



*Sustainable Energy Efficiency for Carbon Neutral Future*



**20** YEARS

**13** COUNTRIES

**10+** MTOE ENERGY AUDITS

**5+** MTON CO<sub>2</sub> EMISSION REDUCTION

**42** ENERGY PERFORMANCE CONTRACTS

**26** INTERNATIONAL PROJECTS

**1200+** INDUSTRIAL FACILITIES

**1100+** DETAILED ENERGY AUDITS

**400+** CONSULTANCIES

**1300+** TURN-KEY PROJECTS





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## ABOUT US

ESCON was established in 2004 as Türkiye's first Energy Service Company, providing holistic services and system solutions in the fields of energy efficiency, transformation and recovery; including energy audits, feasibility studies, consultancy, project planning, project financing and performance-guaranteed implementation with measurement & verification reporting. With its expert engineering team, reputable international partners, and proven know-how infrastructure, ESCON helps businesses reduce their energy costs and decrease their carbon footprints. Maintaining sectoral leadership, ESCON has successfully carried out hundreds of projects both domestically and internationally to date.

## VISION

Becoming a leader global energy service company by offering the most advanced and innovative solutions with cutting-edge technologies for sustainable future.

## MISSION

Delivering innovative, performance-guaranteed, and state-of-the-art turnkey system solutions by financing customers in the four fundamental pillars of combating climate change: energy conservation, energy efficiency, energy transformation, and renewable energy.





**Türkiye's first global energy service company, ESCON, was awarded the bronze medal in the "Energy Industry Innovation of the Year" category at the 20th Stevie International Business Awards, where 3,700 organizations from 61 countries applied.**



In today's rapidly changing and evolving dynamics of the business world, where all businesses are striving to reduce their emissions and transition to greener operations to combat climate change, the importance of being able to source all services reliably and sustainably from a one-stop-shop has become crucial. Esco4Zero, the latest innovative business model of ESCON, ensures the performance guaranteed and turnkey supply of four pillars (energy efficiency, energy recovery, energy transformation, and renewable energy) for the transition to a carbon-neutral economy and sustainable growth.







## Why Esco4Zero?

- One-Stop-Shop for holistic and sustainable energy management
- Comprehensive and green future oriented planning with tailor made solutions
- Risk free and state-of-the-art technology, implementation and operation
- No upfront capital investment and immediate cost and emissions reduction
- Contribution to sustainability goals by only focusing on core business





# ADVANTAGES

**Expertise and Specialization:** ESCOs bring specialized knowledge and expertise in energy management, efficiency technologies, and sustainable practices, allowing companies to leverage the latest advancements without the need for in-house experts.

**Comprehensive Energy Audits:** ESCOs conduct thorough energy audits, identifying areas for improvement and proposing tailored solutions to optimize energy use, reduce waste, and enhance overall efficiency.

**Cost Reduction and Savings:** Through innovative technologies and practices, ESCOs help companies reduce energy consumption, leading to immediate and long-term cost savings. Shared savings models in Energy Performance Contract (EPC) ensure a financially viable transition.

**Risk Mitigation:** ESCOs often guarantee the performance of implemented measures, mitigating risks for companies. Performance contracts ensure that promised energy savings are achieved, providing peace of mind for businesses.

**Access to Capital:** ESCOs can often provide or facilitate access to financing options for energy-efficient projects, enabling companies to implement sustainable solutions without significant upfront capital investment.

**Customized Solutions:** ESCOs tailor their services to the specific needs and goals of each client, ensuring that energy solutions align with the unique requirements of the company, its operations, and its sustainability objectives.

**Regulatory Compliance:** ESCOs stay abreast of evolving energy regulations and environmental standards, helping companies navigate complex compliance requirements and avoid penalties associated with non-compliance.

**Technological Innovation:** Partnering with ESCOs ensures access to cutting-edge technologies, allowing companies to stay ahead of the curve in adopting the latest innovations that contribute to sustainability.

**Focus on Core Competencies:** Outsourcing energy management to ESCOs allows companies to concentrate on their core business functions, delegating the complexities of energy efficiency planning, implementation, and management to specialists.

**Corporate Social Responsibility (CSR):** Working with ESCOs enables companies to enhance their CSR profiles by actively participating in sustainability initiatives, reducing their environmental impact, and contributing to broader global goals of mitigating climate change.

# 2 INVESTMENT GRADE **ENERGY AUDIT**

Embark on a transformative journey towards energy efficiency and sustainability with our Investment Grade Energy Audit (IGEA), a hallmark service offered by ESCON. Our IGEA is not just an audit; it's a strategic roadmap meticulously crafted to guide businesses and organizations towards optimal energy performance. Our certified energy professionals conduct a comprehensive analysis, delving into the intricacies of energy consumption patterns and system inefficiencies, utilizing cutting-edge technology and innovative methodologies. This audit is a key component of our commitment to delivering high-value, turnkey solutions. By identifying and prioritizing energy conservation measures, our IGEA empowers decision-makers to make well-informed choices backed by precise financial analyses. Trust in our expertise to guide you through a journey of enhanced energy efficiency, reduced operational costs, and a greener, more sustainable future. Discover the power of our Investment Grade Energy Audit as a catalyst for meaningful change in your energy management strategy.





# ADVANTAGES

**Comprehensive Understanding:** IGEA provides a thorough and detailed understanding of the current energy consumption patterns, systems, and potential inefficiencies within a facility. This in-depth analysis allows for a holistic view of energy usage.

**Identifying High-Impact Areas:** The audit pinpoints specific areas and systems with the highest potential for energy savings. This targeted approach ensures that resources are focused on measures that will deliver the most significant impact.

**Financial Accuracy:** IGEA involves a detailed financial analysis, providing accurate projections of costs, savings, and return on investment for potential energy efficiency measures. This financial precision aids decision-making and secures investment.

**Risk Mitigation:** By conducting a comprehensive audit, potential risks and challenges associated with energy efficiency projects can be identified early on. This allows for proactive planning and risk mitigation strategies.

**Basis for Informed Decision-Making:** The data and insights gathered from an IGEA serve as a solid foundation for informed decision-making. Companies can confidently choose the most effective and financially viable energy efficiency measures.

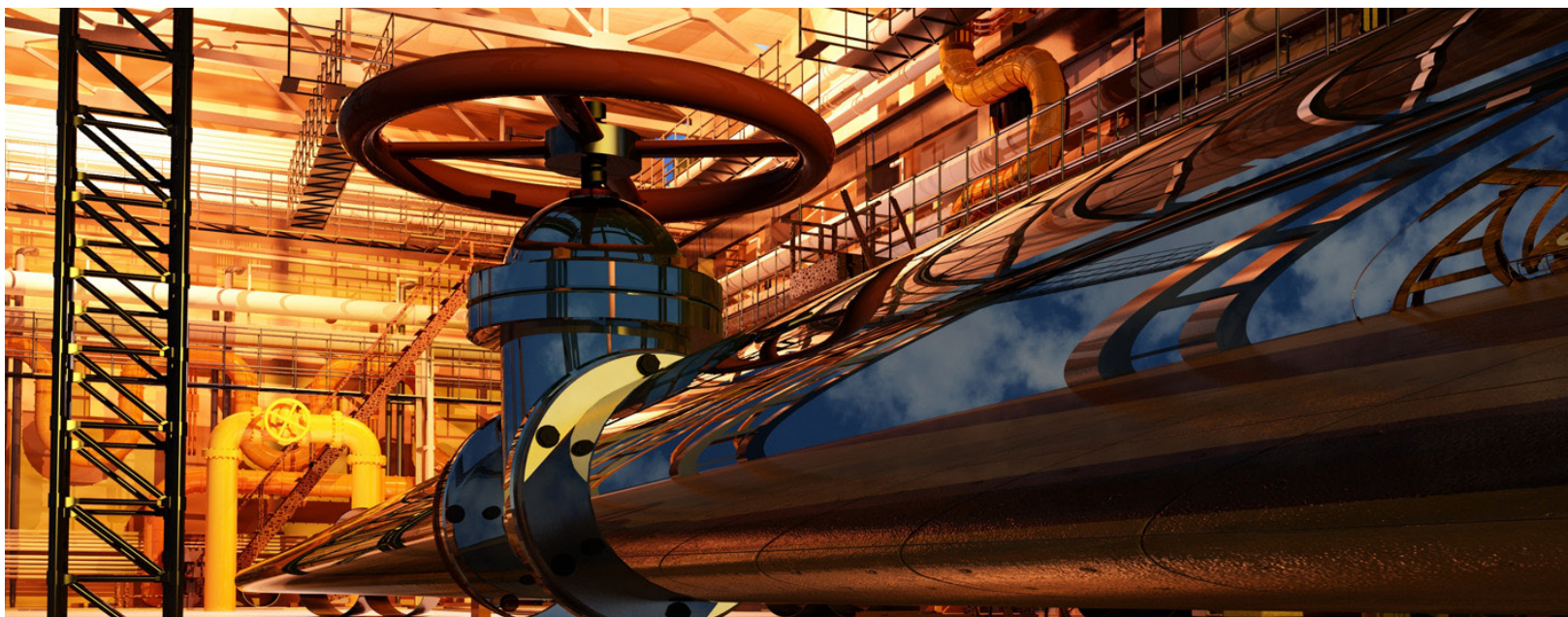
**Optimized Project Design:** The detailed information from an IGEA allows for the optimization of project design. This ensures that energy efficiency measures are tailored to the specific needs and characteristics of the facility, maximizing their effectiveness.

**Performance Validation:** Investment-grade audits typically include a measurement and verification plan, ensuring that the performance of implemented measures is accurately assessed. This validation is essential for demonstrating the success of energy efficiency initiatives.

**Long-Term Planning:** IGEA not only addresses immediate energy efficiency needs but also provides a roadmap for long-term planning. Companies can prioritize measures based on their long-term sustainability goals, ensuring ongoing improvements.

# 3 SYSTEM SOLUTIONS

Unlock the full potential of energy efficiency with our cutting-edge Energy Efficiency System Solutions, thoughtfully curated by ESCON. These innovative technologies serve as the cornerstone of a sustainable and resource-conscious future. Our comprehensive suite includes a range of state-of-the-art solutions such as waste heat recovery systems, chillers, heat pumps, boilers, air conditioning systems, compressed air systems, and pumps. Each component is meticulously designed to optimize energy consumption and reduce environmental impact. Embrace a holistic approach to energy management as our solutions seamlessly integrate into diverse industrial and commercial settings. From recovering wasted heat to optimizing air and fluid systems, our Energy Efficiency System Solutions promise tangible results in enhanced performance and cost savings. Elevate your commitment to sustainability with our transformative technologies, tailored to meet the unique energy demands of your operations. Discover the power of efficiency with our comprehensive and advanced system solutions.





# KEY TECHNOLOGIES



**WASTE HEAT  
RECOVERY  
SYSTEMS**



**COOLING  
SOLUTIONS**



**HEATING  
SOLUTIONS**



**HEAT PUMPS**



**ON-SITE POWER  
GENERATION**



**ABSORPTION  
TECHNOLOGIES**



**COMPRESSED  
AIR SYSTEMS**



**AIR  
CONDITIONING  
SOLUTIONS**



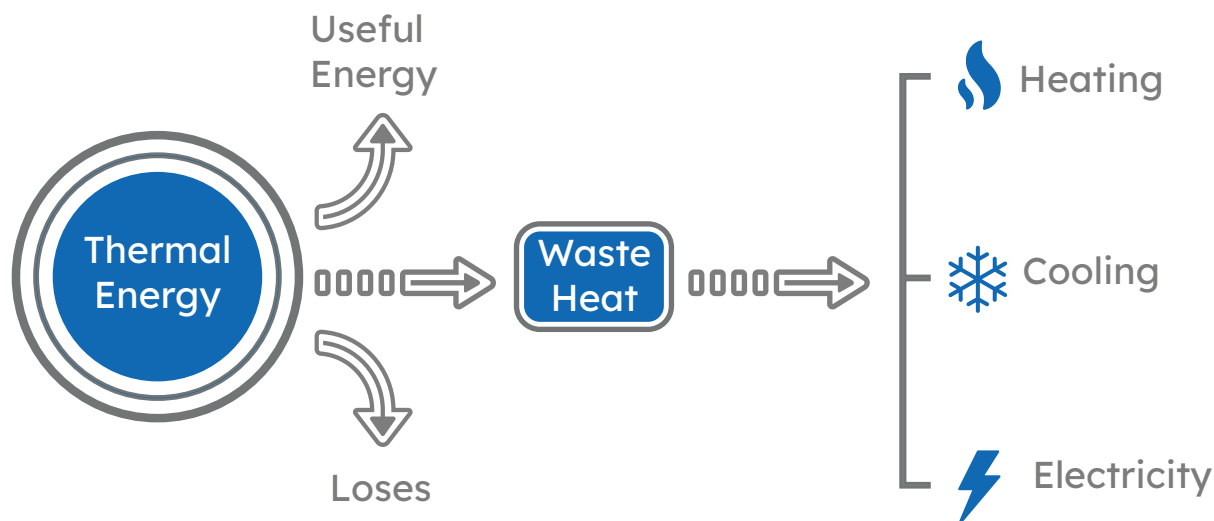
**PUMPS  
&  
FANS**



**RENEWABLE  
ENERGY**

# 4 WASTE HEAT RECOVERY

Waste heat recovery solutions play a pivotal role in addressing the growing concerns of energy efficiency and sustainability across various industries. These innovative technologies are designed to capture and harness the residual heat generated during industrial processes, which would otherwise be lost into the environment. By implementing waste heat recovery systems, industries can significantly reduce their overall energy consumption, lower greenhouse gas emissions, and enhance operational efficiency. These solutions employ a range of technologies such as expertly engineered heat recovery systems (condensing and non-condensing economizers, recuperators and boilers), organic rankine cycle systems, and absorption technologies to convert waste heat into usable energy, thereby promoting a more circular and resource-efficient approach. Whether in manufacturing, power generation, or other high/low-temperature processes, waste heat recovery not only contributes to cost savings but also aligns with global efforts to mitigate climate change and create a more sustainable future. By harnessing and converting waste heat into valuable energy resources, our solutions not only optimize operational efficiency but also pave the way towards a greener, more sustainable future. Transform waste into opportunity with ESCON's waste heat recovery solutions, leading the charge in resource conservation and environmental stewardship.





## ECONOMIZER



## CONDENSING ECONOMIZER

### ADVANTAGES

**Energy Efficiency:** It helps to reduce the consumption of primary energy sources and lowers greenhouse gas emissions, contributing to sustainable and environmentally friendly operations.

**Cost Savings:** Cost-effective solutions enhance the competitiveness of businesses and support long-term financial sustainability.

**Environmental Impact:** It aligns with global efforts to mitigate climate change and promotes responsible corporate practices.

**Resource Conservation:** As the demand for energy continues to rise, efficient use of available resources becomes crucial for sustainable development.

**Process Optimization:** Improved process efficiency leads to enhanced productivity, reduced downtime, and better product quality.

**Compliance with Regulations:** Regulatory compliance is essential for avoiding penalties, maintaining a positive public image, and ensuring long-term business viability.

**Diversification of Energy Sources:** Energy source diversity improves resilience to supply disruptions and price fluctuations in the energy market.

**Heat-to-Power Conversion:** This contributes to the overall energy mix, particularly in regions with high energy demand, helping to meet the growing needs sustainably.

**Heat Exchange Technologies:** Ongoing research and innovation lead to more effective and economically viable solutions, further encouraging the adoption of waste heat recovery practices.

**Corporate Social Responsibility (CSR):** It enhances the company's reputation, fosters stakeholder trust, and attracts environmentally conscious customers and investors.



## RECUPERATOR



## WHRB (Steam/Thermal oil)

# 5 COOLING SOLUTIONS

Experience the pinnacle of cooling technology with our High Efficiency Water-Cooled Centrifugal Chillers, proudly developed by Mitsubishi Heavy Industries and brought to you by ESCON. Representing the forefront of innovation, these chillers redefine industry standards by combining cutting-edge engineering with sustainability.

Mitsubishi Heavy Industries' expertise ensures optimal performance, energy efficiency, and environmental responsibility. Our water-cooled centrifugal chillers are designed to meet the diverse cooling needs of various applications, providing reliable and precise temperature control. Engineered for efficiency, these chillers boast an impressive balance of power and eco-consciousness, contributing to substantial energy savings and a reduced carbon footprint. Elevate your comfort and sustainability goals with Mitsubishi Heavy Industries' High Efficiency Water-Cooled Centrifugal Chillers, setting a new benchmark for cooling solutions in the modern era.

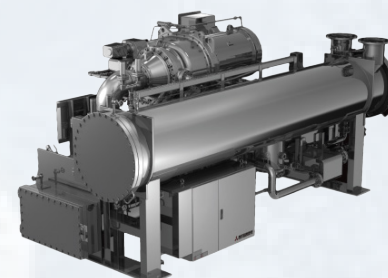
ESCON stands at the forefront of revolutionizing energy consumption patterns by spearheading innovative and sustainable cooling solutions. With a dedicated focus on designing and implementing energy-efficient cooling systems, ESCON plays a pivotal role in mitigating environmental impact while simultaneously optimizing operational costs for businesses. Leveraging cutting-edge technologies and a deep understanding of the intricacies involved in cooling processes, the company tailors bespoke solutions that prioritize energy conservation without compromising performance. By conducting thorough energy audits, employing state-of-the-art equipment, and integrating smart controls, ESCON ensures that each cooling solution is customized to meet the unique needs of its clients. Through strategic partnerships and a commitment to staying abreast of industry advancements, this forward-thinking ESCON contributes significantly to the global shift towards sustainable and eco-friendly practices in the realm of cooling, marking a commendable milestone in the pursuit of a greener and more energy-efficient future.



**ETI**



**ETI-Z / GART-ZE**



**GART**



**GART - I**





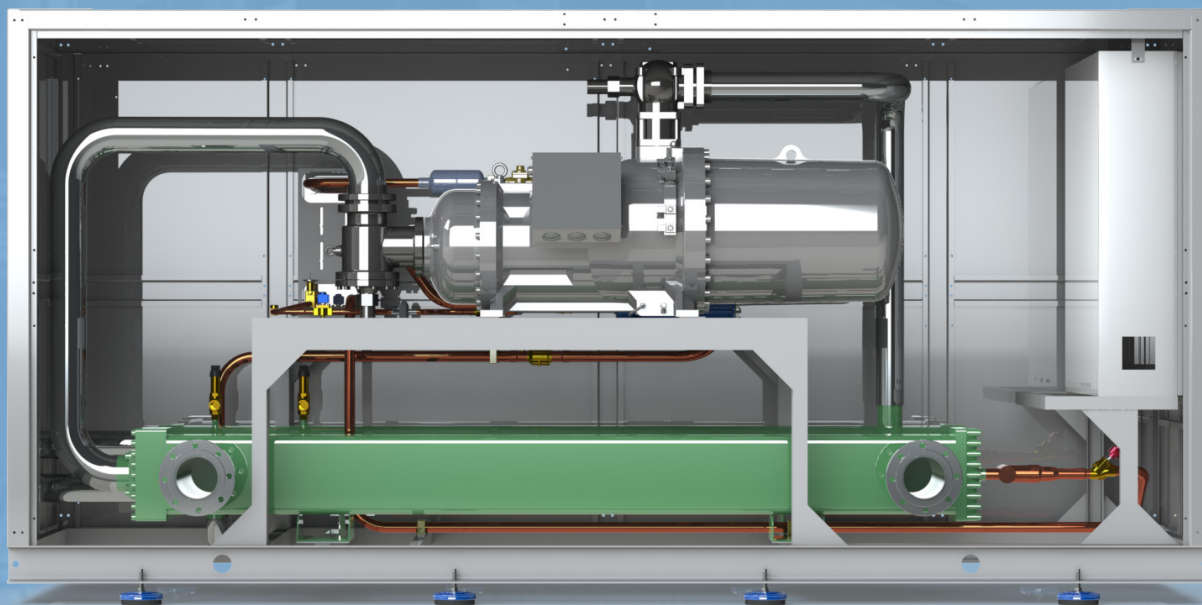
## KEY FEATURES

- Highest guaranteed performance – COP
- State-of-the-art control system for surge free operation
- Variable Frequency Drive for optimum operation
- Compact Design for ease of installation
- Lowest noise levels for smooth operation
- Low carbon footprint due to less energy consumption
- New HFO refrigerants for sustainable environment

# 6 HEAT PUMP

Introducing our cutting-edge High Efficiency Industrial Heat Pumps, a technological marvel developed and offered by ESCON. These innovative heat pumps are designed to deliver exceptional performance, harnessing both water and air sources to provide hot water at temperatures reaching up to 120 degrees Celsius and boasting an impressive heating capacity of up to 3000 kW. Engineered with precision, our heat pumps are ideal for industrial applications, ensuring reliable and energy-efficient solutions for diverse heating needs. From process heating to industrial space heating, our high efficiency heat pumps offer unparalleled versatility, delivering significant operational cost savings and reducing environmental impact. Trust in our expertise to elevate your industrial heating systems with state-of-the-art technology and a commitment to sustainability, setting new standards for efficiency and performance in the industry.

In the broader context of energy transformation and the imperative to tackle climate change, high efficiency industrial heat pumps emerge as indispensable tools in the transition towards sustainable practices. These heat pumps play a pivotal role in decarbonizing industrial processes by efficiently utilizing renewable energy sources like water and air. By replacing conventional heating methods with advanced heat pump technology, businesses can significantly reduce their carbon footprint and energy consumption. The importance of heat pumps lies in their ability to enhance energy efficiency, promote the integration of renewable energy, decreasing reliance on traditional fossil fuels, and contribute to the overall mitigation of greenhouse gas emissions. As we navigate the challenges of climate change, embracing high efficiency industrial heat pumps becomes a critical step in fostering a greener, more resilient future for industries and communities worldwide.



## KEY FEATURES

- Up to 120°C water outlet
- Up to 3.000 kW heating
- New Refrigerants and eco-friendly design
- High efficiency – COP
- Water/Air sourced design
- Variable Frequency Drive Control

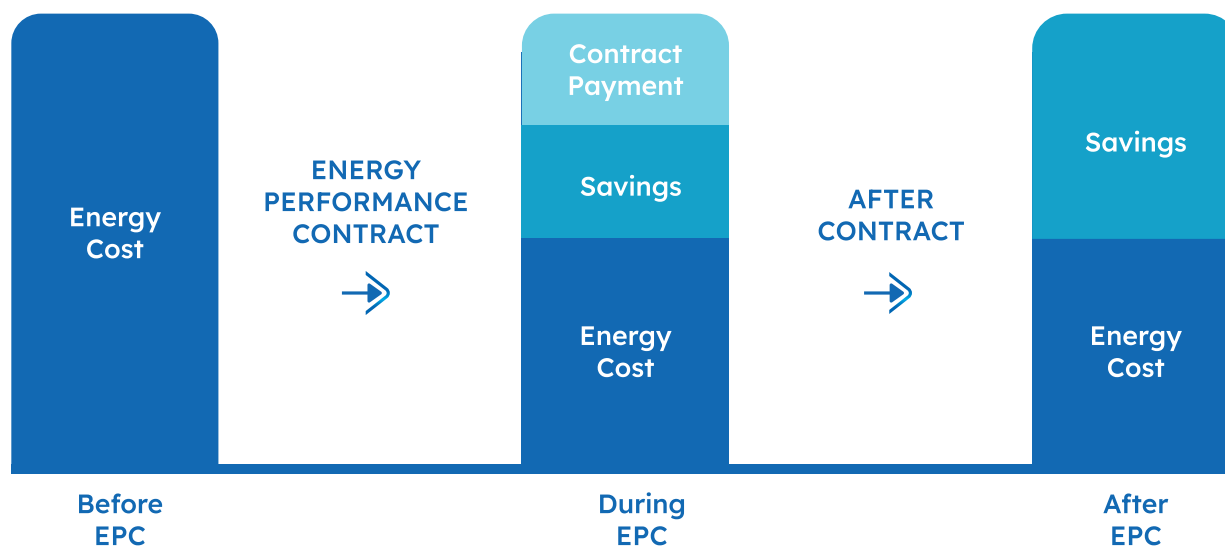
# 7 ENERGY PERFORMANCE CONTRACT

Transform your energy landscape with our innovative Energy Performance Contract (EPC) solutions, tailored to perfection by ESCON. EPC is not merely a service; it's a strategic partnership that empowers businesses to:

- Optimize energy use
- Reduce costs
- Enhance operational efficiency
- Reduce emissions

Our experienced team of energy professionals collaborates closely with clients to identify, implement, and guarantee energy-saving measures. From comprehensive energy audits to the implementation of cutting-edge technologies, our EPC solutions offer a holistic approach, ensuring a seamless and financially viable transition towards sustainability. With performance guarantees and shared savings models, our EPC services are designed to mitigate risks and deliver tangible results.

Ultimately, EPC emerges as a comprehensive and risk-mitigated strategy for companies to boost energy efficiency, reduce costs, and align their operations with the demands of a greener future. Embrace a future of energy efficiency and financial savings with our Energy Performance Contract, where innovation meets sustainable impact.





# ADVANTAGES

**Risk Transfer:** EPC agreements often involve the transfer of performance and financial risks from the company to ESCON. This assures the client that the proposed energy efficiency measures will deliver the promised results.

**Guaranteed Savings:** EPC guarantees a certain level of energy savings, providing companies with assurance that the investment will lead to measurable and verified improvements in energy efficiency.

**No Upfront Capital Investment:** One of the most significant advantages is that EPC typically involves little to no upfront capital investment from the client. ESCON covers the initial costs, recouping the investment through a portion of the energy savings over the contract period.

**Immediate Cost Reduction:** As energy efficiency measures are implemented, companies experience immediate reductions in energy costs. This can enhance cash flow and contribute to overall financial performance.

**Customized Solutions:** EPC solutions are tailored to the specific needs and characteristics of each client. ESCON conducts a comprehensive energy audit, identifying the most effective and suitable measures for the particular facility or operation.

**Efficient Project Implementation:** EPC projects often proceed quickly and smoothly. ESCON, with its expertise, manages the entire project lifecycle, from design and implementation to ongoing monitoring and maintenance.

**Measurement and Verification:** Rigorous measurement and verification processes are integral to EPC agreements. This ensures that the projected energy savings are accurately assessed, providing transparency and accountability throughout the contract.

**Enhanced Equipment Performance:** EPC often involves the installation of high-performance, energy-efficient equipment and technologies. This not only improves energy efficiency but also enhances the overall performance and reliability of systems.

**Focus on Core Business:** Outsourcing energy efficiency projects to ESCON allows companies to focus on their core competencies without being burdened by the complexities of project management, technology selection, and ongoing maintenance.

**Environmental and CSR Benefits:** EPC projects contribute to sustainability goals by reducing carbon footprints and environmental impact. Companies can align their energy efficiency initiatives with corporate social responsibility (CSR) objectives, enhancing their public image.

# 8 REFERENCES

 **ABDİİBRAHİM**



 **BASF**  
We create chemistry



 **bayındır**  
sağlık grubu

*Cargill*

*Carlsberg*



**ExxonMobil**

İPEK KAĞIT



 **KÜMAŞ**  
MANYEZİT SANAYİ A.Ş.



 **Mustafa Nevzat**

**MILU**

 **NORM**  
CIVATA

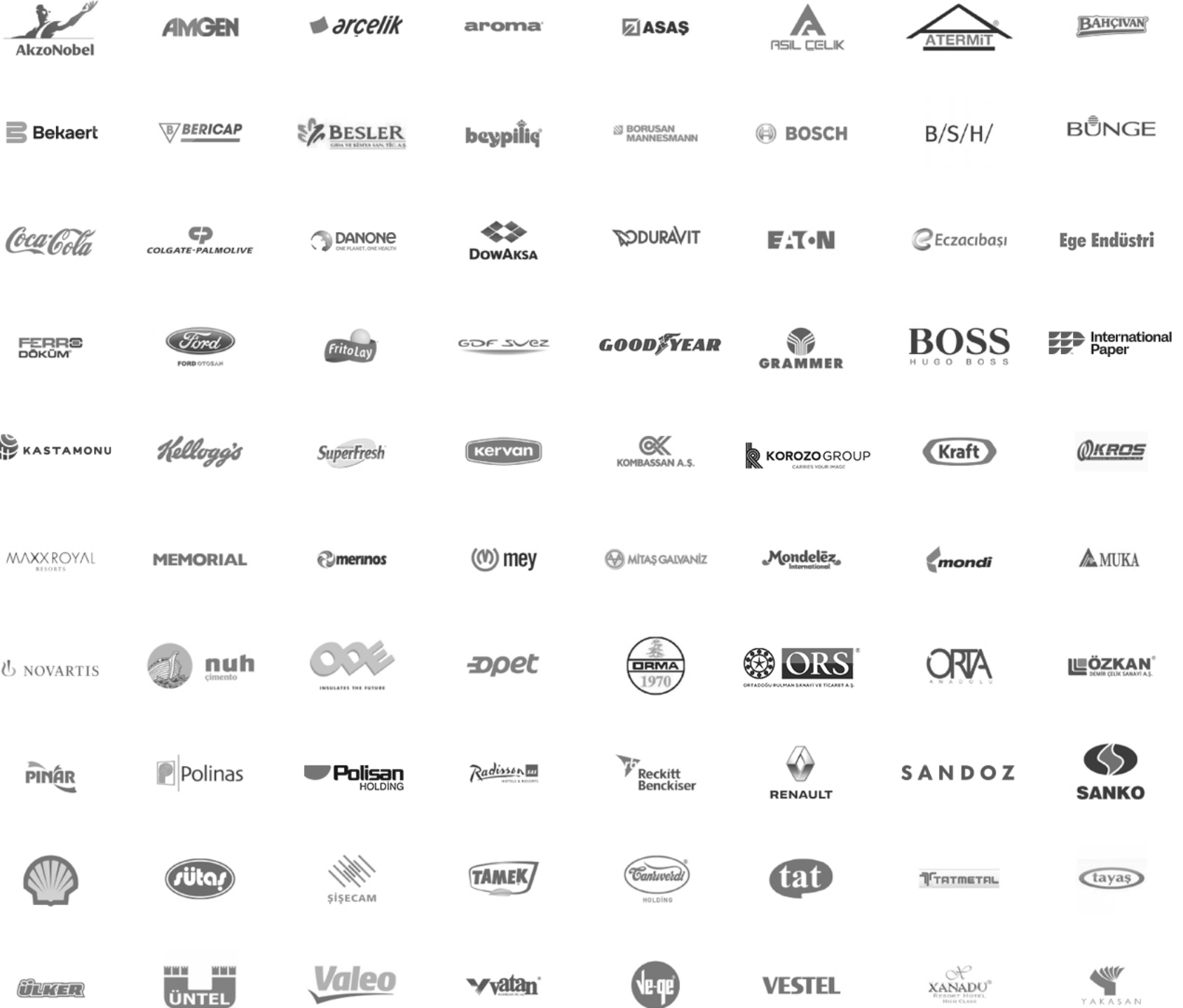
*Penti*



**TOFAŞ**  
TOSK OTOMOBİL FABRİKASI A.Ş.

 **TRELLEBORG**

 **Tükek Holding**





SUSTAINABLE ENERGY EFFICIENCY

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