation to being a renewable energy hub.

This represents not only an operational transformation, but also a transformation of the way we think and approach energy generation.

The TFB site is in an ideal location for conversion to renewable energy sources such as solar panels or wind turbines.



With our completed and ongoing Hybrid SPP projects, the power plant, which will reach a minimum of **300 MW** solar installed power over the years, is currently integrated into the electricity grid, revealing that it can play a critical role not only in increasing the speed of renewable energy projects, but also in terms of ensuring integration.



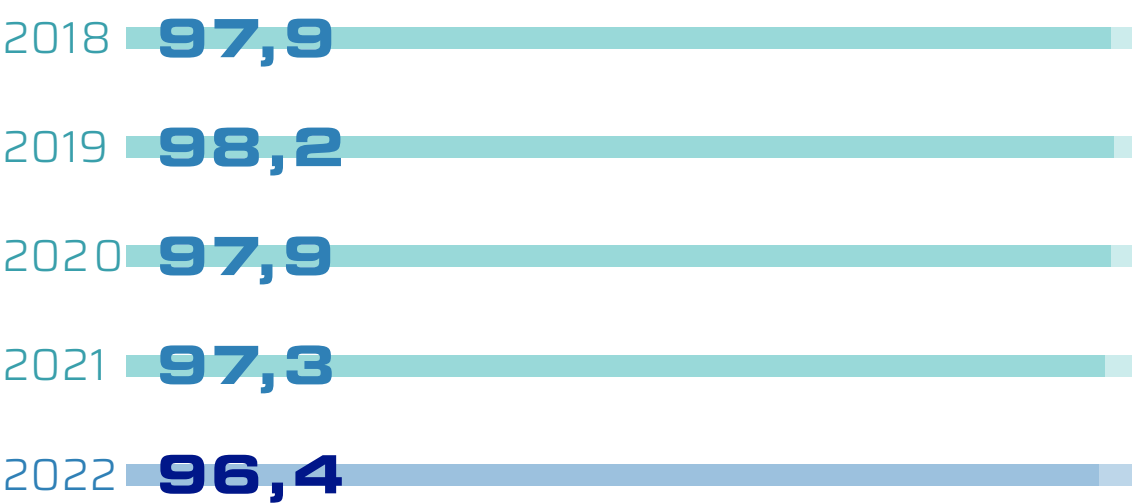
With the effect of increasing air temperatures, TFB has the potential to become a data processing and energy storage centre. Energy storage technologies have the potential to correct imbalances between generation and demand, increase energy efficiency and contribute to meeting energy demand respectively.

Our learning centre ‘Academy’ will play a key role in this transformation process and will be positioned as a talent development centre that will support employees’ adaptation to the renewable energy sector. This offers the potential to lead the industry in talent and knowledge expansion while accelerating the pace of the renewable energy transition. All these factors make TFB a prominent and exemplary model in global just transition practices.

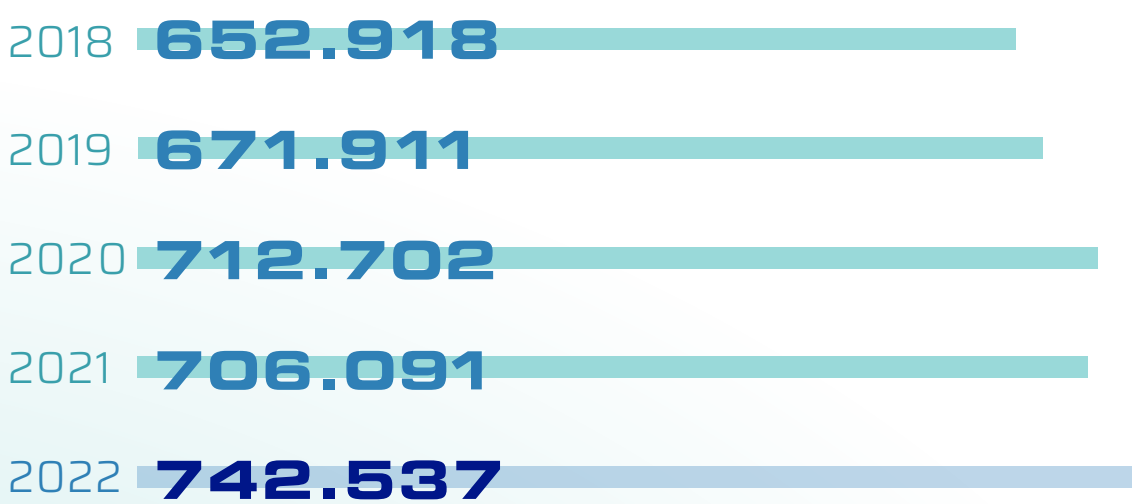
WIND POWER PLANTS

A total of **5 wind power plants** with an installed capacity of **332 MW** in operation in Kayseri, Manisa, Mersin, Çanakkale and Balıkesir.

Availability Rates (%)



Net Generation (MWh)



Baki Yalçın and his daughter Zeynep from our Head Office

We recruited the operating team of the Erciyes WPP power plant - the construction of which was completed this year - in a timely manner, thus ensuring that they worked in sync with the project team. We also employed the first female turbine technician in the Erciyes WPP project.

We started to detect low-performance turbines and equipment-based anomalies prior to the failure, through the performance and equipment condition monitoring system we developed with the Senkron team. We increased our turbine controls by providing training to our teams in line with their development programmes.

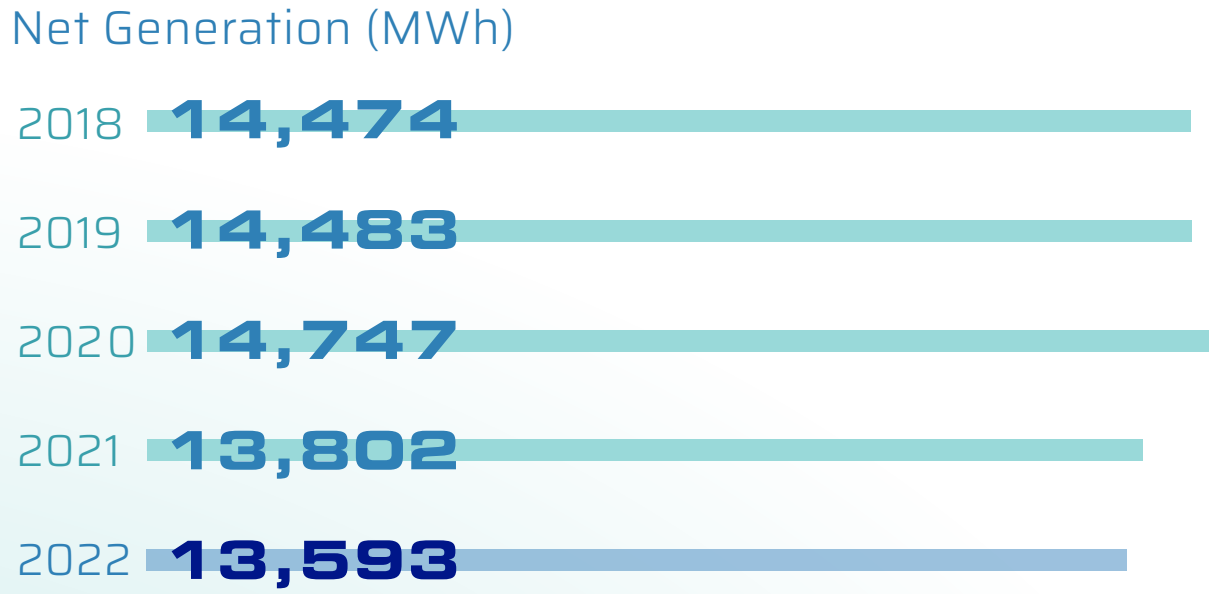
We have started research and planning processes for the possibility of in-house service and maintenance operations of wind turbines using the experience we have so far acquired.

Ela ve Defne, daughters of Erkan Erdoğan from our Hacınoğlu Power Plant



UNLICENSED SOLAR POWER PLANTS

Total of 2 solar power plants with an installed capacity of 9 MW in operation in Bandırma and Karabük.



HYBRID SOLAR INVESTMENTS

With the steps we took in 2021 and 2022, we turned all our wind power plants and thermal power plants into hybrid power plants with the addition of solar power plants. At the end of 2022, we commissioned 41 MW solar power plant and started 54 MW power plant investment scheduled to be completed in 2023.



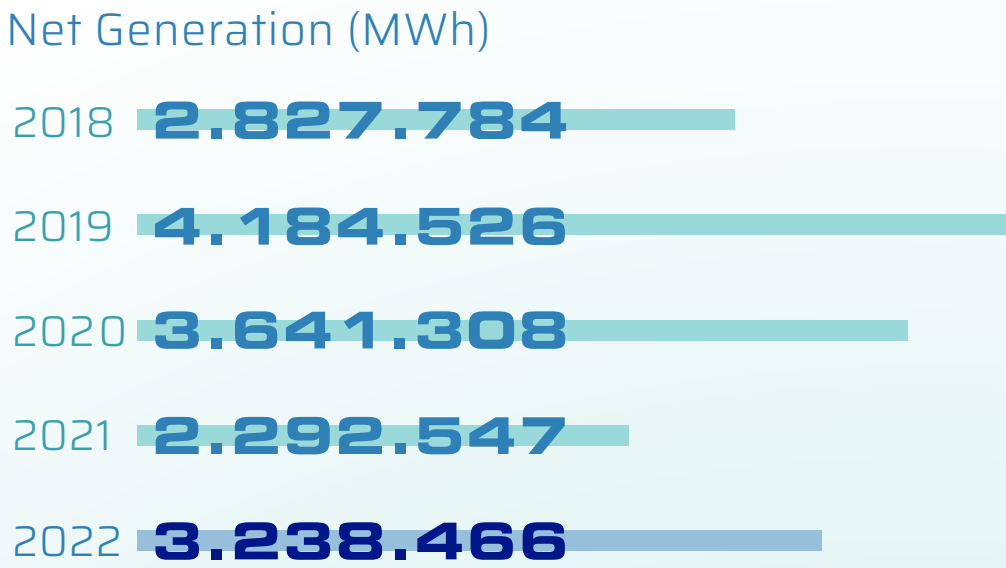
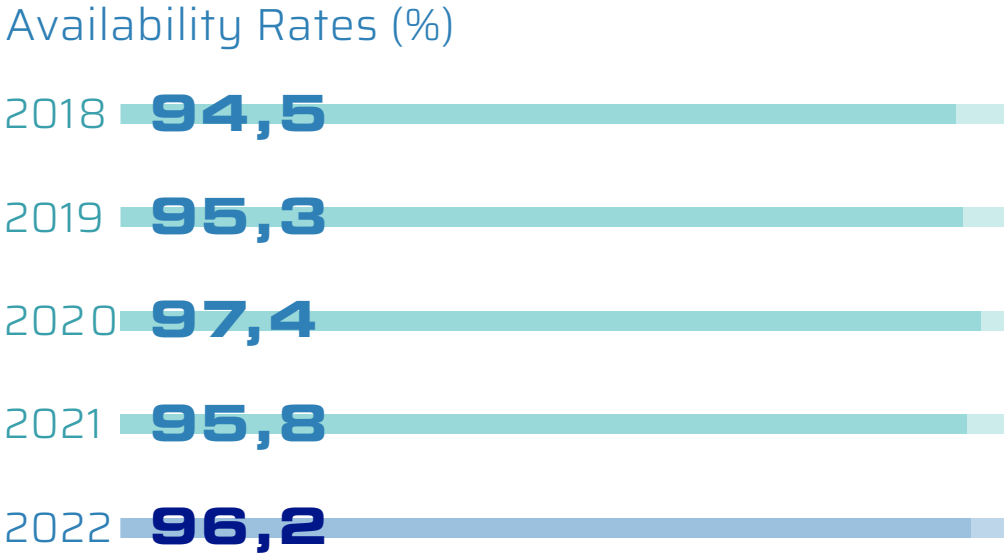
HYDROELECTRIC PLANTS

With 12 power plants, we are the player that operates the most hydroelectric power plants in the private sector in Türkiye. Our power plants located in the basins of Seyhan (6 units), Ceyhan (4), Çoruh (1) and Eastern Black Sea (1) have a total installed power of 1,350 MW.

As a first in the electricity generation sector, we have successfully completed ISO 55001 Asset Management System certification studies for all hydroelectric power plants within our organisation.

In line with our targets of becoming net zero carbon in 2045 by using our renewable energy resources, we have completed the infrastructure installations of our charging stations with 22 kVA

AC power in all our hydroelectric power plants.





Dark Plant

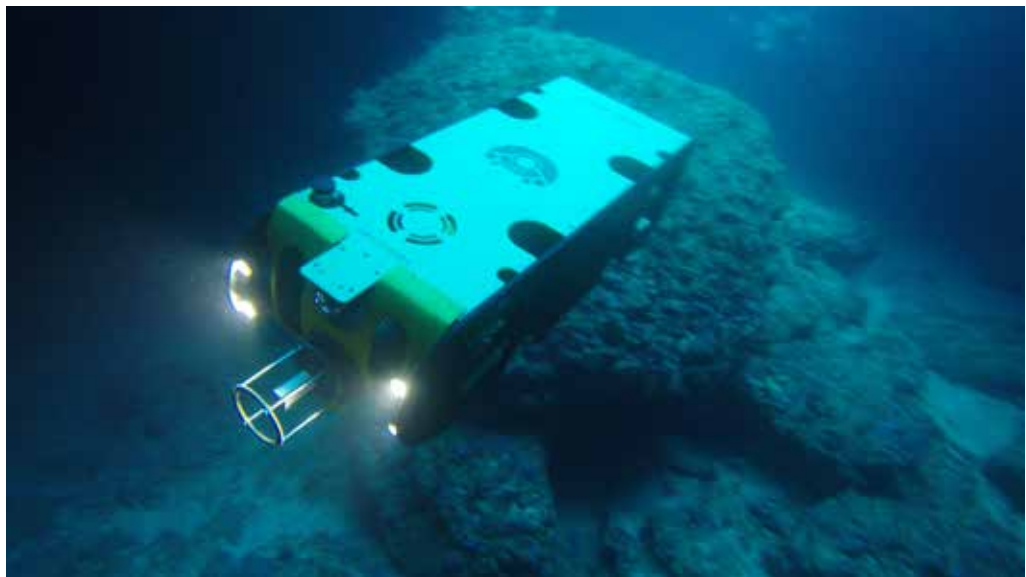
We have designated our Dağdelen Hydroelectric Power Plant in Ceyhan Basin, with an installed capacity of **8 MW**, as a structure that can be fully managed remotely enabling digital generation without humanpower.

Click to watch the video



Examples of Our Other R&D Activities

We made the HYDROV-Profiles underwater measurement and observation tool, one of the innovation projects we implemented with the support of TÜBİTAK 1707 Order-Based R&D, ready for use in all the underwater structures and tunnels.



We carried out measurement and observation studies in Sarıgözü HEPP emergency valve and energy tunnel in June 2022 and in Arkun HEPP surge tank and energy tunnel in October 2022 respectively.

Maintenance Management Strategy

We have created the Maintenance Management Strategy, which we call New Age Maintenance, by going beyond the traditional maintenance approach for the continuity of our power plants to operate at the desired performance level.



In this context, together with the root cause analysis of the malfunctions we experienced using the RCA (Root Cause Analysis) method, we identified

the malfunctions that our critical equipment may encounter in the future with the FMEA (Failure Mode Effect Analysis) method.



As a result of the work done, we achieved the lowest breakdown maintenance rate in the last 5 years, reaching **96.2%** availability.

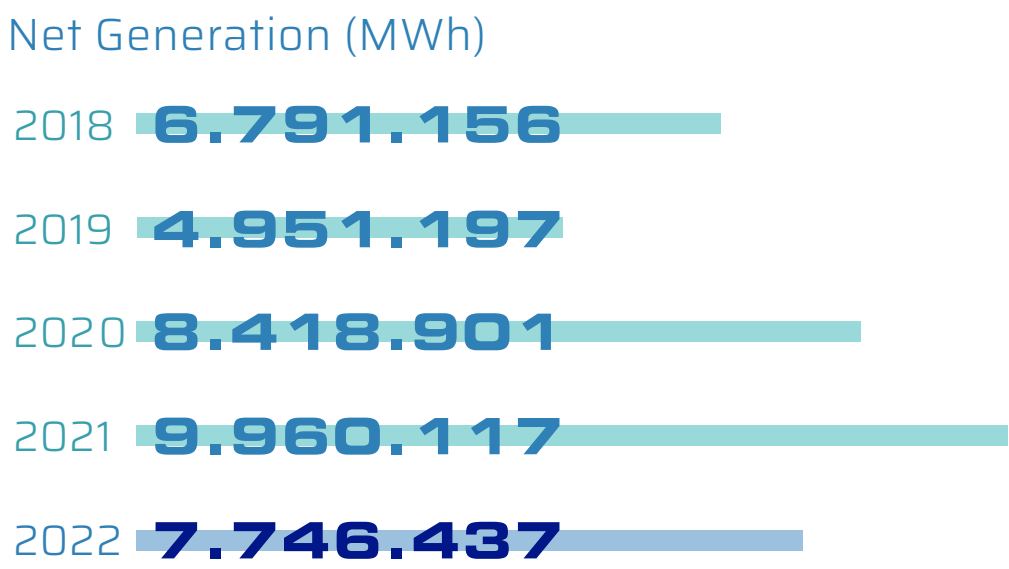
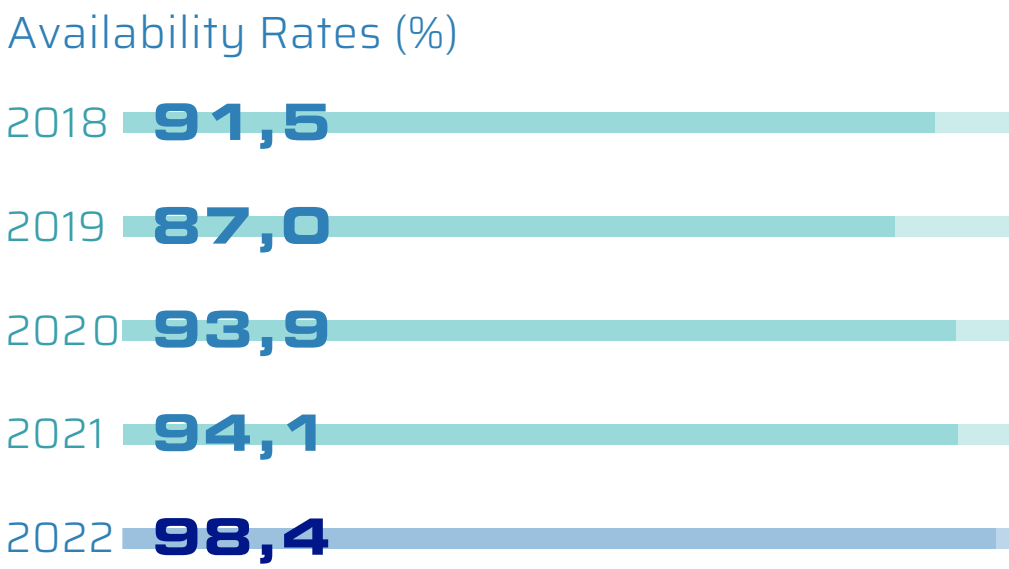




Bandırma Energy Base
Bandırma Energy Base has the distinction of being the first hybrid power plant in Türkiye. This energy base, which is the only one in Europe, has 2 natural gas power plants with a generation capacity of **1543 MW**, as well as unlicensed and auxiliary source generation facilities (solar and hydroelectric) with a total generation capacity of **22 MW**.

Incorporating different technologies, Bandırma Energy Base continues to create value and shed light on the future with its pioneering position in innovation, by providing an R&D environment at different stages of the sector.

By means of the Predictive Maintenance Approach and the digitalization projects developed, we decreased the breakdown maintenance from 20% to 17% and achieved an improvement versus a year ago.



Green Hydrogen Generation

With the pilot study carried out within the scope of green hydrogen production activities, we aim to determine the possible future needs of Enerjisa Üretim in terms of hydrogen usage and generation, and play an important role in addressing the development of technology through research on alternative green hydrogen generation technologies.

In February 2022, as Enerjisa Üretim we signed a cooperation protocol between Eti Maden, Aspilsan, and Tübitak MAM for Green Hydrogen studies, under the coordination of the South Marmara Development Agency (GMKA). In this context, we aim to develop and implement a small-scale electrolyzer and investigate the Green hydrogen potential of the Southern Marmara region.

In 2022, we completed the electrolyzer unit and storage tank installations at our Bandırma Energy Base, and started the generation of green hydrogen. The hydrogen generated on site is used for generator cooling in our Bandırma-2 power plant.

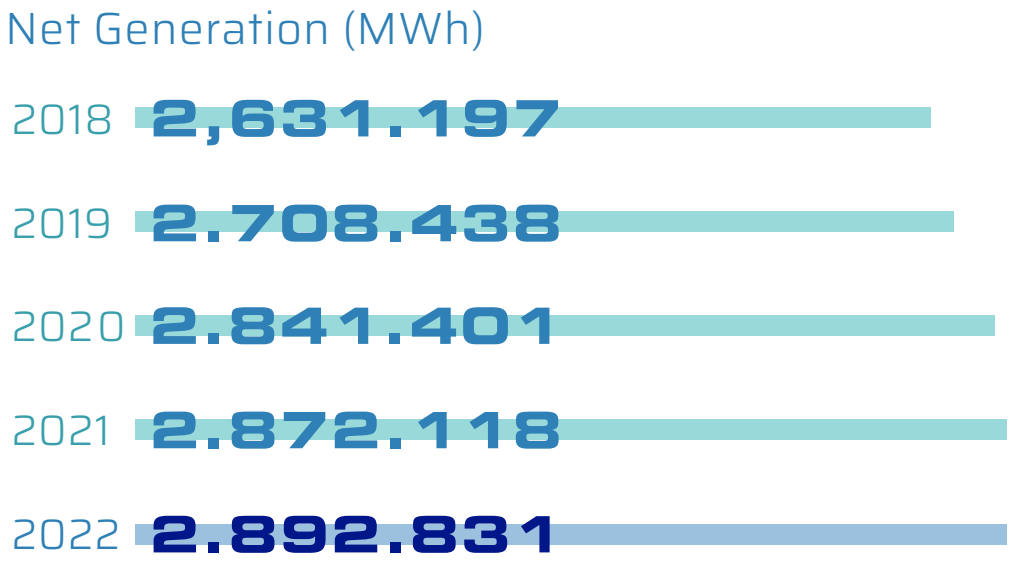
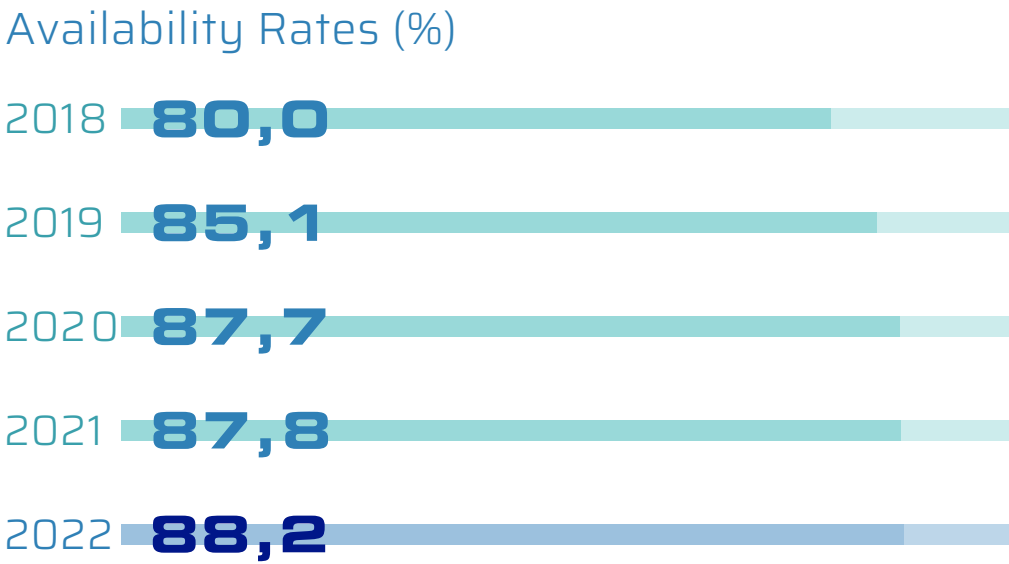


Kentsa

Kentsa continued its operations to ensure the continuity of electricity supply to the factories located on its site.

Tufanbeyli Power Plant

We have implemented 70 projects worth 101 MTL in our planned maintenance activities and on efficiency, reliability, availability, environment, employee health and safety. We increased our generation capacity, increased the net efficiency of the power plant by 1% on a unit basis and achieved the highest annual generation since the start of operation.



SENKRON CENTRAL OPERATION ROOM

Senkron Central Operation Room (Senkron), which we have established in Istanbul Ataşehir Head Office, continues with the remote operation process of 12 hydroelectric power plants and 5 wind power plants of Enerjisa Üretim. Senkron performs process and performance monitoring of Thermal, Hydroelectric, Wind and Solar power plants utilizing advanced data analytics and machine learning algorithms.

Along with its competent staff, Senkron carries out all its operations through the assurance of ISO 55001 Asset Management, ISO27001 Information Security Management, ISO 9001 Integrated Management System Documents.

- We increase the performance of power plants via our multi-site management and ensure the sustainability of energy generation with maximum efficiency. We provide better integration and communication throughout our value chain.
- Through advanced data analytics, we are able to carry out our instant decision-making processes more effectively and at the same time, we are able to manage more effective maintenance planning.

TARGETS AND SUSTAINABILITY
FOCUSED PROCUREMENT APPROACH

We carry out our procurement operations with a responsible supply chain approach, in line with company goals and sustainability principles. We establish long-term strategic relationships with our suppliers, and establish our collaborations in terms of our principle of winning together.

We collaborated with 1,225 suppliers in 2022. We generated **14,827 orders** totalling **3.1 billion TL** in a total item basis. We deal with local suppliers in the regions where we operate, and we placed an order of **205.8 million TL** with these suppliers.

Procurement Director Aziz Ünal and his nephew Alaz



[Click to watch the video](#)

1.225
suppliers

14.827
total orders

3,1 billion TL
worth of total orders

205,8 billion TL
worth of local orders

LEADER AND FUTURE PROOF
PORTFOLIO

As Türkiye’s leading electricity generation company, we generate electricity in 5 diverse technologies, including hydroelectric, wind, solar, natural gas combined cycle power plant and lignite power plant, with an operational diversified generation portfolio of **3,727 MW**. Our low-carbon natural gas combined cycle and renewable energy-based power plants make up 87% of our future proof portfolio. By means of the diversity of our portfolio and our business optimization capabilities, we take advantage of the potential opportunities in the market and avoid negative impacts.

TECHNICAL RISK MANAGEMENT

By creating Strategic Asset Management Plans for our power plants, and by assessing critical developments, financial and risk analysis for our assets, we create our road map to strategic targets. In this respect in 2023 we will continue our work to receive the ISO 55001 Asset Management certifications for our Bandırma Energy Base and Wind Power Plants, which we had previously received for our Hydroelectric Power Plants and Senkron Control Centre.

We conduct our risk analyses for all of our power plants that enables us to monitor the risks stemming from climate change within the framework of TCFD (Task Force on Climate-related Financial Disclosures).

We contribute
to the trade ecosystem with
the responsibility of tomorrow.

Ali, son of Burcu Akkahve from our Head Office

Our Operations

Within the scope of our trade activities, which is our second main business line, we take a position independent of our company's generation activities and assets in the energy markets, within the framework of defined risk limits, and with comprehensive and detailed analysis. In this context, we play an active role in the following topics:

- Electricity trading in organized and unorganized energy markets in Türkiye and Europe,
- Participation in cross-border electricity capacity tenders,
- Natural gas trade,
- Power plant imbalance management services,
- Customized solutions for renewable power plants in the market,
- Customer solutions for the end consumer
- International carbon and green energy trade

Trading And Energy Solutions Assistant General Manager Yusuf Ilimsever and his daughter Sare



Click to watch the video



With our Enerjisa Toptan and Enerjisa Europe companies, we carried out our electricity and natural gas trade activities in Türkiye and South East Europe, and our green solutions activities in every corner of the world. We have started our preparations to move our electricity and natural gas trade activities to Continental Europe as of 2023. We expect the incorporation of our Amsterdam-based Enerjisa Commodities company to be completed in the first quarter of 2023. With the establishment of this company, we will carry out all our trade activities under the brand of Enerjisa Commodities.

Our Trade Activities in Numbers:

- **26.5 billion kWh** electricity gas sales and trade volume

*Despite the low volume experienced in the 2nd quarter of 2022, with the introduction of the ceiling price application within the scope of the resource-based support mechanism for companies holding production licenses

TÜRKİYE

- Approximately **7.5 billion kWh** free consumer portfolio in Türkiye
- 36% market share in all electricity trade volume traded on OTC
- Balancing service to our **126** stakeholders in Türkiye



GLOBAL

- **1.56 billion kWh** electricity trade volume in Europe.
- **1.9 billion kWh** transaction volume in the TTF (Title Transfer Facility) market through Enerjisa Europe.
- For 2023, we received a total annual electrical energy transfer capacity, with a total of **25 MW** of export and **30 MW** of import, regarding the Türkiye-Bulgaria and Türkiye-Greece border. In addition to annual tenders, we continue to regularly participate in monthly capacity utilization tenders.
- Total **10,000,000** Carbon + IREC loan transaction volume (Buy + Sell).
- Positioning as a global player in the Green Energy Certificate trade, with a market share of approximately **2%** in the world, with transactions in more than **20** countries.
- Reaching **1,300,000** IREC end-user sales volume: The market leader with a **25%** share in the Turkish market, and a **2%** market share globally.
- **23 MW** solar PPA, development and sale of 6-year carbon rights of solar power plants on behalf of the project owners.

Emir, son of Ekrem Aksay from our Tufanbeyli Power Plant



OUR VALUE CREATION
ACTIVITIES: FLEXIBLE AND WIDE
PRODUCT DIVERSITY-FOCUSED
CUSTOMER SOLUTIONS

- Thanks to our product diversity, strong financial structure and pricing flexibility, we can provide products according to the needs of all market players. We meet the expectations of our customers not only with alternative pricing options, but also by sharing our experience in infrastructure, legislation and practices in the sector accordingly.

- We offer digital solutions that can directly reach our stakeholders in line with concepts such as “PtF”, “Yekdem”, “Imbalance”, “Financial Cost”, “Consumption Forecast” that entered the lives of customers, and in line with digitalization, the importance of which has increased even more during the pandemic process. Thanks to our “Enerjisa Access” service, we provide our customers with the opportunity to monitor all their performances (Monitoring), make instant costing, and also access analysis screens with forecasts for the future period; we also provide the ability to create energy purchasing and use strategies.
- We sign energy purchase agreements that protect our plant owner stakeholders against price and imbalance risks.
- We offer GHG Monitoring and Green Certification process management solutions.

MANAGEMENT OF COMMERCIAL
AND OPTIMIZATION RISKS

We carry out our commercial and optimization risk management operations in cooperation with the Commercial Risk Management team under the Risk Culture department and the teams that carry out all commercial and optimization operations. We periodically report the profitability and risks of each commercial and optimization operations. We maintain a dedicated venture capital for commercial operations. We set the trade limits in line with this risk capital and current risk appetite and monitor them on a daily basis. We use advanced Value at Risk (VaR) models to measure business risks.

We interpret the technology
of the era with the responsibility of
tomorrow.

PRESENTATION

PEOPLE & CULTURE

GENERATION

TRADE

DIGITAL

FINANCE, STRATEGY & INVESTMENTS

SUSTAINABILITY



INFORMATION
TECHNOLOGIES AND
DIGITAL BUSINESS

In a world of constant change, digitalization is essential for companies to remain competitive and efficient. The energy sector, which faces difficulties in providing sustainable energy, also adopts digitalization at this point. Technology helps energy companies optimize their operations, increase energy efficiency, improve the customer experience and stay prepared against cyber threats.

The accelerated growth in technology has brought the cyber security risk to the highest level, especially for energy companies. In this respect, as Enerjisa Üretim, we continue our digitalization journey in all our business units.



We are at a distinctive point in the sector with our business operation and trade processes, the digital products we have developed, and our colleagues whose digital competencies are constantly improving. We attach great importance to data-driven decision making and data access. We create opportunities to use our machine learning and artificial intelligence solutions in every aspect of our business.

We follow sectoral and regional threat groups and continuously improve our security layers by obtaining threat intelligence services on a global scale. We also became one of the few companies that completed the SASE transformation, which is included in the 2025 predictions of technology analysts.

Information Technologies and Digital Business Assistant General Manager Ali İnal and his sons Poyraz, Kuzeý and Deniz



Click to watch the video



DIGITAL AND INNOVATION

We continued our start-up collaborations this year as well.

• With the Yol Arkadaşım (My Companion) application, we have developed a mobile application that provides users with approved safe route information for switchboard routes. With this application, we can also access the alternative route and the last updated location of the user in case of an emergency.

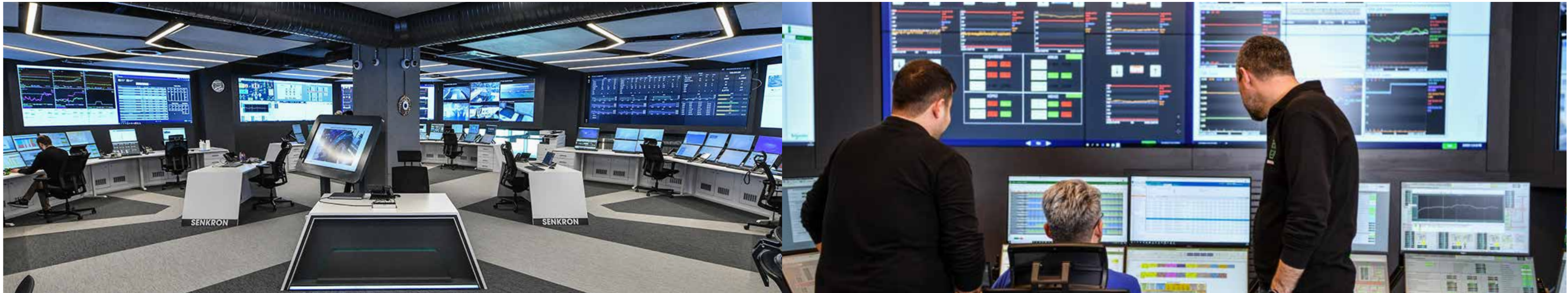
- We modelled our wind turbines in a virtual reality environment with our business partner in renewable power plants. We plan to use this solution in the field of turbine training and modelling.
- We developed a 3D model of our Dağdelen power plant on mixed reality goggles. With our virtual reality model fed with instant production data, we have become able to follow the issues related to our power plant remotely.
- We collaborated with a company that offers AI, IoT and robotic solutions for predictive and preventive maintenance and 24/7 health monitoring of energy and underwater assets. By performing operations that require submersibles in our hydroelectric power plants with this solution, we provided data and analysis for asset management and risk planning, and carried out maintenance processes supported by robotic processes.





SENKRON.ENERGY DIGITAL SERVICES:

We have decided to offer our digital competence, which we have aggregated over the years and is constantly increasing, in a way that will create value for the industry, particularly in Türkiye and European countries. We plan to carry out our service operations through a separate legal entity belonging to our parent company, starting from 2023.



I) Business Transformation Services:

Using the SaaS products we have developed, we offer the stakeholders operating in the field of energy generation and trade, the opportunity to move their operations to the digital environment and transform accordingly.



II) Data Services

Through our artificial intelligence and machine learning models, we provide situational assessments for power plants, enabling them to detect possible incidents before they happen, and take action accordingly.



III) Cyber Security Services

We have implemented a new cyber security posture for the IT and OT world. The cyber security assessments we provide will facilitate flexibility, defensibility and regulatory compliance to our stakeholders.



IV) Digital Energy Platform

We set out to create catalogues covering green energy solutions, data on energy markets and our power plants, and customized training relating to energy business.

With the responsibility of tomorrow,
we raise our strategies and financial
targets every year.

As Enerjisa Üretim, we have the largest special generation portfolio in Türkiye and continue to advance towards our goals with the vision of being a pioneering company for the future. We operate with a culture of operational excellence, technology development and cyber security.

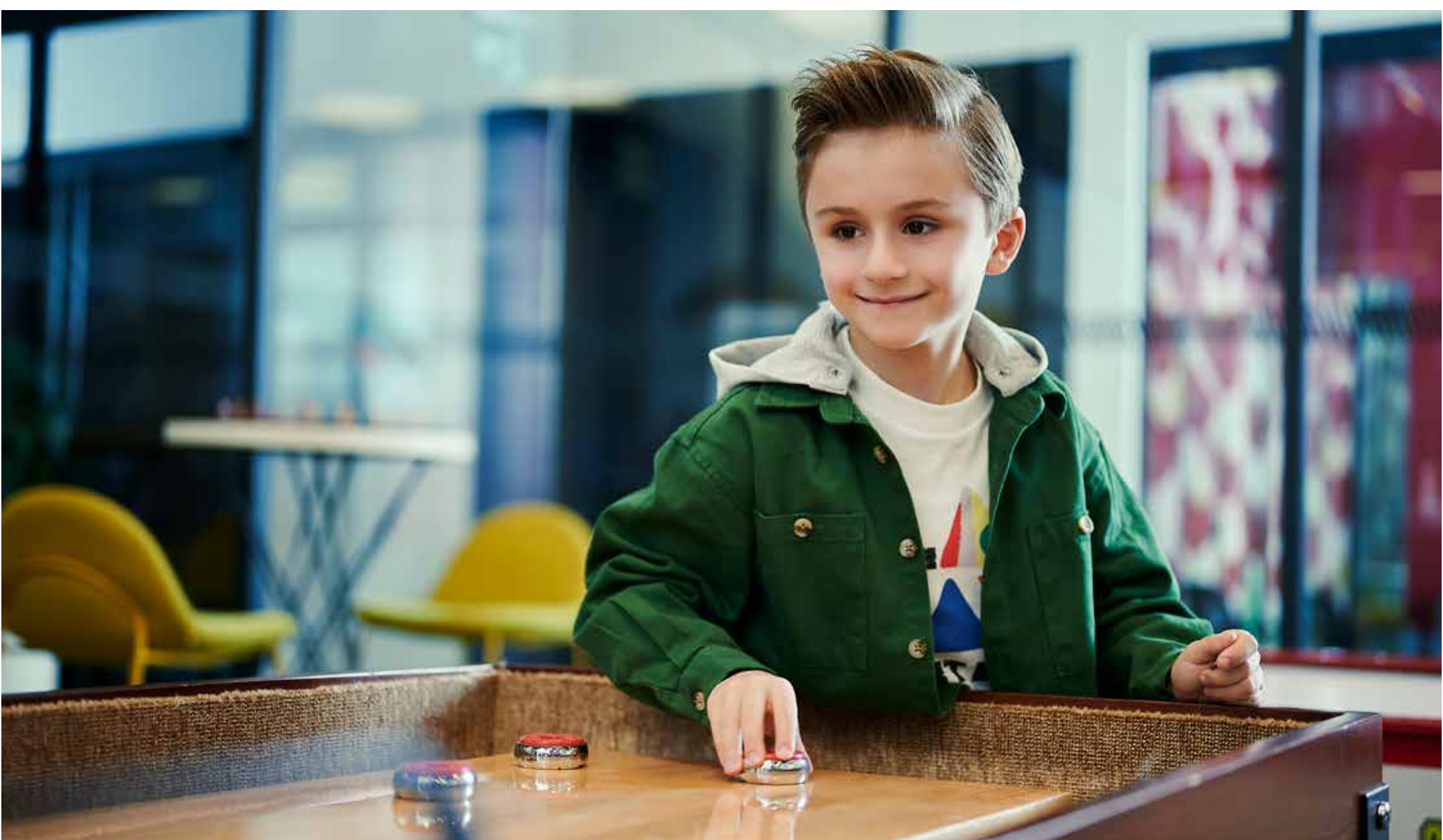
We continue to contribute to Türkiye's renewable energy targets regarding the near future and to fulfil our sustainability commitments with our low-carbon renewable energy power plants, the majority of which are CCGT and renewable energy sources.

We create our culture with the value and importance we attach to life, occupational health and safety, business continuity and technology. As an exemplary company with our commitment to the principles of environmental protection, zero work accident target and respect for human rights, we fulfil our social responsibilities by integrating these topics into all our activities.

Strategy and Portfolio Management Director Egemen Yamankurt and his daughter Arya



[Click to watch the video](#)



Mert Demir, son of Rufi Özgür from our Bandırma Power Plant

In addition, we aim to have a leading position in the sector with our investments in innovative technologies, smart solutions and digitalization. In this way, while making a great contribution to the energy sector, we also work for a sustainable future.

We follow new and disruptive technologies and continue displaying an interest in Start-ups and REITs. We communicate and cooperate with both domestic and foreign universities.

2022 OPERATIONS

Despite the challenging market conditions, we were able to manage the transaction volume of up to 900 million USD thanks to our financial power. By signing the 102 million USD loan agreement, we provided funding for the 100MW wind and solar hybrid investment within the framework of Üretim Next.

We paid **150 million USD** dividend to our shareholders for 2022 year-end profit.

Total Assets **33,2 Billion TL**

Net Sales **56,1 Billion TL**

EBITDA **8,6 Billion TL**

Net Profit for the Period **8,7 Billion TL**

Free Cash Flow **4,0 Billion TL**

Net Debt/EBITDA **0,5 x**

CFO Mert Yaycioglu and his son Alp



[Click to watch the video](#)

FINANCIAL RISKS & ACTION PLANS

In 2022, Our Asset/Liability Committee, which was established with the participation of senior management to assess financial risks and plan actions, pursued the assessment of financial risks in a proactive and regular manner and;

- Assessed company’s current and prospective deposit and loan

- positions,
- Assessed income and expenses in different currencies,
 - Assessed currency and interest risks, and
 - Determined positions to be taken and the risk management actions.

We manage the risks in cash flow and net profit/loss levels via our digital tools, by evaluating them with daily granularity and long-term analysis, incorporating thousands of different exchange rates and interest rate scenarios. Thus, we ensure the management of financial risks and obtaining optimum financial results for Enerjisa Üretim.

MANAGEMENT OF FINANCIAL RISKS

Our currency risks arising from our receivables, debts and purchase guarantees in different currencies

constitute a significant part of our financial risks. In addition, interest risks and tax risks arising from deposits, loans and/or term debts and receivables are also included in the scope of financial risks. In order to manage these risks more effectively, we assigned the Financial Risk Management department under the Risk Culture department. The basic principles, authorization and limits of financial operations, approval procedures, monitored metrics and risk management practices are determined in line with the Financial Risk Management Policy.

2022 INVESTMENTS
RENEWABLE ENERGY POWER PLANT
INVESTMENTS

We aim to further increase the share of renewable energy in our production portfolio, with wind and solar power plants at the centre of our investment.

In addition to the total capacity of 500 MW in Aydın and Çanakkale regions, which we had won via the WPP YEKA-2 tenders held by the Ministry of Energy and Natural Resources, we included a 500 MW capacity that we achieved by Enercon in Muğla and Balıkesir regions, into our investment plan. In this way, we took a step towards realizing the entire capacity of the YEKA-2 tender with an investment of approximately 1.2 billion dollars.

Wind Power Plants Director Ezgi Deniz Katmer and her son Mert



[Click to watch the video](#)

We will increase our generation capacity to 5,000+ MW in 5 years with our investments in wind and solar power plants accordingly. In this way, our share of renewable energy will increase to 60 percent.

All of our YEKA-2 projects were pre-licensed in 2022. The Environmental Impact Assessment (EIA) processes of the projects were also initiated. Our Erciyes WPP investment was put into operation in 2022, both before the targeted project schedule and below

the targeted budget.

By installing SPP in our Erciyes WPP project, we turned it into a multi-source renewable energy facility (hybrid electricity generation plant). We are happy to add 65 MW wind and 14.5 MW solar power plants to our country's grid.

By taking advantage of the electrical capacity increase opportunities of TEİAŞ, we have been entitled the right to increase the capacity for our 5 wind power plants in operation. In this respect, we will complete the permit processes of our power plants in the coming period and install approximately 48 MW. In 2022, we started the investment process of a 60 MW hybrid solar power plant while the installation of 41 MW hybrid solar power plant has been completed. Project design processes for hybrid solar power plants, which



are planned to be established in 2023 and 2024 respectively, have already begun.

In addition to all these, while we are taking steps to grow with renewable energy by tapping into wind and solar energy, we strengthen our journey by caring about new technologies such as micro wind turbines, which we continue to implement at our Bandırma Energy Base, as well as start-up collaborations.

Melis, daughter of Murat Eröz from our Head Office

[<](#)[45](#)[>](#)

We carry our sustainability approach
to every point of our business
with the responsibility of
tomorrow.

PRESENTATION

PEOPLE & CULTURE

GENERATION

TRADE

DIGITAL

FINANCE, STRATEGY & INVESTMENTS

SUSTAINABILITY



OUR SUSTAINABILITY VISION

As Enerjisa Üretim, we embrace the change and invest in people-oriented ecosystems and regenerative business models for a better future.

Through our sustainability approach, we concentrate on making our current investments more sustainable by means of our environmental, social and governance practices in our operating regions. We set our priorities within the framework of global transformation, the needs of society and our employees, and the continuity of our business models. We strive to be one of the leading companies in our industry and business world in the short, medium and long term in line with our sustainability vision and good practices we have implemented in these areas.

We consider climate change and biodiversity as our critical areas and work to improve them. We regard our renewable energy investments, digitalization and innovation as the driving force in ensuring energy supply security.

We make our social investments in the regions where we operate in line with the needs of the society and our priorities. By focusing on people in all processes, we feature our operations in the terms of occupational health and safety, employee engagement, gender equality, ethics and talent management. While carrying out all these, we manage them with a common sense alongside our internal and external stakeholders.



OUR FOCUS AREAS WITHIN THE FRAMEWORK OF OUR SUSTAINABILITY STRATEGY:

- 1. Climate Change and Environment
- 2. Energy Supply Security
- 3. Our Employees
- 4. Contribution to the Community

Our Efforts Within the Framework of Our Sustainability Focus Area

- This significant achievement in our sustainability journey will lead us to our goal of being net zero carbon by 2045.

We will achieve our net-zero carbon target by growing through renewable energy investments and transforming our existing assets. Additionally, we aim to achieve this goal with green hydrogen production, energy efficiency and process efficiency studies at Bandırma Energy Base, and efficiency improvement studies at the TFB Unit.

- Sapling planting protocols were signed with the TR General Directorate of Forestry, “Breath for the Future, Afforestation Project” and with the TR Bozcaada District Governorship, within the frame of the “Republican Mobilization”. In 2022, a total of **340,000 saplings** were planted within the scope of both projects and in the areas of influence of our facilities.
- When there is a problem in the transmission lines feeding the Tufanbeyli district in harsh winter conditions, the electricity needs of the district can be met from our Tufanbeyli Power Plant, during the maintenance periods of the transmission lines, as a social responsibility. In this respect, **3,300 MWh** of power was supplied in 2022.



Our Agrivoltaic Project

We broke new ground with an implementation that will lead the use of renewable energy in agriculture with the collaboration of Komşuköy. Agrivoltaic application, which is a way to make use of land for both agriculture and energy generation, offers us a unique opportunity for sustainable agriculture and energy. By means of the extraordinary positioning of the solar panels, plants such as blueberries, cabbage, and spinach are grown in an efficient and sustainable way with this project,

which we have put into operation with Komşuköy.



Our Honey Forest and Beekeeping Activities

As Enerjisa Üretim, within the scope of the project of Protecting Bees and Improving Beekeeping, handled under the title of Biodiversity Conservation and Development, which is one of

our priority issues within the framework of our sustainability vision, in line with the needs of the forest ecosystem and contributing to biodiversity, following activities were realized in terms of the “Creating Honey Forests” and “Beekeeping Training and Collective Fight Against Bee Diseases” projects carried out in Kahramanmaraş (Göksun) and Çanakkale (Eceabat);

- A habitat for approximately 4000 hives and 300 million bees has been built.
- Collective pesticide spraying was carried out for 51 thousand hives together with all stakeholders.
- Sustainable Beekeeping training was given to 150 beekeepers.
- Appropriate areas were determined together with the Forestry Directorate and approximately 23 thousand different types of saplings and trees were planted.

• In 2022, we created 2 honey forests in order to provide a habitat for 300 million bees, 200 million in Çanakkale and 100 million in Kahramanmaraş respectively. Working with the Union of Beekeepers and the Provincial General Directorate of Forestry in our honey forests, we have provided both support for local producers and protection of biodiversity.



Our Training Programme for Female Students

We initiated a Training Programme for Female Students in order to enable women who study in associate and undergraduate programmes and who will take a new step in business life, in order for them to undertake more roles in the energy industry and to prepare them for business life.

Within the scope of the programme, we accepted the 3rd and 4th grade female students from various universities and vocational schools in Türkiye, particularly in central regions, regardless of department.

We created the training content by tapping into Boğaziçi University Lifelong Learning Centre and our Power MBA programmes. We involved academicians from Boğaziçi University Lifelong Learning Centre and Sabancı University Executive Development Unit to our instructor staff. In our training programme, where we aimed to include 500 female students, the number of such students who were entitled to receive certificates at the end of the process was **525**.

Due to the increasing importance of individual awareness and volunteering along with the recent forest fires, we carry out activities for the prevention of forest fires and for providing conscious approaches in the fight against such fires. In this context, as Enerjisa Üretim, we organized the “Forest Fire Fighting Training” for our employees and volunteers in our ecosystem.

In cooperation with the Provincial General Directorates of Forestry, we organized specialization training sessions with our internal and external stakeholders, who were willing to volunteer in this field, provide support when needed, and ensure that the process is managed effectively with end-to-end coordination. We

completed these training sessions with the participation of 156 volunteers in 3 different regions, namely Adana (3 different training sessions), İstanbul and Balıkesir.

Within the scope of Forest Safety, we built Fire Pools in the regions required by our General Directorates of Forestry and provided the resources to enable firefighters to intervene in fires in the most effective way. We built a total of 7 fire pools in the Antalya, Muğla and Adana regions.

**RISK MANAGEMENT
ORGANIZATION AND CULTURE**

As Enerjisa Üretim, we do not only approach risk management technically and methodically, but also care about its cultural dimension. The ever-increasing volatility and obscurity necessitate the spread of risk management approach and practices today and for them to be a part of our daily decision mechanisms. In order to adapt to the changing world, we develop our Enterprise Risk Management organization and practices in accordance with the needs of the future.

In 2022, we formed two new committees in order to develop our risk culture approach, manage cultural transformation, discuss strategic and systemic risks more effectively and strengthen coordination. While the Risk Leadership Committee, which consists of the senior management team, focuses on the management of strategic and organizational risks and determining policies, the broader Corporate Risk Management Committee, which consists of our function leaders, evaluates the existing risk ecosystem, works for the early detection of systemic risks that may occur, and coordinates activities in order to spread the risk culture to the base.

With our risk management approach; we aim to define all risks and opportunities that may affect our operational, strategic and financial plans, measure and evaluate them using various methodologies and manage risks in the most effective way.

Two different departments responsible for risk management carry out risk management activities in their own fields. The Technical Risk Management department focuses on the management of technical risks, while the Risk Culture organization includes the Corporate Risk Management, Commercial Risk Management, Financial Risk Management and Business Continuity departments.

**GENERAL RISK ASSESSMENT
FOR 2022**

When the 2022 WEF Global Risks report is examined, we see that many of the most important risks identified bring along fundamental risks and opportunities for energy market players. These risks, which are also included in many different studies can be summarized as unresponsiveness to climate change, extreme weather events, natural resource crises, debt crises, rising cyber security risks and supply chain crises caused by epidemics.

We observe that risks arising from inflation and large-scale migration are added to the risks foreseen for 2023. When the results of the large-scale risk surveys for Türkiye are analysed, we see that the loss of skilled labour at the beginning of 2023 is added to the foreign exchange and market risks and economic crises that came to the fore in 2022.

2022 was also a year of high volatility and record prices for global energy markets. Price records were broken in the European natural gas and electricity markets. While the Dutch TTF (Title Transfer Facility) market, which is one of the most important liquid natural gas trade centres in the world, started at 80 EUR/MWh at the beginning of 2022, the gas shortage concerns that emerged with the Russia-Ukraine war that started at the end of February rocketed the TTF spot prices to 210 EUR/MWh. However, as Russia continued to supply gas, prices fell back to 80 EUR/MWh.

Serkan Çiftçi's son Yiğit and daughter Asiye, from our Köprü Power Plant



In June, a fire broke out in the LNG terminal (Freeport) of America, which mostly exports to Europe, causing TTF gas prices to rise to 180 EUR/MWh again. TTF spot prices rose to 308 EUR/MWh with the concern that Nord Stream 1, which was put into maintenance in July, would cut natural gas after maintenance. The record prices that came with the unprecedented volatility and uncertainty in the natural gas markets brought great risks and opportunities for companies operating in this market.

These developments in natural gas, which is one of the important sources of electricity generation, also deeply affected the European electricity markets. Germany's 2023 annual (Cal-23) contract prices averaged 935 EUR/MWh in August, but dropped to an average of 279 EUR/MWh in December. Electricity price volatility in 2022 was 300%.

The high uncertainty and volatility environment also directly affected the prices in our country, albeit at a relatively low rate. The electricity market clearing price (PTF), which was 1177 TL/MWh on average in January 2022, became 3600 TL/MWh in December 2022 with rising natural gas, coal prices and exchange rates.

As Enerjisa Üretim, we closely monitor all market risks with both asset optimization and advanced risk management tools and techniques that we have developed and used for many years in our commercial activities. We continue our commercial activities with clear risk capital and risk limit structures accordingly.

We use advanced risk management tools and techniques in order not to be negatively affected by currency fluctuations. Despite all the uncertainties, the year 2022 was completed with successful practices and high performance in terms of risk management in our company.

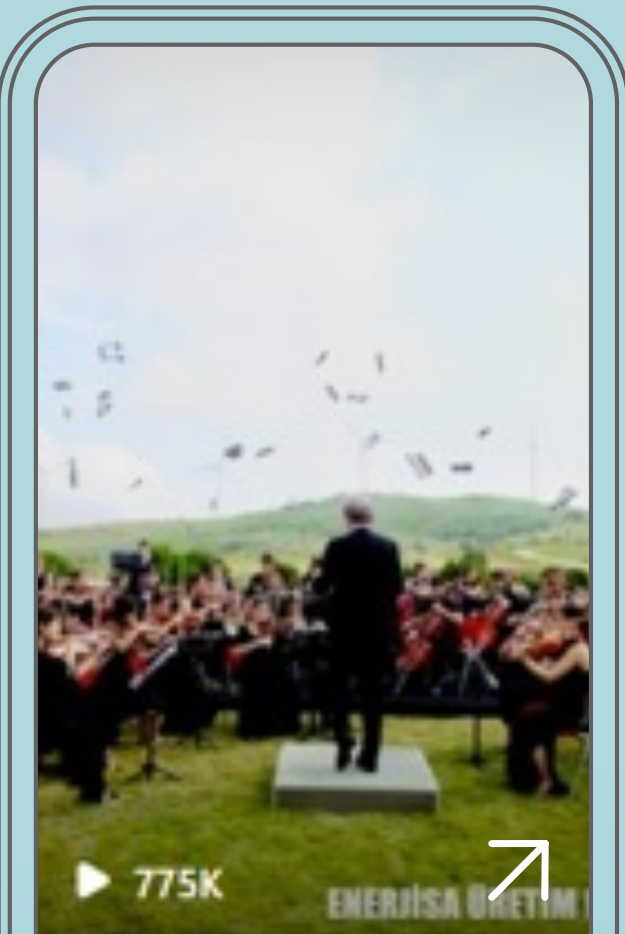
Our 3 LinkedIn posts with the most likes

Click on the image to see the post.



Our 3 Instagram posts with the most likes

Click on the image to watch.



Our 3 favourite photos from 2022, which reveals “We generate”.



Derin, daughter of Ersin Karaduman from our Head Office



INTERNAL AUDIT ACTIVITIES

Activities for the efficiency and competence of the internal control system in Enerjisa Üretim and all its subsidiaries are carried out by our Internal Audit Department. The Internal Audit Department performs three main tasks: conducting audit activities within the company, consultancy services, and ethical review practices. The department reports directly to the Audit Committee, which consists of 2 independent members of the Board of Directors. In 2022, a total of 5 Audit Committee meetings were held with the participation of the Internal Audit Department and committee members.

CONDUCTING AUDIT ACTIVITIES

With the internal audit activities conducted, the Board of Directors is provided with reasonable assurance by the Audit Committee. Risk assessment studies are carried out regularly on an annual basis by the Internal Audit Department regarding the processes, and the processes to be audited in the following year are determined through the audit universe created. The annual internal audit plan prepared is approved by the Audit Committee and the Board of Directors. The audits conducted within the framework of this plan aim to contribute to the achievement of the following objectives;

- Complying with legal regulations, contracts, authorization plan, policy and internal procedures,

- Prevention of mistakes and misconducts,
- Establishing an effective internal control system in ERP systems, other databases and business applications,
- Protecting assets, ensuring the effectiveness and efficiency of operations,
- Complying with corporate governance principles and ethical values,
- Ensuring effectiveness in internal and external reporting, performance and risk management,
- Identifying improvement opportunities and disseminating good practices.

Findings and suggestions regarding the audit carried out are discussed with the managers of the audited functions and

remedial action plans are drawn up. The auditor’s assessment on the effectiveness of the internal control system is presented in the audit report and the audit results are reported to the Audit Committee. In this context, a total of 14 audits were conducted by the Internal Audit Department in 2022.

The action plans covered in the audit reports are followed by all relevant action owners and managers through the systematically designed Internal Audit Module. Various notification and reminder e-mails and management reports set up on the system provide employees and managers with immediate access to and follow-up details about audit results.

CONSULTANCY SERVICES

During the year, specific inquiries are received from the Board of Directors, Audit Committee or senior management in order to obtain more detailed information about some business processes or to assess the current status regarding the effectiveness of the internal control environment. In this context, consultancy activities regarding business processes are carried out by the Internal Audit Department by conducting relevant studies and reporting the results. Furthermore, within the scope of consultancy services, the Internal Audit Department actively participates and provides support to social responsibility projects within the company and various projects aimed at improving business processes.

Mira, daughter of Özlem Ayas from our Head Office



ETHICAL REVIEW PRACTICES

Company employees or all stakeholders can report any potential ethical, legal or company policy violations by calling the Ethics Line at ‘[+90 216 512 42 42](tel:+902165124242)’ or by contacting the Internal Audit Department via the e-mail address of “enetikuretim@enerjisauretim.com”. All notifications are reviewed with

the principle of confidentiality and impartiality, within the scope of the Law on Protection of Personal Data No. 6698. Internal Audit Department is the sole authority to access these notifications and investigate violations. The results of the investigations and recommendations are discussed and resolved by the Workplace Behavioural Assessment Board.

PERFORMANCE REVIEW AND CONTINUOUS DEVELOPMENT

The Internal Audit Department conducts its activities in compliance with International Internal Audit Standards and Code of Conduct. This compliance is certified and approved by an independent Quality Assurance Review (QAR) carried out every 5 years as per the standards, which was last performed in 2018. The team members within the department are members of the Internal Audit Institute of Türkiye in order to improve and share their professional knowledge and experience.

ENERJİSA ENERJİ ÜRETİM A.Ş.

Barbaros Mahallesi Çiğdem Sokak Ağaoğlu
My Office İş Merkezi No: 1/6 Ataşehir/İstanbul
<https://www.enerjisauretim.com.tr>
iletisim@enerjisauretim.com.tr
(0216) 512 40 00

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SUSTAINABILITY

