



Our Energy For the Future

SOCAR Türkiye Sustainability Report 2022



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About Report

SOCAR Türkiye's business strategy emphasizes the systematic management of the social, economic and environmental impacts arising from its operations as well as the financial value it creates. This means that the company is not only concerned with making a profit, but also with its impact on society, the economy and the environment.

To achieve this, SOCAR Türkiye has adopted policies that prioritize the management of social, economic and environmental impacts. The Company's sustainability priorities and the United Nations Sustainable Development Goals also guide its activities and performance results. For example, SOCAR Türkiye prioritizes reducing greenhouse gas emissions or promoting gender equality within the company.

SOCAR Türkiye Sustainability Report 2022 provides details about the activities and performance results of the parent company and its subsidiaries in Türkiye between January 1, 2022 and December 31, 2022. The report covers a range of topics including energy consumption, greenhouse gas emissions, employee training, community engagement and supply chain management.

In order to ensure the integrity of the report, this report includes consolidated data of SOCAR Türkiye and group companies, particularly financial data. For example, SOCAR Türkiye may consolidate the financial data of Petkim, STAR Refinery and other subsidiaries to provide a more comprehensive view of the company's financial performance.

The report has been prepared in accordance with the "Core" option of the GRI Standards, which provides a framework for organizations to report on their sustainability performance. The report identifies material topics according to the "content identification" principles of the GRI Standards and takes into account the "content index quality" principles when creating the data shared.

In summary, SOCAR Türkiye's business strategy places importance on creating financial value as well as managing the social, economic, and environmental impacts of its operations. The Company's sustainability priorities and the United Nations Sustainable Development Goals guide its activities and performance results. Prepared in accordance with the GRI Standards, the report provides details on the company's performance in various areas, including the use of consolidated data from group companies.



Management Messages



Elchin Ibadov, Acting CEO

Dear Stakeholders,

As SOCAR Türkiye, in addition to addressing the challenges facing our own business and the industry, we are aware of the need to reconsider current ways of doing business. This is why we accelerate the delivery of sustainable solutions for both society and our world, and continuously focus on improving the performance of our business, putting sustainability front and center.

As Türkiye's largest industrial holding, we are determined to be at the forefront of the transition towards sustainability in line with the United Nations Sustainable Development Goals (SDGs) while continuing our activities in many sectors, particularly petrochemicals, refining, natural gas, trade, transmission and distribution. At the same time, we attach great importance to the social, economic and environmental impacts arising from our operations, the expectations of our stakeholders and the management of SDGs.

We continue to create value for people, society and the environment by using the latest technologies so that we can contribute positively to create a better society for today and future generations. Hence, our group company Petkim was ranked 8th among 206 companies in 2021 in the "ESG Rating", in which the world's leading businesses are evaluated by an independent organization. We are working to disseminate this performance in our other group companies.

In line with our sustainability strategy, while minimizing the risks arising from the effects of climate change, we aim to seize the opportunities arising from the same results in a way that will provide maximum benefit. As a pillar of our strategy, we focus on reducing emissions from our operations, and implement energy efficiency initiatives as operational moves. On the other hand, the strategic new areas we evaluated include biofuels and the use of bio-sourced or recycled raw materials in the first place.

SOCAR Türkiye supports the development and adaptation capability with low greenhouse gas emissions in order to limit the global average temperature increase to 1.5°C, which is the main target of the Paris Climate Agreement, and to create climate resistance against the negative effects of climate change. As the strongest representative of the economic cooperation between Türkiye, while contributing to employment and production, we also support the reduction of Türkiye's current account deficit. With this belief we have in Türkiye's potential and future, we take on important roles in order for Türkiye to become an effective player in the international energy arena.

Our Environmental Approach

As a leader in our industry, we are aware of our responsibilities towards society. With our SDG-based sustainability strategy, we reveal the actions we need to take to help solve difficult problems for society, such as decarbonisation, waste management and water management, which are increasingly important. Throughout 2022, we continued to develop our business and solution strategy to meet the needs of society and our customers and to combat the climate crisis. Our R&D project titled "Sustainable Bioplastic Production from Agri-Food Wastes (BIOLINK)", in line with SOCAR Head Office's vision of contributing to global sustainability through the development of low carbon emissions, circular economy and environmentally friendly operations, was entitled to be supported within the scope of Türkiye-Spain Eureka 2021 Network Projects.

Our Net Zero Journey

As SOCAR Türkiye, we take climate action seriously and are committed to decarbonizing our business at every level. In this context, we ensure the transition to net zero by investing in new technologies. As we move towards net zero by 2050, we see an opportunity to increase demand for innovative, low-impact products and solutions that help mitigate and adapt to the effects of climate change. At this point, our subsidiary SOCAR Energy Trading, in order to reduce and neutralize the carbon footprints of end consumers, will sell 13.5% of our current electricity end-consumer portfolio in 2022, ie 382 million kilowatt-hours, with the sale of green energy certified with the International Renewable Energy Certificate (I-REC). We realized it as a green energy sale.

As part of our decarbonization strategy, we are implementing studies in the fields of energy efficiency, electrification and resource management in order to reduce carbon emissions by an average of 1% annually until 2025. We set our target as 40% carbon emission reduction by 2035 and net zero emissions by 2050.

As SOCAR Türkiye, the two main focuses of our efforts aimed at reducing our greenhouse gas emissions, which are caused by the nature of our activities, are to reduce energy consumption and to obtain energy needs from alternative energy sources as much as possible. Our efforts to create value focused on energy efficiency and digitalization, which are carried out uninterruptedly under the "My Value Platform", where all improvements are centrally managed, stand out in this regard.

Throughout 2022, we continued to implement our projects that affect sustainability, production increase and capacity utilization within the scope of My Value Programme. In 2022, with our 56 projects that have a positive impact on sustainability; We saved 29 thousand MW of electricity, 17 thousand tons of natural gas, 16 thousand tons of fuel gas and 108 thousand tons of water.

With the CARMOF project, we aim to capture the carbon dioxide emitted from the flue gases to the atmosphere more efficiently in terms of energy and cost by using innovative materials and methods.

With the CO2Fokus project, we aim to convert carbon dioxide gas into dimethyl ether (DME), a low-emission diesel fuel alternative, with catalysts produced with three-dimensional printer technology.

With the LOUISE project, we aim to obtain pure carbon dioxide ready to be converted into energy and valuable chemicals from refinery and petrochemical wastes by chemical cycling method.

With the NEFERTITI project, we aim to convert carbon dioxide and water into valuable chemicals such as ethanol and isopropanol by using solar energy and artificial photosynthesis technology.



Our Human-Oriented Approach

As SOCAR Türkiye, our focus is not only on commercial gain; it is critical for us to carry out our activities in a correct and proper manner within the framework of high business ethics.

At SOCAR Türkiye, employee safety remains our number one priority. We continue to invest in safety initiatives and technologies with the overall goal of realizing a culture of safety and well-being as we strive for zero harm in all our business activities..

With our project, which aims to provide a healthier and safer working environment for the establishment and dissemination of occupational health, safety and environment (OHS-E) culture, we are concerned with making unforeseen risks visible and recognizing through video analysis and planning the right preventive and corrective actions by measuring the frequency and importance of known risks. It also uses the advantages of artificial intelligence technology.

As SOCAR Türkiye, we strive to continuously move society forward by being aware of our corporate structure and human resources practices. We strive to fulfil our mission to be recognized as an exemplary organization in Türkiye and around the world through our practices both within and outside our areas of operation, and constantly seek ways of making our employees happier.

Technology and Innovation

As SOCAR Türkiye, we prioritize following and implementing technological developments and supporting innovation in all our activities. As in previous years, we have realized many innovations in this field in 2022 and implemented new projects together with our existing projects.

In the Circular TwAln project, funded by the HORIZON EUROPE Program and ongoing at the Petkim Ethylene Oxide/ Ethylene Glycol Plant and monitored by R&D, we are designing an artificial intelligence-supported digital tool that will enable high energy savings in chemical production facilities. In this way, we aim to maximize energy efficiency while reducing the carbon footprint of chemical production processes.

As SOCAR Türkiye, we are working to turn the crises we face into opportunities to address longer-term challenges and to integrate them into our goals for the future. We will continue to bring innovation to our sector through our products and activities, create sustainable value for our stakeholder ecosystem and protect our employees.

With this innovative approach, 2022 SOCAR R&D and Innovation Inc. became the first company in the industry to receive the ISO 56002 Innovation Management System Certificate in the world. This success is a very important milestone in the field of innovation and quality management systems in our country. On behalf of both our company and Türkiye, we are proud to have pioneered the first certification among International Standards in Türkiye.

In our long-standing sustainability journey, we are constantly improving ourselves with the support of our employees. This report is proof of that. Our report, which we have prepared in accordance with GRI Oil and Gas industry standards, has been prepared with the contributions and efforts of all our business units. At this point, I would like to express my sincere thanks to all our stakeholders who contributed to SOCAR Türkiye's sustainability journey, especially my colleagues who contributed to the preparation of this report.

Elchin Ibadov, Acting CEO





About SOCAR Global

SOCAR is an energy company that offers integrated solutions to create economic, social and environmental benefits on a global level and continues to develop its international operations through strategic partnerships. It carries out activities related to the exploration, production and processing of oil and natural gas resources, distribution of oil, natural gas and natural gas condensates, national and international marketing of crude oil and petrochemical products and natural gas supply.

Operations in Azerbaijan

Founded in 1992 in Azerbaijan, SOCAR utilizes the resources of the country, which is among the world's richest in oil and natural gas, for international development and benefit. SOCAR rapidly strengthened its international operations, establishing representative offices in 13 different countries, founding international trade companies in Singapore, Vietnam, Nigeria and Switzerland, and acquiring assets in Türkiye, Georgia, Ukraine, Romania, Switzerland and Greece. SOCAR realized the most important of its strategic projects worldwide in Türkiye, where it created an integrated value chain in the energy sector with an investment of approximately of \$18 billion and played an important role in the future of the two brotherly countries with the power of friendship within the framework of cooperation and trust.

SOCAR Global Areas of Operation



Exploration



Production



Refining and Gas Processing



Petrochemicals



Communication (Transfer)



Services

SOCAR Türkiye

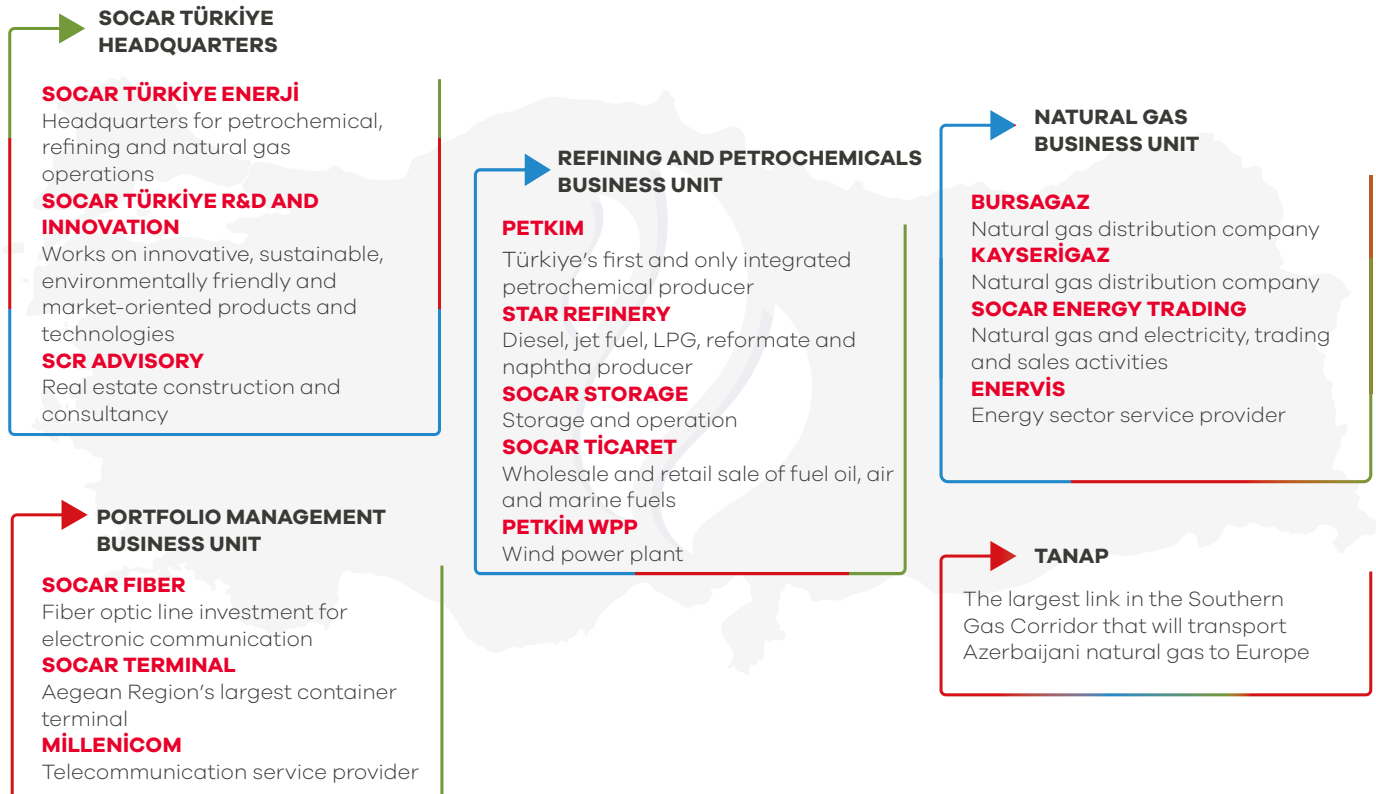
SOCAR Turkey Enerji A.Ş. (SOCAR Türkiye), a subsidiary of Azerbaijan's state-owned oil and gas company SOCAR, is one of the largest oil and natural gas companies in Türkiye. SOCAR Türkiye was established in 2008 following the privatization of Petkim by purchasing a 51% stake from the Privatization Administration. It operates in the petrochemical, refining, natural gas trading and distribution sectors and applies the cluster model to create an integrated value chain from crude oil to the final product.

SOCAR Türkiye is the largest industrial holding in the country and continues to successfully develop its operations. It was the first company in Türkiye to grant the title of "Special Industrial Zone" to its land in Aliğa, which houses the majority of its investments. As a symbol of the developing economic partnership between Azerbaijan and Türkiye, SOCAR Türkiye's investments support the country's goal of becoming a major player in the international energy arena. SOCAR Türkiye's total investments in Türkiye are expected to reach \$19.5 billion while the total value of its investments in Türkiye has been accomplished as \$18 billion with its growth-oriented projects in natural gas, refinery and petrochemicals.

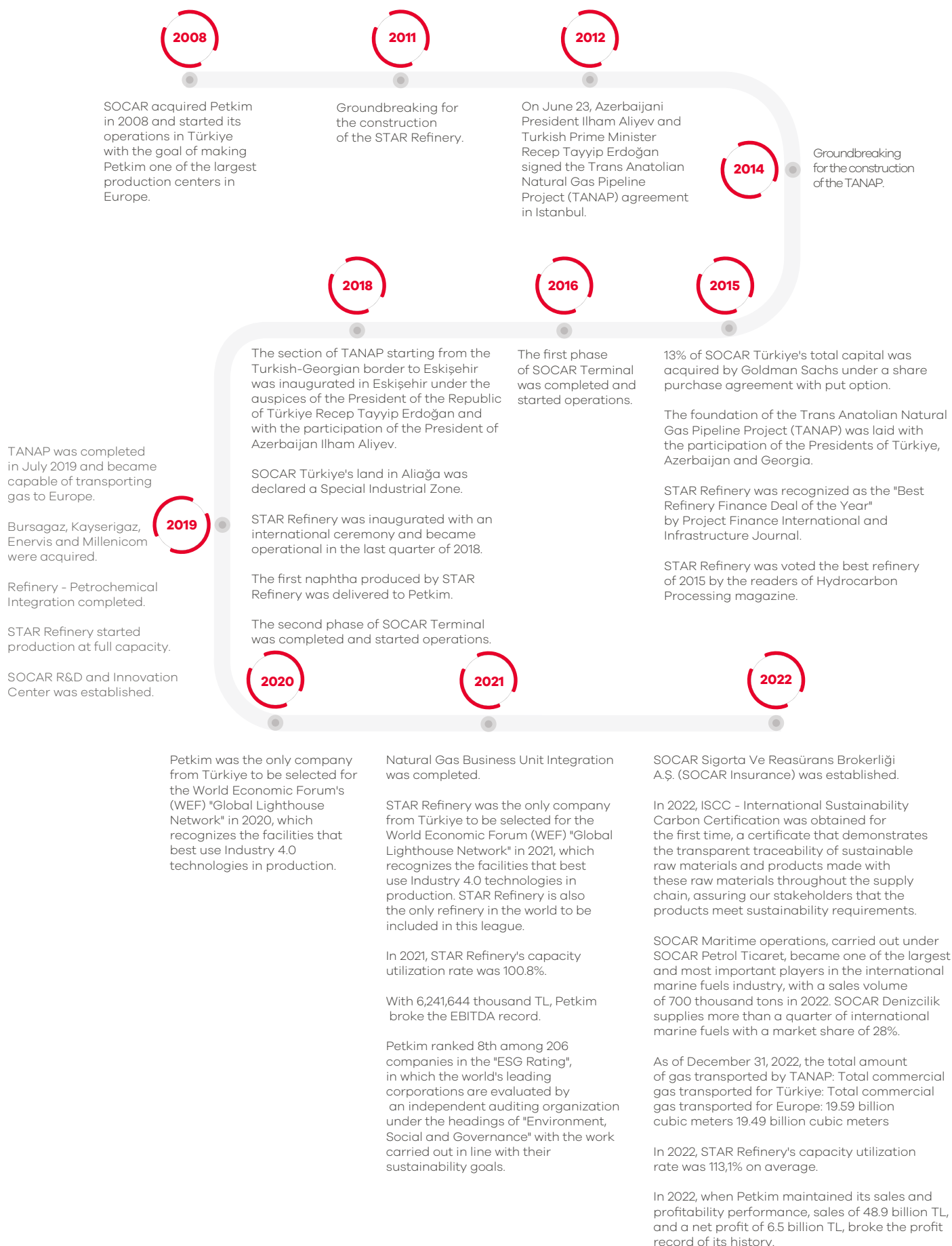
Within the scope of its \$18 billion investment plan, SOCAR Turkey Enerji A.Ş. continues to implement its strategies to maximize the competitiveness of the energy sector. Having completed the integration process in refineries, petrochemicals, energy, logistics, distribution and storage sectors, the group is Türkiye's largest industrial holding. The Group includes leading companies in different sectors such as Petkim, TANAP, STAR Refinery, SOCAR Terminal, Petkim WPP, Bursagaz, Kayserigaz, Enervis, SOCAR Energy Trade, Millenicom, SOCAR Ticaret, SOCAR Storage.

SOCAR Türkiye at a Glance

After the strategic investments it took, in 2020, SOCAR Türkiye, continues its activities as Türkiye's largest integrated industrial holding.



Milestones





Corporate Governance

The Board of Directors, the top management body of SOCAR Turkey Enerji A.Ş., consists of 7 members in total, including the Chairman and 6 members. CEO (General Manager) is not a member of the Board of Directors and there are several committees established at various levels to ensure effective coordination between the Board of Directors and executive activities. These committees consist of the Audit Committee, Early Detection of Risk Committee, Corporate Governance and Sustainability Committee and Remuneration Committee, which report directly to the Board of Directors.

With the refining-petrochemicals-energy-logistics-distribution integration process, the management operations of group companies are consolidated under SOCAR Türkiye, creating synergies that provide strategic investment opportunities in critical and strategic areas such as risk management, talent management and portfolio management.

The BIST Sustainability Index, launched by Borsa Istanbul in 2014, evaluates companies every year according to their sustainability management practices. Petkim is consistently included in this index as an indicator of its strong commitment to sustainability and social responsibility.

SOCAR Türkiye determines its senior management remuneration policy in accordance with the SOCAR Türkiye total profit procedure. The Company uses global assessment methods to determine the salary level of its senior management based on business size calculated using market data produced by global data providers as a benchmark. This approach ensures that the company's remuneration policy is in line with industry standards and reflects the market value of its executives.

In addition to base salaries, performance bonuses are paid annually upon the decision of the Board of Directors. The amount to be distributed is determined by taking into account company performance and the budget approved by the Board of Directors. This approach ensures that the bonus is linked to performance and aligned with the company's overall financial objectives.







Board of Directors and Senior Management

Committees

Audit Committee

The Audit Committee is responsible for overseeing the effectiveness and adequacy of SOCAR Türkiye's internal control systems, the functioning of the accounting and reporting systems and the integrity of the information produced by these systems. They also oversee the effectiveness and appropriateness of independent audit processes and internal audit mechanisms and make recommendations and suggestions when necessary. The Audit Committee consists of at least two non-executive members elected by the Board of Directors from among its own members and convenes at least four times periodically throughout the year.

Corporate Governance and Sustainability Committee

On behalf of the Board of Directors, the Corporate Governance and Sustainability Committee makes recommendations and suggestions for initiatives that will ensure SOCAR Türkiye's commitment to the highest corporate governance standards and contribute to the development of corporate governance. The Committee focuses on sustainable practices and aims to improve the company's sustainability performance by overseeing the implementation of sustainable policies and practices. The Committee aims to strengthen SOCAR Türkiye's position in the market and promote long-term success by promoting good corporate governance and sustainable development.

The Corporate Governance Committee is responsible for evaluating and reporting on SOCAR Türkiye's compliance with corporate governance principles. In this context, it reviews the corporate governance practices of all committees and provides suggestions and recommendations to the Board of Directors. It also assesses the effectiveness and adequacy of the independent audit process and internal control mechanisms. The Committee provides suggestions and recommendations for the nomination of members of all committees reporting to the Board of Directors, the development of corporate governance practices regarding the remuneration of Board members and senior executives, and to ensure that these practices are applied fairly to all employees. It also monitors sustainability issues at board level and ensures appropriate governance. Provides advice and guidance on sustainability strategy.

Remuneration Committee

It is responsible for making recommendations and suggestions to the Board of Directors on issues related to the determination of candidates for board members and senior executives and the development of corporate governance practices regarding the remuneration of executives. The Committee aims to ensure that the company's remuneration policies and practices are in line with industry standards and support the long-term success of the organization.

The Remuneration Committee operates in accordance with the best practices in corporate governance and is composed of independent board members and experts in the field of executive remuneration. The Committee meets periodically throughout the year to review and evaluate remuneration policies and practices and to make recommendations to the Board of Directors.

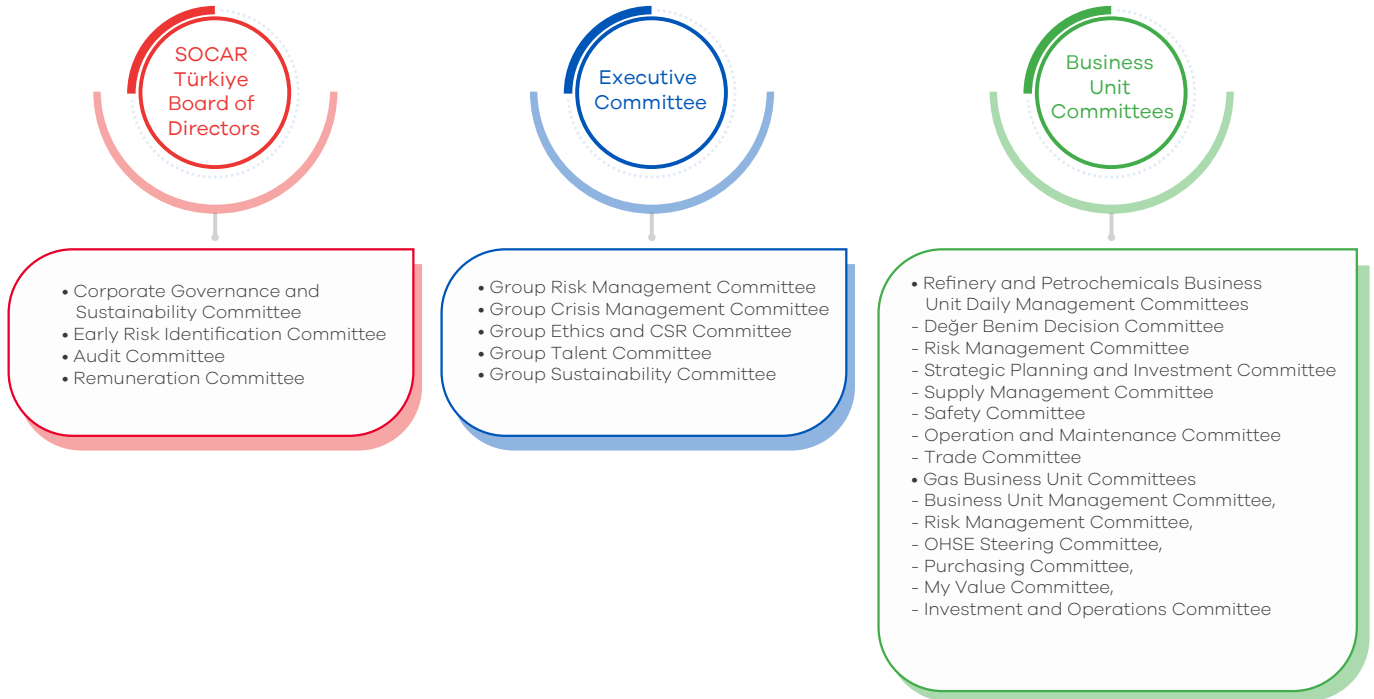
Executive Committee

The Executive Committee is responsible for assessing and presenting to the Board of Directors the proposals raised by all committees that support corporate governance activities and report to the CEO. The Committee meets monthly under the chairmanship of the CEO.

Other Committees

In addition to the committees reporting to the Board of Directors, the committees that support corporate governance activities and report directly to the CEO are the Group Risk Committee, Ethics and Corporate Social Responsibility Committee, Sustainability Committee, Investment Subcommittee, Strategic Development Subcommittee, HR and Performance Management Subcommittee and Crisis Management Subcommittee.

On behalf of the Board of Directors, the Early Detection of Risks Committee makes suggestions and recommendations on identifying, defining, prioritizing, monitoring and reviewing strategic, financial, operational and other risks and opportunities that may affect SOCAR Türkiye's activities by calculating their impact and probability; managing, reporting and taking into account these risks and opportunities that may be exposed to in parallel with the Company's risk profile in decision-making mechanisms.





Risk Management

There are many opportunities that SOCAR Türkiye faces during its operations, as well as many strategic, financial, operational, legal and similar risks that it may be exposed to. In order for the company to achieve its strategic goals, these uncertainties that may affect its sustainable development, as well as the opportunities that may be obtained, must be identified early and managed systematically. With this aim, a comprehensive corporate risk management model has been established within SOCAR Türkiye.

Risk management processes throughout the Company are managed by the experts responsible for these processes under the supervision of the Early Detection of Risk Committee organized at the Board of Directors level, within the framework of the decision taken by the Group Risk Committee, which reports to the CEO at the senior management level. The risk management function is positioned to support the company in achieving its goals and decision-making processes. During the planning and implementation phases of the strategy, target-based risk assessments are made within the framework of risk management, and it is ensured that the necessary actions are taken in a timely manner to achieve the targets through potential impact analysis and probability calculations and that resources are used based on these criteria.

In addition, decision-making processes are supported with a risk perspective by making situation-specific risk assessments at strategic investment requests, critical stages of projects and decision moments that may have a significant impact on operations within the company.

The SOCAR Türkiye Risk Management Unit was positioned under the Board of Directors in a centralized manner within the organization in order to provide support to all group companies on senior management and unit basis in accordance with international standards, particularly ISO 31000 Risk Management Standard. This choice ensures the efficiency, objectivity and independence of the work. The Board of Directors approved the "Risk Appetite Declaration" on December 12, 2020, which sets the limits of the risks that can be taken as a basis both in the risk management process and in the company's activities and decision-making areas.

In addition to the traditional risk registry list, SOCAR Türkiye has created an Environmental, Social and Governance Risk Registry List where sustainability risks are analyzed in line with global concepts such as the Paris Climate Agreement, the European Green Deal and Net Zero Carbon, as well as sectoral needs.

The requirements of the ISO 31000 Risk Management System Standard were taken into consideration when creating this list. In the work carried out according to this standard; difficult situations that may be encountered in the future are anticipated, time is saved, proactive management is encouraged, loss prevention and case management are improved, compliance with relevant legal and regulatory requirements and international norms is helped, business continuity is ensured and the standard provides guidance on similar issues.

The Environmental, Social and Governance Risk Register is based on the COSO (Committee of Sponsoring Organizations) internal control guidelines and best practices from around the world. When organizing the aforementioned risk list, the steps of Risk Identification, Risk Definition, Risk Analysis, Risk Assessment and Risk Treatment are followed. The report resulting from these steps is classified in accordance with international reporting (TCFD, PRI, CDP, etc.).

Corporate Risk Management Practices

The Company conducts its activities in a transparent, accountable, fair and responsible manner. The Board of Directors establishes internal control systems, including risk management, information systems and processes that can minimize the effects of risks that may affect the Company's beneficiaries, particularly shareholders, by taking into consideration the opinions of the relevant committees of the Board of Directors.

The Early Detection of Risk Committee makes recommendations and suggestions to the Board of Directors regarding the early detection and evaluation of all kinds of risks that may affect the Company, calculation of their impact and probability, management and reporting of these risks in accordance with the Company's corporate risk-taking profile, realization of necessary actions regarding the risks identified, taking them into consideration in decision-making mechanisms and establishment of effective internal control systems in this direction. In 2022, 6 reports were prepared by the Early Detection of Risk Committee and submitted to the Board of Directors.

As a result of the analysis and assessments made in the process of managing risks in which the attitude towards risk is determined, a decision is made between four different attitudes. These are risk acceptance, risk mitigation, risk transfer and risk avoidance. In order to systematically manage corporate risk management activities, the Company has categorized risks into 6 main categories based on the 'SOCAR Türkiye Risk Appetite Statement' document. These are OHS-E risks, compliance risks, reputational risks, operational risks, financial risks and strategic risks.

OHS-E Risks

Risks specific to OHS-E were also prioritized by the Board of Directors. Risks in this category primarily involve human life and health, but also the environment, biodiversity, society, operational safety and other similar issues. In this context, a specific risk management process has been developed to respond in a timely and effective manner to risks arising from climate change, which may be triggered by global trends and sectoral needs.

Compliance Risks

Based on the fact that there is no risk appetite by the Board of Directors for non-compliance with local legislation, regulations and other regulatory items, initiatives have been taken to establish several governance structures within the Company.

In order to ensure compliance with the Competition Law, a decision was taken by the members for the approval of the SOCAR Türkiye Competition Compliance Policy by the Board of Directors at the last risk committee of 2021. As a continuation of the process, practices are planned for annual compliance programs where different competency, analysis and awareness activities will be carried out.

Another important aspect is to ensure compliance with internal regulations, policies and procedures. The development of different governance mechanisms, control environments and organizational structures have been ensured to create this assurance. It is aimed to develop the established approaches by deepening and broadening over time.

Reputational Risks

Reputational risks are inherently included in the main risk categories. At the highest level of reputational risk management, the Board of Directors has made it clear that there is no risk appetite for any decision, activity or action that could damage brand value. In the implementation of any process within the company, brand value is always the primary consideration.

In addition to the aforementioned, necessary governance mechanisms have been established to prevent bribery, misconduct, abuse and human rights violations that may have a negative impact on reputation as a result of the Company's operations.

Ultimately, the Company has identified reputational risks as one of the most important issues to ensure that the protection of the rights of large and small investors is always prioritized and no victimization is allowed to occur.



Operational Risks

Within the scope of operational risks, studies are carried out on the management of human resources, information technologies and security risks. Operational risk studies, which basically aim to manage operations in a safe manner, also aim to comply with laws and regulations and protect physical assets.

During operations, the Company pays utmost attention to risks that may jeopardize environmental and occupational health, continuously monitors laws and regulations and provides training to personnel. In addition, emergency response plans are developed and drills are conducted to ensure the shortest and most effective response in emergencies. Sample analyzes are carried out in order to monitor compliance with laws and regulations of the wastes generated as a result of production and are monitored on a daily and instant basis. During the periodic audits carried out throughout the year, the incident detection and notification forms created on the system are used to determine whether environmental, occupational health and safety risks are caused by people, processes or systems, and necessary corrective actions are taken. Therefore, operations are made safer.

Risks in the field of human resources are also monitored in order to realize the Company's goals and strategies, to keep employee satisfaction at the highest level and to increase corporate loyalty. Efforts in this area are carried out in line with the principle of employee orientation, which is also among the Company's values. Professional information is provided to employees through trainings in various fields, and employee motivation is increased through activities organized for employees.

The Company continuously invests in the field of information technologies and tries to manage the risks that may arise in this field both with its own personnel and by receiving consultancy when necessary. In program changes and revisions, studies are carried out with consultancy and the suggestions from the consultants are implemented as soon as possible. Periodic backups are made and measures are taken to prevent loss of corporate information.

The Security Department, which operates to ensure security throughout the Company, carries out deterrent and preventive activities with the measures it takes and the practices it implements in compliance with the Security Management Standard and relevant laws and regulations. In addition, technology is utilized effectively and sufficient tools and equipment are available. The training and training of security personnel is given importance and activities in this field are periodically carried out and audited. In addition to the security measures taken, the Company's assets are also secured with comprehensive insurances.

Financial Risks

Within the scope of financial risks, the Company manages interest rate, currency, credit and liquidity risks. National and international economic developments are continuously monitored and necessary measures are implemented by taking into account the impact of economic developments on assets and liabilities. In addition, specific metrics and policies have been developed for financial sustainability in the face of the economic impacts of the pandemic.

In order to manage interest rate risk, the amount, maturity and interest rates of interest rate sensitive assets and liabilities are carefully monitored and balanced in favor of the Company.

The Company conducts high volume of foreign currency transactions both in the purchase and sale of goods. For this reason, foreign exchange transactions are strictly monitored within the relevant directorate. Foreign exchange rate risks are managed mainly through on-balance sheet transactions.

The approach to managing credit risk ensures that there are no unmanageable transactions. No risk is taken and full assurance is provided.

The Company attaches importance to asset-liability balance in the management of liquidity risks and monitors liquidity on a daily basis to avoid maturity mismatches and payment problems. Credit risk management policies and systems to facilitate the collection of receivables are actively utilized. This method increases the liquidity of receivables and at the same time guarantees them.

Strategic Risks

Strategic risks consist of different categories of risks that may pose an obstacle to the Company's short-, medium- and long-term strategies.

A risk management process has been developed specifically for strategic risk management. The process is based on an analytical model that enables the calculation and forecasting of the collective impact of strategic risks on relevant objectives. The purpose of strategic risk management is to ensure the success of the strategy and data-based decision making.

This approach supports strategy management to develop and successfully implement plans and tactics that are in line with the corporate governance structure and business processes by utilizing the Company's resources effectively and efficiently.

In addition, in case of specific demands on investment decisions, the addition of a risk management perspective aims to align with current strategic priorities and enhance the value chain.





Sustainability Management

SOCAR Türkiye has an ambitious vision to integrate the best and scalable sustainability strategy into the entire value chain, mitigate risks and seize business opportunities, and assess all critical sustainability opportunities to become a leader among SOCAR Global and other oil and gas companies. In today's global world, sustainability has become critical to corporate strategy. Acting responsibly and building strong partnerships are essential for a sustainable world. SOCAR Türkiye takes into account the growing concerns about climate change. Aware of its responsibility to achieve the United Nations' 17 Sustainable Development Goals, SOCAR Türkiye monitors the social, environmental and economic impacts of all its activities and adopts an effective communication approach based on transparency with all its stakeholders.

SOCAR Türkiye is developing sustainability strategies to prevent climate change risks caused by greenhouse gas emissions, to adapt its business model to the energy transition and to maintain its leading position in the sector by seizing the opportunities of this transition. In this regard, it sets emission reduction and climate change-related targets based on these strategies. SOCAR Türkiye's Sustainability Committee monitors its strategies, practices, realizations and declarations regarding climate change.

SOCAR Türkiye conducts periodic Environmental, Social and Governance (ESG) assessments with the assistance of independent audit organizations to understand the risks SOCAR Türkiye is exposed to and to identify gaps in risk management strategies. This enables the company to continuously improve its ESG performance by implementing measures to mitigate risks and seize opportunities.

The results of ESG assessments are used to direct the company's sustainability strategy, including efforts to reduce greenhouse gas emissions, adapt the business model to the energy transition and set climate change-related targets. The Sustainability Committee oversees the implementation of these strategies, monitors progress and keeps track of global developments in sustainability.

Contribution to UN Sustainable Development Goals

The Sustainable Development Goals (SDGs) include a range of strategies in development areas such as ending poverty, protecting oceans and forests, mitigating climate change, reducing inequality and promoting environmental, social and economic and economic growth. These goals are not only the responsibility of governments, but also require the joint efforts of companies, civil society organizations and humanity as a whole.

While SOCAR Türkiye supports all SDGs, it has identified 8 priority SDGs based on its dialog with stakeholders and global standards set by national and international industry associations. These priority SDGs are Industry, Innovation and Infrastructure (Goal 9), Partnerships for the Goals (Goal 17), Responsible Production and Consumption (Goal 12), Decent Work and Economic Growth (Goal 8), Climate Action (Goal 13), Clean Water and Sanitation (Goal 6), Affordable and Clean Energy (Goal 7) and Gender Equality (Goal 5).





















































Policies

- Anti-Corruption and Trade Controls Policy
- Occupational Health, Safety and Environment (OHS-E) Policy
- Corporate Risk Management Policy
- Business Continuity Policy
- Information Security Policy
- Sustainability Policy
- SOCAR Türkiye Human Rights Policy and Guidelines
- SOCAR Türkiye Diversity, Equality and Inclusion Policy
- Integrated Management System Policies



Management Systems Certificates*

| | Petkim | STAR Refinery | SOCAR Storage | SOCAR Terminal | Bursagaz | Kayserigaz | Enervis | SOCAR Türkiye R&D and Innovation |
|--|---|---|---|---|--|---|---|---|
| ISO 50001 (Energy Management System) |  |  | | |  |  | | |
| ISO 14001 (Environmental Management System) |  |  |  |  |  |  | | |
| ISO 45001 (Occupational Health and Safety Management System) |  |  |  |  |  |  | | |
| ISO 9001 (Quality Management System) |  |  |  |  |  |  | | |
| ISO 27001 (Information Security Management System) |  |  | | |  |  | | |
| ISO 17025 (Laboratory Quality Management System) |  |  | | | | |  | |
| ISO 22301 (Social Security and Business Continuity Management System) |  |  |  | |  |  | | |
| TS ISO 10002 (Customer Satisfaction Management System) |  | | |  |  |  | | |
| TS ISO 31000 (Risk Management System) |  | | | |  |  | | |
| TSE Covid-19 (Safe Service Certificate) | | | | |  |  | | |
| ISO 55001 (Asset Management System) |  |  | | | | | | |
| ISCC (International Sustainability Carbon Certification) |  | | | | | | | |
| ISO 14064-1 (Standard for the quantification and reporting of greenhouse gas emission and removals at an organizational level) | | | |  | | | | |
| ISO 56002 (Innovation Management System) | | | | | | | |  |

*Current quality management systems cover all operations, sites and employees of our companies.



Ethics, Compliance and Transparency

SOCAR Türkiye and its group companies act in compliance with internationally accepted business ethics rules in all their organizational structures and activities.

We make the "SOCAR Türkiye Code of Ethics", which is available on SOCAR Türkiye's website, accessible to the relevant individuals with full transparency. These rules are binding on managers and employees at all levels within the company, employees of subsidiaries and all business partners of SOCAR Türkiye and group companies. SOCAR Türkiye's Code of Ethics is built on the values of trust, agility, inclusiveness, efficiency, passion and obligation, and shapes SOCAR Türkiye's way of doing business with the guidance of doing the right thing. Our Code of Ethics constitutes an important part of our corporate culture, guiding our employees, business partners acting on behalf of SOCAR Türkiye, suppliers and contractors in making the right and ethical choices in today's rapidly changing world.

An internal program has been established to achieve success in compliance, which occupies an important place within the SOCAR Türkiye Code of Ethics. The 2023 Compliance Plan was prepared and submitted to the Supervisory Board for approval. The plan approved by the Supervisory Board covers all compliance activities to be carried out in 2023. The Compliance Group Coordinatorship, which is located within the Audit, Risk and Compliance Group Directorate reporting to the Chairman of the Board of Directors, is responsible for coordinating compliance activities throughout the Company.

Compliance with the Code of Ethics and SOCAR Türkiye's internal policies and procedures is the responsibility of all employees and all third parties acting on behalf of SOCAR Türkiye. Anyone who thinks or suspects that these rules are not being followed, or who has questions about them, should speak up.

Those who wish to share in this context should notify the SOCAR Türkiye Ethics Line. Although notifications may be made anonymously if desired, SOCAR Türkiye will not tolerate any retaliation or discrimination against anyone who makes a notification in good faith and those who attempt to do so will be subject to disciplinary action. The same sanctions apply to those who deliberately make false or misleading notifications.

The Ethics Line, which is designed to be open to anonymous reporting by SOCAR Türkiye employees and/or third parties via electronic mail, telephone and letter, is used to report ethical concerns, violations and suspicions of bribery and corruption. Ethics Line notifications can only be viewed by the Compliance Group Coordinator and the Audit, Risk and Compliance Group Director. This system, which reports to the Board of Directors and not to executive functions, guarantees the independence of the line.

With this structure, the management of the Ethics Line has been entrusted to a function reporting to the Board of Directors rather than to the executive functions, thus providing the necessary independence. The Ethics & CSR Committee and the Audit Board are informed about the number, types and resolution status of Ethics Line notifications at regular meetings.

The SOCAR Türkiye Ethics & Corporate Social Responsibility (CSR) Committee, which meets regularly under the chairmanship of the CEO of SOCAR Türkiye, was established to ensure that the activities carried out throughout SOCAR Türkiye and group companies are carried out in accordance with ethical and compliance rules. The Ethics & CSR Committee and the Audit Board are informed about the number, types and resolution status of Ethics Line notifications at regular meetings.

Compliance with Laws and Rules:

As SOCAR Türkiye, we attach great importance to acting in compliance with all laws and legal regulations that may apply to our commercial activities. In case there is a difference between the legal regulations that we are obliged to comply with within the scope of our activities and our Code of Ethics, we apply the stricter rule. We comply with the requirements of the Law on the Protection of Competition in all our activities such as correspondence, data sharing and meetings.

Integrity and Honesty:

At SOCAR Türkiye, we have a zero tolerance policy against all kinds of activities and corruption that are incompatible with high business ethics. We are sensitive to gifts, meals or entertainment offered to public officials or other third parties, as they carry corruption risks. We also ensure that gifts, meals and entertainment in line with business practices and local customs are in line with the Representation and Hospitality Procedure and transparently record these expenses. We manage budget, expenditures and other funds in the most appropriate way and use company resources only for their intended purpose. In every situation where we represent SOCAR Türkiye, we observe the interests of our Company and put the interests of our Company before our individual interests.

Our Responsibility to our Stakeholders and Investors:

We are aware of our responsibilities towards our stakeholders and investors in all our activities. We show the utmost sensitivity to the security of information and data belonging to our Company, our employees, third parties and private persons, especially our controls in our commercial activities and financial processes. We always comply with the rules set by an effective financial control environment and system. We have the opportunity to design, operate, monitor, evaluate, maintain and develop with up-to-date technologies that comply with international standards in the field of information security. We act in compliance with all laws and regulations on the protection of personal data, which is one of the fundamental human rights under the Constitution of the Republic of Türkiye.

Our Responsibility to the Environment and Society:

As SOCAR Türkiye, we strive to make a difference, add value to society, and be beneficial to our environment and humanity. We carry out our activities in line with the Constitution of the Republic of Türkiye, the United Nations Universal Declaration of Human Rights and the main conventions of the International Labor Organization. We adopt global and industry-specific OHS-E best practices in Occupational Health, Safety and Environment ("OHS-E"). While all employees of SOCAR Türkiye are allowed to participate in democratic political activities in light of the Constitution of the Republic of Türkiye, we strictly refrain from making any reference to SOCAR Türkiye.



Anti-Bribery and Anti-Corruption

As SOCAR Türkiye, our focus is not only on commercial gain. It is critical for us to conduct our activities in a correct and proper manner within the framework of high business ethics. In addition, we care that our business ethics standards are also met by the commercial parties with whom we do business, and we check and ensure that they comply with our values set out in the Code of Ethics through our ethical due diligence activities regarding them.

Within the scope of our Anti-Corruption efforts, we carry out approval studies to ensure that commercial party registration form, conflict of interest, representation, hospitality and sponsored travel practices comply with our policies and procedures.

Anti-corruption policies (SOCAR Türkiye Anti-Bribery and Anti-Corruption Policy, SOCAR Türkiye Trade Controls Policy, Representation and Hospitality Procedure, Conflict of Interest Procedure) are published and updated on a platform called QDMS Integrated, to which all employees within SOCAR Türkiye have access. During the registration and contracting of commercial parties, reference is made to this Code of Ethics and inclusive clauses are added to include compliance with the Code of Ethics.

Our Ethics and KVKK (Personal Data Protection Law) orientation training, which includes anti-corruption training, is assigned to everyone at the first recruitment, including management. In addition, the digital video ethics training prepared for 2023 will be assigned to everyone, including management. In addition, an annual compliance declaration is received from all employees and the declarations are reviewed, necessary communication is provided and actions are determined.

We organize training activities to increase knowledge and awareness about business ethics rules, anti-corruption and human rights policies throughout the company. The Compliance Department provides new employees with Code of Ethics Orientation Trainings, annual KVKK & Compliance Trainings and trainings specially prepared for focus groups to keep them up-to-date. Business ethics and corruption risks are also included in the internal audit studies conducted during the reporting period. By means of the contribution of our awareness and training activities, it has been determined that no incidents of non-compliance have occurred.

Corporate Memberships

The total number of NGOs of which SOCAR Türkiye Group Companies are members is 52 and the total number of representatives is 89.

| SOCAR Türkiye NGO/MONTH | Petkim NGO/MONTH | STAR Refinery NGO/MONTH | SOCAR Energy Trading NGO/MONTH |
|--|--|---|--|
| YASED | ISTANBUL CHEMICALS AND CHEMICAL PRODUCTS EXPORTERS' ASSOCIATION (IKMİB) | ISTANBUL CHEMICALS AND CHEMICAL PRODUCTS EXPORTERS' ASSOCIATION (IKMİB) | PETFORM |
| TOBB | ISTANBUL MINERAL AND METALS EXPORTERS' ASSOCIATION (IMMİB) | ISTANBUL MINERAL AND METALS EXPORTERS' ASSOCIATION (IMMİB) | ENERGY TRADE ASSOCIATION (ETD) |
| TÜSİAD | AEGEAN IRON AND NON- FERROUS METALS EXPORTERS ASSOCIATION (EİD) | TURKISH QUALITY ASSOCIATION (KALDER) | |
| DÜNYA ENERJİ KOMİTESİ (DEK) TÜRK MİLLİ KOMİTESİ (TMK) | TOBB | TURKISH CHEMICAL, PETROLEUM, RUBBER AND PLASTIC INDUSTRY EMPLOYERS' ASSOCIATION (KİPLAS) | Bursagaz NGO/MONTH |
| FOREIGN ECONOMIC RELATIONS BOARD (DEİK) | TURKISH CHEMICAL INDUSTRIALISTS ASSOCIATION (TKSD) | UNION OF CHAMBERS AND STOCK EXCHANGES OF TÜRKİYE | GAZBİR |
| EUROPEAN ETHYLENE PRODUCERS COMMITTEE (EEPC) | TURKISH QUALITY ASSOCIATION (KALDER) | | Turkish Quality Association (KALDER) |
| PUBLIC COMMUNICATION AND CORPORATE RELATIONS MANAGEMENT ASSOCIATION (KİYED) | TURKISH CHEMICAL, PETROLEUM, RUBBER AND PLASTIC INDUSTRY EMPLOYERS' ASSOCIATION (KİPLAS) | | |
| BRITISH CHAMBER OF COMMERCE IN TÜRKİYE (BCCT) | TURKISH PORT OPERATORS ASSOCIATION (TÜRKLİM) | SOCAR Ticaret NGO/MONTH | Kayserigaz NGO/MONTH |
| SKD TÜRKİYE | AEGEAN PLASTIC INDUSTRIALISTS SOLIDARITY ASSOCIATION (EGE PLASDER) | PETDER | GAZBİR |
| UNGC | ISTANBUL AND MARMARA, AEGEAN, MEDITERRANEAN AND BLACK SEA REGIONS CHAMBER OF SHIPPING, THE TURKISH CHAMBER OF SHIPPING (TCS) | | Turkish Quality Association (KALDER) |
| UNITED NATIONS WOMEN'S EMPOWERMENT PRINCIPLES (WEPs) | TÜRKİYE INVESTOR RELATIONS ASSOCIATION (TUYİD) | SOCAR Terminal NGO/MONTH | |
| TÜRKİYE CIRCULAR ECONOMY PLATFORM | RUBBER ASSOCIATION | SERVICE EXPORTERS ASSOCIATION (HİB) | |
| ETHICS AND REPUTATION SOCIETY (TEİD) | AEGEAN INDUSTRIALISTS AND BUSINESSMEN ASSOCIATION (ESİAD) | TURKISH PORT OPERATORS ASSOCIATION (TÜRKLİM) | |
| CORPORATE COMMUNICATION ASSOCIATION (KİD) | PEOPLE MANAGEMENT ASSOCIATION OF TÜRKİYE (PERYÖN) | INTERNATIONAL INVESTORS ASSOCIATION (YASED) | |
| ASSOCIATION OF INSURANCE AND REINSURANCE BROKERS | ASSOCIATION OF CALIBRATION AND TEST LABORATORIES (TÜRKLAB) | IMEAK MARITIME CHAMBER OF COMMERCE ALİAĞA BRANCH (IMEAK DTO) | |
| CORPORATE RISK MANAGEMENT ASSOCIATION | TÜRKİYE COGENERATION AND CLEAN ENERGY TECHNOLOGIES ASSOCIATION (TÜRKOTED) | | |
| | DÜNYA ENERJİ KOMİTESİ (DEK) TÜRK MİLLİ KOMİTESİ (TMK) | | |
| | SUPPLY CHAIN MANAGEMENT ASSOCIATION (TEDAR) | | |
| | TURKISH WIND ENERGY ASSOCIATION (TWEA) | | |
| | TECHNOLOGY DEVELOPMENT FOUNDATION OF TÜRKİYE | | |

SOCAR Türkiye in 2022

Economic Value Generated

Economic and Administrative Performance*,** (TL)

| Years | 2020 | 2021 | 2022 |
|---|-----------------|-----------------|------------------|
| Revenues | 31,247,111,000 | 89,445,890,000 | 251,804,966,669 |
| Revenue from Sustainable Product Categories (Renewable Energy etc.) | 0 | 1,137,677 | 4,501,036 |
| Economic Value Distributed | -32,956,563,000 | -89,407,824,000 | -238,512,801,325 |
| Economic Value Retained | -1,709,452,000 | 38,066,000 | 13,292,165,344 |

*The tax amounts accrued in the declarations of the SOCAR Türkiye Group companies within the partnership structure of 2022 regarding the direct and indirect tax types subject to declaration are taken into account.

** Although each declaration is subject to stamp duty, only the amount related to the relevant tax type has been taken into account.

Tax Policy

For SOCAR Türkiye group companies, one of the indicators of being a responsible corporate taxpayer is the direct impact on economic development. In line with the legal compliance objective of SOCAR Türkiye group companies, we act in compliance with all regulations of national and international tax legislation. In order to ensure compliance with tax legislation, expert organizations that provide services review company transactions every month in terms of compliance with legislation, etc., and submit full approval reports at the end of the year.

SOCAR Türkiye's strategy regarding tax management is to carry out SOCAR Türkiye transactions within the framework of the principle of compliance with national and international tax laws/financial legislation. Within this working principle, we aim to;

- Manage companies' tax liabilities in compliance with national and international tax laws,
- Establish the tax policy of the companies and carrying out all kinds of work necessary for the management of tax,
- Create and develop tax awareness in all projects of companies and provide all kinds of technical support,

- Use the necessary instruments and strategies to determine the tax payable by the company within the framework of the legal regulations and practices permitted by the authority,
- Manage tax incentives.
- Identifying, managing and eliminating tax risks.

The SOCAR Türkiye Tax Unit is responsible for establishing SOCAR Türkiye's Tax and Accounting procedures/policies, identifying the necessary needs and preparing procedures for the execution of transactions in accordance with legal regulations. For tax strategies, the procedures, instructions, and documents prepared by SOCAR Tax and Accounting teams are available on the SOCAR portal. Tax strategies are reviewed annually by the SOCAR Türkiye Tax unit and submitted to the approval and information of the relevant business unit heads, Chief Financial Officer and Vice Presidents. In order to ensure full compliance with the fiscal legislation, it follows up the current tax legislation and informs SOCAR Türkiye about the changes that are relevant to SOCAR Türkiye. If necessary, it can make an announcement by preparing a newsletter.

* As SOCAR Türkiye, through our meetings with the financial administration and NGOs, we lead the way in addressing important issues by increasing predictability against possible financial liabilities we may face by submitting opinions/suggestions to existing laws or draft law proposals. We contribute to the economy through the activities we carry out in our country by paying our taxes on time and in full with the awareness of a tax-compliant and responsible taxpayer.

The tax amounts paid by SOCAR Türkiye companies according to the years are given below.

SOCAR Türkiye Tax Payments (TL)**

| | 2020 | 2021 | 2022 |
|-------|-------------------|------------------|-------------------|
| TOTAL | 11,488,496,318.59 | 6,304,584,520.34 | 17,262,702,990.17 |

*The tax amounts accrued in the tax returns of the SOCAR Türkiye group companies within the partnership structure of 2022 regarding the types of direct and indirect taxes subject to declaration have been taken into account.

**Although each declaration is subject to stamp duty, only the amount related to the relevant tax type has been taken into account.



Group Companies

Petkim

Türkiye's Petrochemical Technology Base

Petkim, a giant production power of strategic importance for the Turkish economy and industry, has an annual average gross production capacity of 3.6 million tons in its 15 main production facilities and 6 auxiliary facilities, and approximately 12% of Türkiye's petrochemical raw material need, with nearly 60 types of petrochemical products. meets his.

Petkim produces many high value-added raw materials such as ethylene, benzene, orthoxylene, paraxylene, polyvinyl chloride (PVC), plastic surgery products (PSP), polypropylene (PP) and plastic colorants (masterbatch), plastics, chemistry, packaging, It provides input to many sectors such as pipes, paints, construction, agriculture, automotive, electricity, electronics, textiles, detergents, cosmetics and many other industries, giving life to countless sub-industries. With its strategic location and production capability, Petkim exports to approximately 78 countries and has been the largest exporter of the Aegean Region for many years.

Petkim, one of Türkiye's largest industrial establishments, has further increased its competitive advantages in production, which it has achieved by ensuring supply security and cost optimization through its integration with STAR Refinery, by avoiding high energy costs thanks to the natural gas agreement signed with SOCAR Azerbaijan in 2022.



| | |
|---|------------------|
| The Rate of Meeting Türkiye's Need for Petrochemical Products | 12% |
| Annual Gross Production Capacity | 3.6 million tons |
| Total Production | 2.2 million tons |
| Capacity Utilization Rate | 63.9% |
| Ethylene-Propylene Efficiency | 46.1% |
| PX, OX and Benzene Efficiency | 36.6% |
| Total Assets (2022) | 54.7 billion TL |
| Total Number of Employees (2022) | 2,335 |

In line with its vision of sustainable development and low carbon economy, it increases its R&D and innovation infrastructure and capacity day by day in order to respond to the developing needs of value-added petrochemical products that require high technology in the hydrocarbon sector and supports sustainability goals with its competence in digital transformation.

Petkim also became the first owner of ISCC Plus (International Sustainability Carbon Certification) in 2022, which guarantees the transparent traceability of sustainable raw materials and the products produced with these raw materials throughout the supply chain.

STAR Refinery**Türkiye's Refinery-Petrochemical
Integration**

Among the World's Most Digital Refinery Companies STAR Refinery, Türkiye's only refinery company with refinery-petrochemical integration, is also the first company in Türkiye to hold a Strategic Investment Incentive Certificate. STAR Refinery, which meets approximately 25% of Türkiye's need for processed crude oil products on its own, also contributes to the reduction of Türkiye's imports of petroleum products, saving approximately 1.5 billion dollars annually.

STAR Refinery, one of the world's most digital companies, has been realized by adopting the most advanced technologies available in order to ensure environmental sustainability as a whole, starting from the engineering design phase. With an investment of \$7 billion, STAR Refinery, one of Türkiye's largest energy investments, plays an important role in the security of energy supply with its high complexity and conversion capability, technology to process different types of crude oil and an annual storage capacity of 1.9 million cubic meters.



| | |
|--|-------------------|
| The Ratio of Meeting Türkiye's Processed Crude Oil Needs | 25% |
| Annual Crude Oil Processing Capacity | 12.1 million tons |
| Total Production | 11.9 million tons |
| Capacity Utilization Rate | 113.1 % |
| Nelson Refinery Complex | 9.2 |
| White Product Efficiency | 88% |
| Medium Distillate and Reformate Efficiency | 74.3 % |
| Total Assets (2022) | 181.41 billion TL |
| Total Number of Employees (2022) | 1,129 |



SOCAR Storage

Inseparable Link in the Energy Chain

In line with the demands of SOCAR Türkiye group companies and business partners, SOCAR Storage carries out issues such as storage of petroleum products and natural gas in tanks, filling operations to land and sea tankers and evacuation operations from sea tankers to tanks in accordance with national and international requirements and OHS-E policy. The SOCAR Storage terminal in Aliğa, İzmir is the largest terminal in the Aegean Region with a storage capacity of 530,000 cubic meters of fuel products and 45,000 cubic meters of LPG. It is also one of the 5 largest storage terminals in Türkiye. Inaugurated in 2018, the SOCAR Storage facility, integrated into the STAR Refinery via pipelines, provides operational flexibility to the refinery thanks to its high capacity.



| | |
|----------------------------------|------------------------|
| Fuel Product Storage | 530,000 m ³ |
| LPG Storage Capacity | 45,000 m ³ |
| Total Number of Employees (2022) | 83 |

SOCAR Ticaret

High market share target in energy distribution

SOCAR Ticaret was established to carry out SOCAR Turkey Enerji A.Ş.'s activities in the energy distribution sector. SOCAR Ticaret operates in wholesale and retail sales of fuel, aviation and marine fuels. SOCAR Ticaret operates under the SOCAR brand in the fuel distribution sector, SOCAR Marine in the marine fuels market and SOCAR Aviation in the aviation fuels market.

SOCAR Aviation Operations

Entering the aviation sector in 2013, SOCAR Aviation signed an important agreement with Pegasus Airlines at Istanbul Sabiha Gökçen Airport where it began its first aircraft replenishment operations and continued to grow with its supplies to the leading global airline companies in the sector. In 2016, SOCAR Aviation started to meet some of the fuel needs of Turkish Airlines at Atatürk Airport, which is currently closed, as well as the refueling of Izmir Adnan Menderes and Bodrum Airports. In 2019, half of Turkish Airlines' consumption at Sabiha Gökçen Airport and fuel consumption at Izmir, Bodrum, Antalya and Dalaman Airports were met by SOCAR Aviation.

SOCAR Ticaret Operations

SOCAR Ticaret, a company that carries out wholesale and retail fuel sales from all major production/storage points in Türkiye, sold 450,000 tons of Jet, 680,000 tons of Marine Fuel and 573,000 tons of Fuel Oil in 2021, with a sales volume of over 1,703,000 tons, and expanded its dealer network across Türkiye with 110 dealers.

Within the scope of its wholesale fuel sales activities, SOCAR Ticaret, in order to increase STAR Refinery's sales power in the Aegean Region, completed agreements to supply fuel to its fuel dealers, the majority of which are located in the Aegean Region, from every point in Türkiye, and started to supply fuel from Derince, Aliğa, Kırıkkale, Mersin, Antalya, Marmara Ereğlisi, Trabzon, Samsun and Dörtöl depots through supply agreements with Türkiye's largest distribution companies.



In retail fuel sales activities, SOCAR Ticaret won the tender for 9 fuel stations at Istanbul Airport, the first phase of which opened on October 29, 2018, in line with its strategy of taking part in Türkiye's giant projects. New fuel stations located on the airport grounds and apron have started operations to meet the fuel needs of consumers, car rental companies, taxis and airport vehicles. Thus, SOCAR Ticaret has reached the position of directly serving consumers in the world's largest airport with an annual passenger transportation capacity of 200 million passengers in a total area of 16,280 square meters.

As part of the same strategy, SOCAR Ticaret initiated the Northern Marmara Motorway (KMO) and Menemen-Aliğa Çandarlı Motorway (IKA) fuel station projects. Two SOCAR fuel stations, located at the strategic point of the Northern Marmara Motorway on the southern direction of the Izmir Motorway, started operations in February 2020.

In addition to their strategic location on the highway, SOCAR stations will also be located next to the first Informatics Valley to be established in Türkiye. The installation of the SOCAR station that will sell fuel to trucks carrying export products at Yalova Port, one of Türkiye's border gates to the outside world, has also been completed.

Yalova RORO station operates as one of the five gateways of Türkiye's international maritime trade to the world. In addition, two SOCAR fuel stations at the Aliğa exit of the Menemen-Çandarlı Highway started operations in July 2020.



SOCAR Marine Operations

SOCAR Marine, which started its operations in 2013 under SOCAR Ticaret, in addition to contributing to the development of the maritime sector with its wide customer portfolio ranging from international shipping companies to domestic shipowners, its high level of experience, its seafaring staff, its structure that responds quickly to needs, and its superior product and service approach, it also provides significant foreign currency inflow to the national economy with its activities.

Enabling the supply of all marine fuels of different specifications for the first time in the İskenderun and Mersin regions, SOCAR Marine is pioneering the region's entry into the international marine fuel market. SOCAR Marine is one of the strongest players in the Turkish market with 700,000 tons/year of transit marine fuel sales, surpassing its competitors by creating the strongest supply network with its 87,000 cubic meters of storage capacity in İzmit Bay, 21,000 cubic meters in İskenderun Bay and 5,000 cubic meters in Aliağa region with a total storage capacity of 113,000 cubic meters and 14 marine tankers.

Continuing its rapid growth, SOCAR Marine started to sell marine fuel from the SOCAR Storage terminal for the first time in 2019 within the scope of transit and exports, taking the first steps towards the İzmir region to take a strong position in the international marine fuel market.

In addition to its physical refueling activities, SOCAR Marine increases the strength of the SOCAR brand in the international arena with its marine refueling activities in all international ports from Gibraltar to Singapore, Rotterdam to South Africa within the scope of international marine fuel trade.

Standing out with its operational efficiency, sectoral experience and customer orientation since its establishment in 2013, SOCAR Marine serves its customers all over the world, with the primary goal of maintaining its strong position.

Within the scope of STAR Refinery integration, SOCAR Marine, which started domestic taxed marine fuel sales in 2021 as planned, continues to grow by demonstrating the measurable success it has shown in transit marine fuel sales in the domestic market. With its outstanding performance in both sales and operational areas, SOCAR Marine was crowned with the most successful company award in the "Logistics and Ship Refueling Category" at the 12th International Golden Anchor Maritime Achievement Awards.



Petkim WPP**Renewable Energy Investment**

Petkim WPP, a wind power plant with a total of 17 turbines, is SOCAR Türkiye's most important investment in the field of renewable energy. The power plant, which was built with a total investment of 55 million Euros, has an installed capacity of 51 MW. In order to increase the installed WPP power in 2021, the Energy Market Regulatory Board (EMRA) approval has been obtained for the additional turbine investment of 3.8 MW/h, evaluation studies are continuing. Floating Sun On alternative areas for Power Plant (GES) installation works are in progress. Studies are also continuing with the aim of establishing hybrid SPP. Alternative studies are carried out for the use of the capacity other than the licensed capacity in the installed WPP power.



| | |
|--------------------------|--------------|
| Total Installed Power | 51 MW |
| Total Number of Turbines | 17 |
| Total Investment | 55 Million € |



Bursagaz

LEED Platinum Certified New Headquarters Building

Bursagaz was established in 1992 by BOTAŞ to sell natural gas. As of 2019, Bursagaz, which continues its activities under the umbrella of SOCAR Türkiye, realizes exemplary practices in Türkiye with over 1 million subscribers and a technology-oriented management approach.

The network length of the company, which expands its service area every year and serves in 11 districts of Bursa, reaches 7,356 kilometers by the end of 2022. Bursagaz, which was awarded the LEED Platinum Certificate, the highest level of certification, for its environmentally friendly headquarters building, continues to execute company strategies in line with international standards within its existing management systems.



| | |
|---------------------------|------------------------------|
| Number of Subscribers | 1,154,938 BBS |
| Number of Gas Users (BBS) | 1,070,059 BBS |
| Total Employees 2022 | 244 |
| Natural Gas Supply 2022 | 2.34 billion Sm ³ |
| Network Size | 7,356 km |
| Satisfaction Rate | 93.72% |

Kayserigaz**Energy Market Regulatory Authority's (EMRA) First Natural Gas Distribution Tender**

Awarded in 2003 with the first natural gas distribution tender by the Energy Market Regulatory Authority (EMRA), Kayserigaz is one of the most important players in the Turkish energy sector, distributing natural gas in Kayseri. Kayserigaz, which plays a major role in providing the safe and uninterrupted energy supply Kayseri needs, has one of the most modern natural gas distribution networks in Türkiye with a network of 6,179 kilometers.



| | |
|----------------------------------|------------------------------|
| Number of Subscribers (2022) | 630,038 BBS |
| Number of Gas Users (2022) | 613,286 BBS |
| Total Number of Employees (2022) | 153 |
| Natural Gas Supply (2022) | 0.77 billion Sm ³ |
| Network Size | 6,179 km |
| Satisfaction Rate | 91.19% |

SOCAR Energy Trading

Türkiye's largest private sector natural gas wholesale portfolio

SOCAR Energy Trading carries out SOCAR Türkiye's natural gas and electricity trade and sales activities. The company, which provides natural gas and electricity supply services to its customers from a single source with its customer-oriented service approach, experience and professionalism in portfolio management, offers customized solutions in the field of energy.

SOCAR Energy Trading, which provides supply security to its customers in different segments; it closely monitors the developments in Türkiye, Azerbaijan and the surrounding regions, evaluates potential supply opportunities and constantly diversifies its portfolio.

SOCAR Energy Trading, which sells natural gas and electricity to natural gas and electricity distribution companies, organized industrial zones and eligible consumers, is the largest private sector player in the natural gas wholesale market in which it has been active since 2009. At the same time, one of the leading companies in electricity trade and sales, SOCAR Energy Trading's natural gas and electricity trade and sales volume reached 17TWh in 2022, and its total turnover amounted to 20 billion TL.

SOCAR Türkiye has the distinction of being one of the most important natural gas and electricity users with its industrial facilities in the Aliğa region. In addition, considering the consumptions of Bursagaz and Kayserigaz natural gas distribution companies, which the company owns recently, SOCAR Türkiye's natural gas portfolio is 5% of Türkiye's consumption, making it one of the largest private sector gas portfolios in the country.



| | |
|------------------------|---|
| Trade and Sales Volume | 17 TWh |
| Total Turnover | 20 Billion TL |
| Shareholding Structure | 100% SOCAR Turkey Doğal Gaz Yatırım A.Ş |

While SOCAR Energy Trading continues to contribute to the development of the natural gas and electricity markets with its experienced team, it aims to continue to seize opportunities that will add additional value to the economy of Azerbaijan and Türkiye, and to increase its supply opportunities, taking into account the increasing market share.

Enervis**Energy industry service provider**

Since 2012; It offers reliable and accurate solutions to its customers in areas such as natural gas distribution service, inspection, project design, consultancy, investment and maintenance service, meter calibration. Operating under 100% SOCAR Türkiye Natural Gas Investments Inc., the company specializes in project design, engineering, material supply and manufacturing services.



Total Employees (2022)

343



SOCAR Fiber

Strategic Infrastructure Investment by SOCAR

SOCAR Türkiye established SOCAR Turkey Fiber Optik A.Ş. on May 8, 2013 to meet the need for fiber optic communication infrastructure due to the continuous increase in IP traffic and the increasing importance of speed in communication.

Having received the Infrastructure Operation Service license from the Information and Communication Technologies Authority on July 22, 2014, the company added a new element to the SOCAR value chain as an optical infrastructure investment. The purpose of the establishment of SOCAR Fiber can be summarized as evaluating the global potential in the telecommunications sector and providing backbone network services to operators for all types of electronic communications and fast internet access.

With this project, which is planned as a 1,850 kilometer long fiber optic line that will cross Türkiye from east to west, SOCAR Fiber aims to contribute to the services of operators and other telecommunication companies operating in the region and around the world, such as additional capacity and line backup.

Starting from the Georgian border in eastern Türkiye and ending at the Greek border in western Türkiye, the SOCAR Fiber network passes through 20 provinces and 67 districts in Türkiye. The security of the line, whose Network Operation Centers are located in Ankara and Eskişehir, is provided by 2 separate fiber optic cables in 2 separate channel systems along the fiber optic route.



| | |
|------------------------|-------------------------------|
| Line Length Approx. | 1,850 km |
| Route Covered | 20 provinces and 67 districts |
| Investment Cost | 80 million Euros |
| Shareholding Structure | 100% SOCAR Turkey Enerji A.Ş. |

Backup fiber optic line service is provided to TANAP via the SOCAR Fiber line that crosses Türkiye on an east-west axis. In addition, the Company continues to engage in business development discussions with operators and other telecommunication companies operating in Türkiye and the region in order to provide additional capacity and line backup to their services.

SOCAR Terminal

Aegean's Gateway to the World

The 100% share of the terminal operated by APM Terminalleri Liman İşletmeciliği A.Ş. was taken over by SOCAR Türkiye on 27.12.2018. SOCAR Aliğa Liman İşletmeciliği A.Ş. (SOCAR Terminal) was implemented by Petkim to complete the logistics integration step. The port investment, together with financing costs, amounted to 400 million dollars. All materials, except for the special materials used in the construction of the SOCAR Terminal, which was built by Turkish contractors, were procured from Türkiye. SOCAR Terminal can employ up to 600 people when operating at full capacity.

SOCAR Terminal is the largest integrated terminal in the Aegean Region with a container handling capacity of 1.5 million TEU. It is also the first port in the Aegean Region to be able to effectively berth ships with a capacity of 18,000 TEU with its 700-meter-long one-piece quay structure. The port, which has a water depth of 16 meters, also has a total of 42 hectares of back service area used for container storage.



Site

| | |
|------------------------------|------------------------|
| Handling Capacity (TEU/Year) | 1,500,000 TEU |
| Site Stacking Capacity | 25,000 TEU |
| Refrigerated Container | 830 (380V) |
| Total Area | 420,000 m ² |

Equipment Park / Capacity

| | |
|---|---------------------|
| STS | 3 pieces / 65 tons |
| RTG / Capacity | 10 pieces / 41 tons |
| Full Container Stacking Equipment (RS) | 3 pieces / 45 tons |
| Empty Container Stacking Equipment (EH) | 3 pieces / 9 tons |
| Tow Truck | 26 pieces / 65 tons |
| Forklift (FL) / Capacity | 8 pieces / 3 tons |
| Forklift (FL) / Capacity | 4 pieces / 5 tons |
| Forklift (FL) / Capacity | 1 piece / 16 tons |
| Forklift (FL) / Capacity | 1 pieces / 28 tons |
| Forklift (FL) / Capacity | 1 pieces / 33 tons |



Millenicom

Millenicom, which was established in 2004 with the aim of becoming the leading alternative operator in the liberalized Turkish telecommunications market, started to provide services under the umbrella of SOCAR Türkiye as of June 2019. Pioneering the alternative telecommunications sector in Türkiye and offering various telecommunications and communication services to more than 260 thousand customers, Millenicom connects its users to the world with affordable, advantageous, trouble-free and high quality internet. Millenicom provides fixed internet and fixed telephone services to its individual customers with ADSL, VDSL, FIBER options, while providing advantages such as attractively priced no-commitment, real unlimited and quota-free internet, and 24/7 call center support. Millenicom aims to keep customer satisfaction at the highest level by responding to the needs of its existing customers in the best way possible.

In addition to fixed internet and telephone services for corporate customers, Millenicom offers affordable, life facilitating cloud solutions and IP-based quality voice that improve the quality of work, and expands its products and services in line with the needs of its customers through new product development activities and collaborations. In 2017, the company was selected as the "Alternative Operator Service of the Year Category Winner" in the Informatics 500 survey and as the "Third in the Communication Services Sector" in the Türkiye's Top 500 Service Exporters survey in 2018 and 2019.



Total Employees 2022

83

Shareholding Structure

100% SOCAR Turkey Doğal Gaz
Yatırım A.Ş

SOCAR R&D Center

Founded in 1969 at Petkim Yarımca facilities and continuing its activities there after the facility was moved to Aliğa, established in December 2019 in order to bring the 51 years of experience in petrochemicals of the R&D center to all group companies of SOCAR Türkiye, SOCAR Türkiye R&D and Inovation A.Ş. was entitled to receive the R&D Center certificate issued by the Ministry of Industry and Technology in June 2020. The purpose of the establishment of SOCAR Türkiye R&D and Inovation A.Ş. is to develop innovative, sustainable, environmentally friendly and market-oriented products, catalysts and digital technologies for all stakeholders in the value chain and to increase the efficiency of production processes in line with SOCAR Türkiye's vision of becoming an integrated energy company that adds value to all stakeholders with economic and social responsibility. Its areas of activity include catalyst research, green chemistry, sustainable, clean and efficient energy, value-added products, developing new application areas, product improvement and new product development, digital transformation and environmental solutions.

Located on the Refinery and Petrochemicals Business Unit campus in Aliğa, the SOCAR R&D Center consists of six laboratories (Rheology, Catalysis, Polymer Characterization, Environment and Biotechnology, Chemical Analysis and Chromatography) in an area of 1,200 square meters, a 400 square meter pilot plant (polymer processing, polymerization, chemical process operations and catalyst testing systems) and offices. Within the scope of developing university-industry collaborations, SOCAR R&D Center conducts open innovation model studies with many national/international universities, providing university students with the opportunity to apply research results and work in projects.



| | |
|------------------------|----------------------------------|
| Installed Area | 1,200 m ² |
| Number of Researchers | 24 |
| Patent | 19 |
| Shareholding Structure | 100% SOCAR Turkey Enerji A.Ş. |

The first ISO 56002 Innovation Management System Certification in the world was realized in our R&D company.

TANAP

The Trans Anatolian Natural Gas Pipeline (TANAP), the most important link of the 3,500-kilometer Southern Gas Corridor extending from Azerbaijan to Europe, is the signature of two brotherly countries, Türkiye and Azerbaijan, in Anatolia.

Having established the legal infrastructure on June 26, 2012 and received the "Environmental and Social Impact Assessment (ESIA) Positive Certificate" on July 24, 2014, TANAP's foundation was laid on March 17, 2015. The TANAP Project, which has been transporting natural gas to Türkiye since June 2018, connects to the Trans Adriatic Pipeline (TAP) to transport natural gas produced in Azerbaijan's Sahdeniz-2 Gas Field in the Caspian Sea and other fields in the southern Caspian Sea to Europe.

Covering a distance of 1,811 kilometers and constructed on a route extending from an altitude of 2,760 meters on land to a depth of -67.5 meters in the sea, TANAP transports 16 billion cubic meters of natural gas per year in the first phase. While 6 billion cubic meters of this amount is used in Türkiye, 10 billion cubic meters is transferred to Europe. The transport capacity of the line will be increased first to 24 billion cubic meters and then to 31 billion cubic meters with additional investments.

The first phase of TANAP was inaugurated with a ceremony on June 12, 2018 and the first commercial gas was delivered on June 30, 2018. On November 30, 2019, the opening ceremony of the TANAP European connection was held.



| | |
|--|------------------------|
| Main Line Length | 1,811 km |
| Dardanelles Crossing | 17.5x2 (Twin Pipeline) |
| Highest Point Passed by Pipeline | 2,760 m |
| Deepest Point Passed by Pipeline (At Sea) | -67.5 m |
| Number of People Directly and Indirectly Employed During the Project Phase | 13 thousand |
| Number of Cities on the TANAP Route | 20 |
| Approximate Investment Cost | 6.5 Billion USD |

Shareholding Structure;

| | |
|-----------------------------------|-----|
| Southern Gas Corridor Company-SGC | 51% |
| BOTAŞ | 30% |
| BP Pipelines (TANAP) Limited | 12% |
| SOCAR Turkey Enerji A.Ş. | 7% |





SCR MÜŞAVİRLİK

For the first time in Türkiye, integration into the Web Land Registry System of the Land Registry Office was provided.

SCR Müşavirlik ve İnşaat A.Ş. is responsible for the design, comprehensive renovation and construction processes of the administrative buildings on behalf of all SOCAR Türkiye group companies, as well as the management processes of all its real estates, and the license and permit processes of all administrative and industrial constructions in the 1,453 hectare "SOCAR Turkey Enerji A.Ş. Special Industrial Zone", which was declared as the first Special Industrial Zone of Türkiye with the President's decision dated 19.10.2018 and numbered 190, in İzmir, Aliağa. It is responsible for carrying out the license and permit processes of all administrative and industrial constructions in the Special Industrial Zone.

SOCAR Türkiye Information and Document Management Center, the construction of which was completed in December 2020, was put into service at the beginning of 2021. Construction of the new cafeteria building for blue-collar employees, designed in modern standards with a capacity to serve 1,016 people at the same time, started in July 2021, and the cafeteria was opened for use in July 2022.

In 2021, 2 construction licenses and 19 occupancy permits were obtained for the investments made within the borders of the SOCAR Türkiye Special Industrial Zone. The technical implementation of the Integrated Zoning Plan, which covers the entire SOCAR Türkiye Special Industrial Zone and regulates building rights, was completed in 2022. The Digital Real Estate Management System project, through which all SOCAR Türkiye's immovable properties may be managed on a geographical information system and all data related to immovable properties may be stored in digital environment, was put into operation in 2022. Completed in 2022. The Digital Real Estate Management System project, through which all SOCAR Türkiye's immovable properties may be managed on a geographical information system and all data related to immovable properties may be stored in digital environment, was put into operation in 2022.





Awards

Award for Petkim from KalDer

Petkim was awarded the silver prize at the annual “Successful Team of the Year” award ceremony organized by KalDer’s İzmir branch. Petkim won the prize for its “Capacity Increase and Carbon Footprint Reduction Project through 5S Implementation in Product Packaging and Storage Areas”.

“Strategic Partnership” award for SOCAR Türkiye

SOCAR Türkiye received the “Strategic Partnership” award during the Turkish Innovation Week. SOCAR Türkiye was one of the companies to receive an award during Turkish Innovation Week. SOCAR Türkiye received recognition for its contributions to the Turkish Innovation Week and excellent work in the fields of technology and innovation.

“Best Wi-Fi Internet in the Home” award to Millenicom

Millenicom received the “Best Wireless Internet in the Home” award at the WBA 2022 Industry Awards. According to the assessment by the Wireless Broadband Alliance (WBA), Millenicom’s patented Ambeent technologies for spectrum optimization and establishing remote access points improved basic Wi-Fi performance by 87 percent.

Fortune 500 and Capital 500 lists

Prestigious rankings like the Fortune 500 and Capital 500 included Petkim, STAR Refinery, SOCAR Petrol Ticaret, Bursagaz, and Kayserigaz.

Awards for internal communication initiatives

The business won prizes in the “Internal Communication” category at the Stevie International Business Awards, the “Award for Innovation in the Use of Events” category at the MENA Stevie Awards, the “Achievement in Internal Communication” category at the International Stevie Awards for Great Employers, and the “Internal Communication Inhouse” category at the IPRA Golden World Awards 2022, given out annually by the International Public Relations Association (IPRA).

SOCAR Türkiye Volunteers Awards

SOCAR Turkey Volunteers won the Communitas Awards in 2022, following the Global Business Excellence Awards, for its corporate social responsibility efforts.

Programs to develop Strategic Competencies

The Strategic Capability Building programs conducted under the leadership of the Human Resources Department were recognized by Brandon Hall and Stevie Awards International Business Awards.

Social Media Award by Brandverse Awards

The company received the Gold Award in the “Energy Company” category for the sixth consecutive year at the Brandverse Awards, where the most prestigious social media awards were presented.

Cogeneration Facility Special Award

At the 9th ICCI Energy Awards, the Petrochemical Refinery Energy Integration Project, which was carried out within the scope of the cogeneration facility in the Petkim Energy Production complex working in an integrated structure with the STAR Refinery, was deemed worthy of the “Cogeneration Facility Special Award”.

SAP Transformation of the Year Award 2022

SOCAR Türkiye has implemented the “Project Earth” study in order to adapt the applications, in which the corporate processes of all group companies are managed, to digital transformation, and to ensure process-based and organizational integration. “Project Earth”, a business transformation project that forms the new backbone of all workflows of SOCAR Türkiye, was awarded at the SAP Transformation Awards of the year.





Highlights from 2022

SOCAR R&D was entitled to be funded by the Horizon Europe Programme.

The Circular TwAIIn project, the first digital project developed by SOCAR Türkiye R&D and Innovation A.Ş. and implemented in partnership with AI Platform for Integrated Sustainable and Circular Manufacturing, was entitled to be funded by the European Commission Horizon Europe Program (HEUROPE). Aiming at maximizing sustainability and energy efficiency with artificial intelligence and digital solutions, the project became the fourth project of SOCAR Türkiye R&D and Innovation A.Ş. to be funded by the EU.

International cooperation was established for the education of children with autism in Azerbaijan.

SOCAR Türkiye, Tohum Autism Foundation and Birge and Sağlam İctimai Birliyi signed a comprehensive cooperation for the education of children with autism. In cooperation with Birge and Sağlam İctimai Birliyi, which provides services for individuals with autism in Azerbaijan, Tohum Autism Foundation supported the training program by transferring its scientific know-how with the support of SOCAR Türkiye.

BURAK conducted an earthquake drill with the students.

Bursagaz Search and Rescue team conducted an earthquake drill with Nilüfer Tofaş Science High School students. Other search and rescue teams in Bursa also participated in the exercise, which was carried out jointly with AFAD. Bursagaz Search and Rescue (BURAK) team participated in the exercise within the scope of Earthquake Week, which is held every year between March 1-7, in order to create earthquake awareness and be prepared for earthquakes.

SOCAR Türkiye signed one of the biggest SAP projects of the sector.

SOCAR Türkiye, which has signed one of the biggest SAP projects not only in Türkiye but also in the region and the energy sector with SAP Turkey, started to manage it from a single center by integrating SAP solutions that deal with different processes into the SAP S/4HANA system with the project called Project Earth.

SOCAR MARINE started sales in the domestic marine fuel market.

SOCAR MARINE has added the domestic marine fuel market to its field of activity and started sales in the Marmara, Aegean and Mediterranean Seas within this scope. Continuing its activities without slowing down since 2013 and reaching 700 thousand tons annually, SOCAR MARINE quickly responds to the needs of customers in a wide range from domestic passenger and cargo ships to tourism boats, from fishermen to public institutions.

Open Innovation Platform from SOCAR Türkiye: SOCAR Wennovation

SOCAR Türkiye launched the SOCAR Wennovation open innovation platform, where it invites companies, startups and academia that offer solutions focused on digital transformation to become participants. SOCAR Türkiye aimed to meet the digital needs within the organization by collaborating with potential stakeholders in the ecosystem.

"Nutrition-Friendly Workplace" certificate for four companies of SOCAR Türkiye

SOCAR Türkiye's subsidiaries Petkim, STAR Refinery, SOCAR Storage and Kayserigaz have been awarded the Nutrition-Friendly and Physical Activity Supporting Workplace Certificate. Kayserigaz became the first company in Kayseri to receive the "Nutrition-Friendly Workplace Supporting Physical Activity" certificate by the Ministry of Health.

SOCAR Türkiye participated in the International Caspian Oil and Gas Fair.

SOCAR Türkiye talked about digitalization at the International Caspian Oil & Gas Exhibition (COG). SOCAR Türkiye gave information about the details and achievements of the Project Earth project, which was implemented during the pandemic period in order to keep up with the digital transformation of the applications where the corporate processes of all group companies are managed, and to ensure process-based and organizational integration.

SOCAR Türkiye R&D and Innovation controls process equipment with artificial intelligence

SOCAR Turkey R&D and Innovation Inc. started its industrial UAV (Unmanned Aerial Vehicle) supported studies with the cooperation of Berlin Technical University and Gebze Technical University. SOCAR Türkiye R&D detects the degrees of corrosion occurring in process equipment with the artificial intelligence-based algorithms it has developed and ensures that the wear rate is minimized.

The third stop of the Blue Climate Ambassadors was İzmir.

The third stop of the Blue Climate Ambassadors Project, implemented by TURMEPA, TÜRKLİM and WISTA Türkiye to draw attention to the increasing climate change events in the world and to develop sustainable solutions for environmental problems, was İzmir. Aiming for women seafarers to lead the industry in the fight against climate change, the project met with port workers in Izmir with the support of SOCAR Terminal. Within the scope of the project realized with the support of SOCAR Terminal, TURMEPA provided Zero Waste Blue training to the port workers.

Visit to SOCAR Türkiye from Uzbekistan

Within the scope of the cooperation established between Azerbaijan and Uzbekistan, a delegation of experts in the field of Downstream from Uzbekneftegaz, the state company of Uzbekistan, visited SOCAR Türkiye. During the 3-day visit, mutual experiences were shared. A delegation from Uzbekneftegaz, the state company of Uzbekistan, visited SOCAR Türkiye's refinery-petrochemical facilities in Aliğa. In the meetings held, mutual evaluations were made on asset management, occupational health and safety, technical services, digitalization, value creation and agile transformation.

The excitement of the bicycle race took place in İzmir with the main sponsorship of SOCAR Türkiye

The Izmir stage of the Turkcell GranFondo Series, sponsored by SOCAR Türkiye, has come to an end. 2,000 amateur and professional cyclists from more than 30 countries participated in the race, which started with the motto "For a Sustainable World".

SOCAR Energy School certificate program was held.

SOCAR Türkiye and Sabancı University signed a collaboration to encourage the training of qualified manpower for the EDU energy sector. As part of the cooperation, the SOCAR Energy School certificate program was implemented.

SOCAR Türkiye's website has been renewed.

SOCAR Türkiye renewed its website with a user-friendly, modern perspective that draws its strength from simplicity. He brought his new visual world, which he created with dynamic, simple and effective touches that make you feel the energy, to his website.

Record net profit of 6.5 billion TL from Petkim in 2022

Petkim achieved a sale of 48.9 billion TL in 2022 and broke a profit record of its history with a net profit of 6.5 billion TL. Despite the global geopolitical risks, the decrease in profit margins and the increase in raw material prices, as well as the planned stance throughout the year, Petkim; It maintained its strong cash position with the financing methods used and increased its profitability thanks to its productivityenhancing efforts, uninterrupted raw material support of STAR Refinery, its agile management approach and effective planning with a holistic perspective.

A first in the energy sector from SOCAR Türkiye and Turkcell

SOCAR Türkiye and Turkcell made an important collaboration by breaking new ground in the energy sector. Within the scope of the project developed for the Aliğa Peninsula, a step was taken by Turkcell to create a mobile communication network exclusive to SOCAR Türkiye.



Bursagaz started receiving subscriptions in Iznik Orhaniye.

Bursagaz, which delivers natural gas to the Orhaniye neighborhood, has completed the installation of service boxes in 268 buildings. While subscription processes were completed in 69% of the buildings, the number of flat-based subscriptions reached 237.

Kayserigaz met with authorized interior plumbing companies

Kayserigaz met with the representatives of 91 authorized indoor installation companies. At the meeting, Kayserigaz indoor installation managers explained the issues to be considered regarding the internal installation installation, which intensified during the summer months, and information was given on the efficient and safe use of natural gas.

Bursagaz and Kayserigaz organized trainings on safe and efficient use of natural gas.

Bursagaz, together with SOCAR Türkiye Volunteers, provided trainings for 18,684 students in 11 districts of Bursa; Kayserigaz provided "Safe and Efficient Use of Natural Gas" trainings for approximately two thousand students in 11 schools in 3 districts of Kayseri.

Bursagaz brought Iznik Dırazali together with natural gas.

Bursagaz completed its investment works in Iznik's Dırazali District and brought the people of the region together with natural gas. More than 3 kilometers of lines were laid within the scope of the investment made by Bursagaz, which serves more than 1.1 million subscribers in 11 districts of Bursa, in Dırazali District.

Bursagaz started to buy subscriptions from unzoned regions.

Bursagaz started to accept subscriptions in the Samanlı District of Yıldırım district, where it delivers natural gas. Bursagaz, which completed the infrastructure works in the Samanlı District of Yıldırım district, started to receive subscription applications.

ISO 31000 Risk Management Certificate to Bursagaz

Bursagaz successfully completed the International Standards Organization (ISO) audits and received the ISO 31000 Risk Management Certificate, which covers international risk management standards with its activities and practices in the field of risk management.

Natural gas training from Kayserigaz to the employees of infrastructure companies

Technical Safety and Basic Natural Gas training was given to the employees of infrastructure institutions by Kayserigaz. In the training given by Kayserigaz Emergency Response and Interior Installation teams, information was given about the causes of natural gas line damage and what to do in case of uncontrolled gas output as a result of line damage.

The Epic of Brotherhood Dance Show met with the audience in İzmir, Bursa and Kayseri.

The Epic of Brotherhood theatrical dance show, which tells the history of Türkiye and Azerbaijan from past to present, the heroes, poets and the cultural richness of the two countries, was watched by approximately three thousand people in Kayseri, Bursa and İzmir Aliağa. The performance of the giant cadre of 70 artists attracted great attention by representatives of local administrations, managers of public institutions and organizations, members of the media, SOCAR Türkiye employees and their families.

Kayserigaz met Kızılören, Yeni Süksün, Güllüce and Çatakdere neighborhoods with natural gas.

Kayserigaz, İncesu District, Kızılören District; It has completed the investment works in Bünyan District, Yeni Süksün and Güllüce Neighborhoods and Talas District Çatakdere District, and brought the people of the region together with natural gas.





Developments in the world, Türkiye and the Energy Market

Nearly half of the world's population received at least one dose of the COVID-19 vaccine, an important milestone in the fight against the pandemic. In 2020, the COVID-19 pandemic had a significant impact on the global economy, causing shutdowns that greatly affected economic activity. In 2021, however, there was a rapid recovery in economic activity worldwide and a significant increase in electricity demand. In addition, many companies are finalizing plans for a hybrid back-to-office model, indicating a move toward normalization of the work environment.

In addition, global gross domestic product (GDP) is expected to fully recover by the end of 2022. This is an important development given the economic disruption caused by the pandemic. The gradual recovery of oil demand, currently at 95% of pre-COVID-19 levels, is also a positive development for the energy sector. The fact that the energy transition is not being hampered, despite initial concerns, is also encouraging for environmental efforts. This increase in demand was partly due to the resumption of economic activity, but also to geopolitical tensions between Russia and Ukraine, which led to imbalances in energy supply and pricing and increased demand for fossil fuels. In addition, the global drought caused by the climate crisis led to lower hydropower generation in Europe and lower wind power generation, which further increased demand for fossil fuels. As a result, global coal and natural gas prices reached record highs, leading to a sharp rise in fuel costs and high electricity price increases at global level.

Overall, developments in these sectors point to a positive trend towards recovery and an upturn in the global economy. Oil and gas firms in particular will gain from increased trust in the energy sector.

Higher oil prices have also spawned some new trends in the oil and gas (O&G) industry that may challenge conventional wisdom. Despite current high oil prices, oil and gas companies are still showing discipline in production and capital forecasts, reducing debt and managing their operations accordingly. The energy shift was originally assumed to be slowed by high oil prices, but according to 76% of O&G executives polled, the change will actually be accelerated or finished in the near future at prices above \$60 per barrel.

It should be emphasized that higher oil prices will also allow companies to contribute to net zero commitments. European O&G companies lead the way in net zero commitments in 2020, while U.S. O&G companies, Canadian oil sands producers, and some national oil companies (NOCs) joined the net zero group in 2021. It is thought that rising oil prices may open up investment opportunities in more expensive and risky green energy technologies like carbon capture, utilization, and storage (CCUS). In such projects, all stakeholders in the O&G value chain become important.

In light of these developments, companies in the O&G sector have begun to cluster around four distinct characteristics: 1-net zero pioneers, 2-green supporters, 3-low carbon producers, and 4-hydrocarbon purists. Each business, by virtue of its investment patterns and value generating methods, inevitably pursues a unique path. High oil prices are creating new opportunities for the O&G sector to transition to cleaner and more sustainable practices.





Value Creation Model

Our Journey of Impact-Oriented Value Creation

Sustainability is an integral part of SOCAR Türkiye's strategy. This year, for the first time, we sought to understand the value creation mechanism of our business model by examining how we manage the resources we invest ("inputs") to create sustainable value ("outputs and impacts") for our shareholders, customers, employees and society. Taking a long-term, comprehensive approach to the value creation methodology and outcomes, SOCAR Türkiye will seek to grow the value created and the contribution to stakeholders based on the results.

SOCAR Türkiye Sustainability Strategy

In order to integrate the best and most scalable sustainability strategy across the value chain and to be a leader within SOCAR Global and other oil and gas companies by minimizing risks and maximizing business opportunities, SOCAR Türkiye has an ambitious vision that takes into account all crucial sustainability opportunities.

SOCAR Türkiye is developing sustainability strategies in order to prevent the risks of climate change brought on by greenhouse gas emissions, adapt its business model to the energy transition, and maintain its leadership position in the sector through the advantages of this transition while establishing its emissions reduction and climate change targets in accordance with these strategies.

Inputs

Natural Resources

- Renewable Resources
- Non-renewable resources

Intellectual Resources

- Brand value
- Partnerships
- R&D and innovation activities and investments
- Our information technology infrastructure

Manufactured/Physical Resources

- Assets
- Facilities
- Equipment

Social Resources

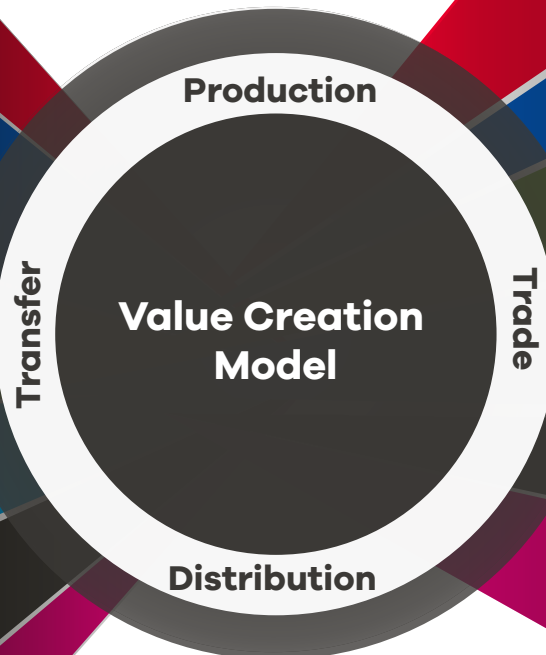
- Qualified competencies of employees and suppliers
- Business partners

Financial Resources

- Income
- Financing
- Stocks and shares

Human Resources

- Employees
- Suppliers



| Outputs | Impact | Customers | Society | Shareholders / Investors | Employees |
|--|---|---|---|---|---|
| | |  |  |  |  |
| Natural values <ul style="list-style-type: none"> Greenhouse gas emissions Extent of renewable energy use Total amount of recycled waste Environmental investments Studies on waste and waste management Studies on water management Natural areas and protected species | <ul style="list-style-type: none"> Reduction of CO₂ emissions through the promotion of renewable energies Reduction of air pollutant emissions Support for the circular economy Efficient use of resources Increased recycling Protection of water quality Preservation of biodiversity Reduction of energy consumption through energy efficiency measures |  |  |  | |
| Intellectual Value <ul style="list-style-type: none"> Innovative applications and services Knowledge generated | <ul style="list-style-type: none"> Increased reputation Strengthening the shareholding structure Adaptation to new technologies Improving employee experience |  | |  |  |
| Produced Value <ul style="list-style-type: none"> Petrochemical services Quality and efficiency of energy supply Accessible energy Suppliers and customers | <ul style="list-style-type: none"> Savings through energy efficiency Societal/social benefit | |  |  |  |
| Social Value <ul style="list-style-type: none"> Community-oriented production and distribution Social investment Customer relations Supplier relations | <ul style="list-style-type: none"> Reputation and recognition Promoting social investment Promotion of customer satisfaction / Customer experience Promoting an ethical culture Supplier development |  |  | |  |
| Financial Value <ul style="list-style-type: none"> Improving economic performance Increased profitability | <ul style="list-style-type: none"> Reduced financial risks Strengthening governance structure Strengthening investor relations Continuity of activities |  |  |  | |
| Human Value <ul style="list-style-type: none"> Diversity in the workforce Training courses for employees Social benefits for employees | <ul style="list-style-type: none"> Promoting diversity and equal opportunities Encouraging the development of employee skills Promoting occupational health and safety Employee satisfaction Employment |  |  | |  |



SOCAR Türkiye's Sustainability Committee oversees the group's climate change strategies, implementation, realization and declaration.

In order to comprehend the environmental, social, and governance (ESG) risks the company faces in the areas where it works, to gauge how these risks are managed, and to spot any gaps in risk management, SOCAR Türkiye frequently conducts ESG assessments with objective auditors. The outcomes of the ESG assessment are used to conduct continuous improvement initiatives. The progress and implementation of these initiatives, as well as global developments are monitored by the Sustainability Committee.

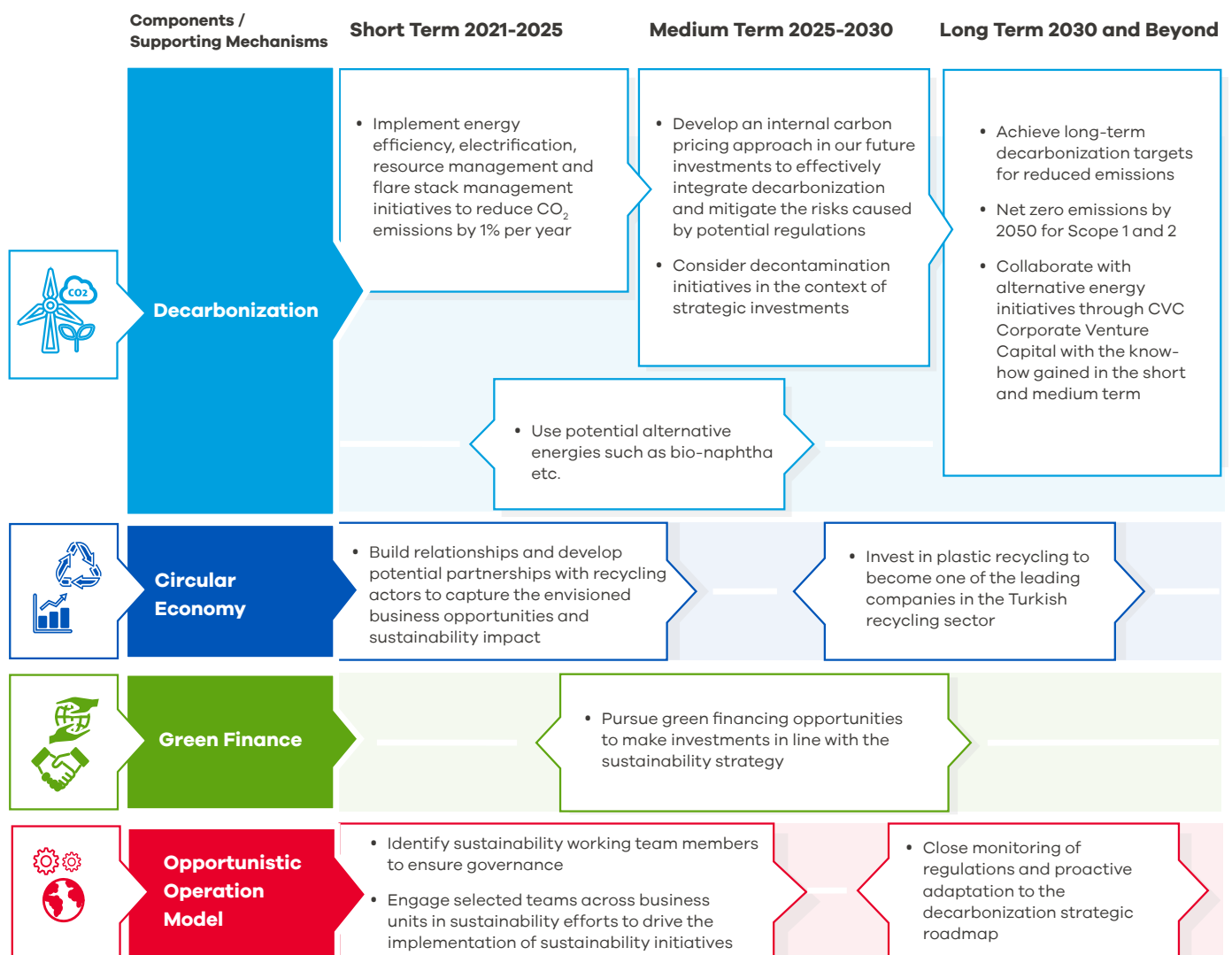
The Co-chairmanship of the Sustainability Committee, which operates under the SOCAR Türkiye executive committee and is chaired by the SOCAR Türkiye CEO, is carried out by the Head of Strategy and the Head of Communications and Public Relations, who report directly to the CEO of SOCAR Türkiye. Sustainability initiatives that are inherently interrelated are handled by the Sustainability Committee in cross-functional collaboration with the relevant departments. The Committee approves the sustainability strategy, monitors its implementation, reviews policies related to sustainability, and follows the initiatives and the general progress in sustainability workflows.

The workflows under the responsibility of this committee are as follows:

1. Strategic New Areas,
2. Stakeholders Relations and Community Development,
3. Sustainability Reporting,
4. ESG Risk Management and Assessments,
5. Operational Decarbonization,
6. Green Financing,
7. Resource Management, Waste and Wastewater Management, Green Energy Sales, Human Development and Diversity,
8. Monitoring of Legal Regulations and Adaptation. The areas covered by the Sustainability Committee are also monitored by the Corporate Governance and Sustainability Committee, which reports to the SOCAR Türkiye Board of Directors.

Goals

SOCAR Türkiye's strategy focuses on optimization of operations in the short term. In the long term, our focus is on selective growth to achieve and maintain a leading position in the petrochemical industry in Türkiye. SOCAR Türkiye's Sustainability Strategy is supported by three components and a supporting mechanism.





Our aim at SOCAR Türkiye was to “operate and develop our entire value chain from source to end user in an efficient and sustainable manner with our experienced, knowledgeable, and dedicated human resources at all levels” when we first began operating in Türkiye in 2008.

As SOCAR Türkiye, we have set a target to reduce CO2 emissions by 40% by 2035 and achieve NET ZERO by 2050 in its sustainability journey. We decided to convert the electricity we consume into green energy.

Along with our production procedures, we also take energy consumption into account. We have started working to provide our electricity consumption with green energy at 22 consumption points in total with 4 administrative buildings within our group.

Accordingly, We set the following sustainability targets for 2022 pursued within the framework of sustainability.

| | | |
|---|--|----------------|
| Establish the Company Strategy to Focus on Sustainability and Decarbonization | (Emission Intensity) | 1% Discount |
| Prioritizing OHS Guidelines in Operations | (TRIR) | ≤0.70 |
| Establish the Company Strategy to Focus on Sustainability and Decarbonization | Water consumption Outage | >1% |
| Establish the Company Strategy to Focus on Sustainability and Decarbonization | Energy intensity index (STAR) | 103.8 |
| Establish the Company Strategy to Focus on Sustainability and Decarbonization | Energy Consumption per ton of product (Petkim) | 2,791 |
| Establish the Company Strategy to Focus on Sustainability and Decarbonization | Hydrocarbon loss reduction (STAR) | 0.7% |





Materiality Analysis

We can better understand the ESG concerns that are most significant to our business, our stakeholders, and our ability to create value by using materiality analysis. The outcomes from materiality analysis help us to find opportunities and reduce risks so that we can increase the sustainability of our operations.

The 2021 materiality analysis was updated in order to better manage future risks and opportunities as well as to make sure that we prioritize the issues that will have the biggest effects on society, the environment, and our stakeholders in all of our actions.

In this context, we closely examined the findings of the materiality analysis from the previous year and switched our focus to account for shifting social and environmental concerns. In doing so, we made sure to update and reevaluate focus areas that are significant to various stakeholder groups, that support organizational decision-making and the development of strategies, particularly our sustainability strategy, and that may have an impact on SOCAR Türkiye's ability to create value in the short, medium, or long term. Additionally, we used the occasion to evaluate SOCAR Türkiye's strategic plan, embrace important challenges, and give internal management instructions on how to proceed.

We make it a priority to solicit and consider the opinions of a wide range of stakeholder groups in all of our business endeavors, whether or not those groups are directly or indirectly impacted by our actions. Therefore, for the first time this year, we conducted independent evaluations for each of SOCAR Türkiye's three business units. This gave us the chance to evaluate each business unit's focus areas of their primary activity. As part of the assessment, we identified relevant stakeholders such as senior management, top management, employees, customers, suppliers, sustainability experts, academics, government and non-governmental organizations (NGOs). Based on the issues' effects on themselves, their communities, and their companies, we asked these stakeholders to rank the significance of the concerns in the list of sustainability topics we identified for our industry and business model.



Materiality Analysis Process

The materiality analysis took into account all of SOCAR Türkiye's business areas to provide a comprehensive view because the level of importance and impact of specific sustainability challenges relies on the areas in which SOCAR Türkiye's businesses operate. The following steps were taken within the materiality analysis to understand the environmental, social, and economic impacts resulting from all SOCAR Türkiye activities and stakeholder expectations.



Identification and Interaction

A long list of sectoral themes for SOCAR Türkiye was developed based on desktop resource reviews. The influence of SOCAR Türkiye's activities on society and the environment, as well as social and environmental issues that may have an impact on SOCAR Türkiye's strategic objectives, were taken into consideration while choosing the themes. Additionally, worldwide trends were monitored during the materiality analysis process.

These sources are:

- Legislation/Legal Requirements
- UN Sustainable Development Goals
- Industry trends & megatrends
- Other companies/competitors in the industry
- GRI standards
- SASB Industry Standards
- ESG rating agencies
- World Economic Forum (WEF) Global Risks Report
- Deloitte Oil & Gas Sector Report

Together with the Sustainability Committee, this list was assessed and refined in a theme-based manner while taking into account the commercial endeavors of SOCAR Türkiye. It was then shared with internal and external stakeholders via an online survey to gather their opinions.

To ensure a comprehensive result, care was taken to include all business units in the analysis. In total, 31 external stakeholders and 80 SOCAR Türkiye employees were reached. The results from internal and external stakeholder analyses were then evaluated and stakeholder priorities were determined.



Materiality

The results from desktop research and the opinions of the stakeholders were collected and analyzed.

The prioritization initiative incorporated the opinions of employees and top management of SOCAR Türkiye and its group companies, as well as the opinions of many different stakeholder groups, including financial institutions, customers, suppliers and business partners, media and non-governmental organizations, and universities.

The participation rate in the materiality analysis was 60% among stakeholders and 50% among external stakeholders.

The following criteria were taken into account to measure the importance of each topic:

- Significance/impact for stakeholders
- Significance/impact on SOCAR Türkiye's strategy

Based on the results of the desktop research and stakeholder engagement analysis, the sustainability issues were assessed based on criteria and presented in a materiality matrix to show both the level of impact on stakeholders and the potential business impact on SOCAR Türkiye.



Approval and Output

To ensure that the key sustainability issues are aligned with business risks and strategic objectives and integrated into the materiality assessment, the identified material issues were reviewed by the Sustainability Committee and the Strategy Team and assessed for their alignment with SOCAR Türkiye's current business environment, strategic position and current strategic approach.

The material challenges discovered for each business unit as a consequence of internal research and stakeholder analyses were compiled by sustainability specialists and evaluated by SOCAR Türkiye managers.

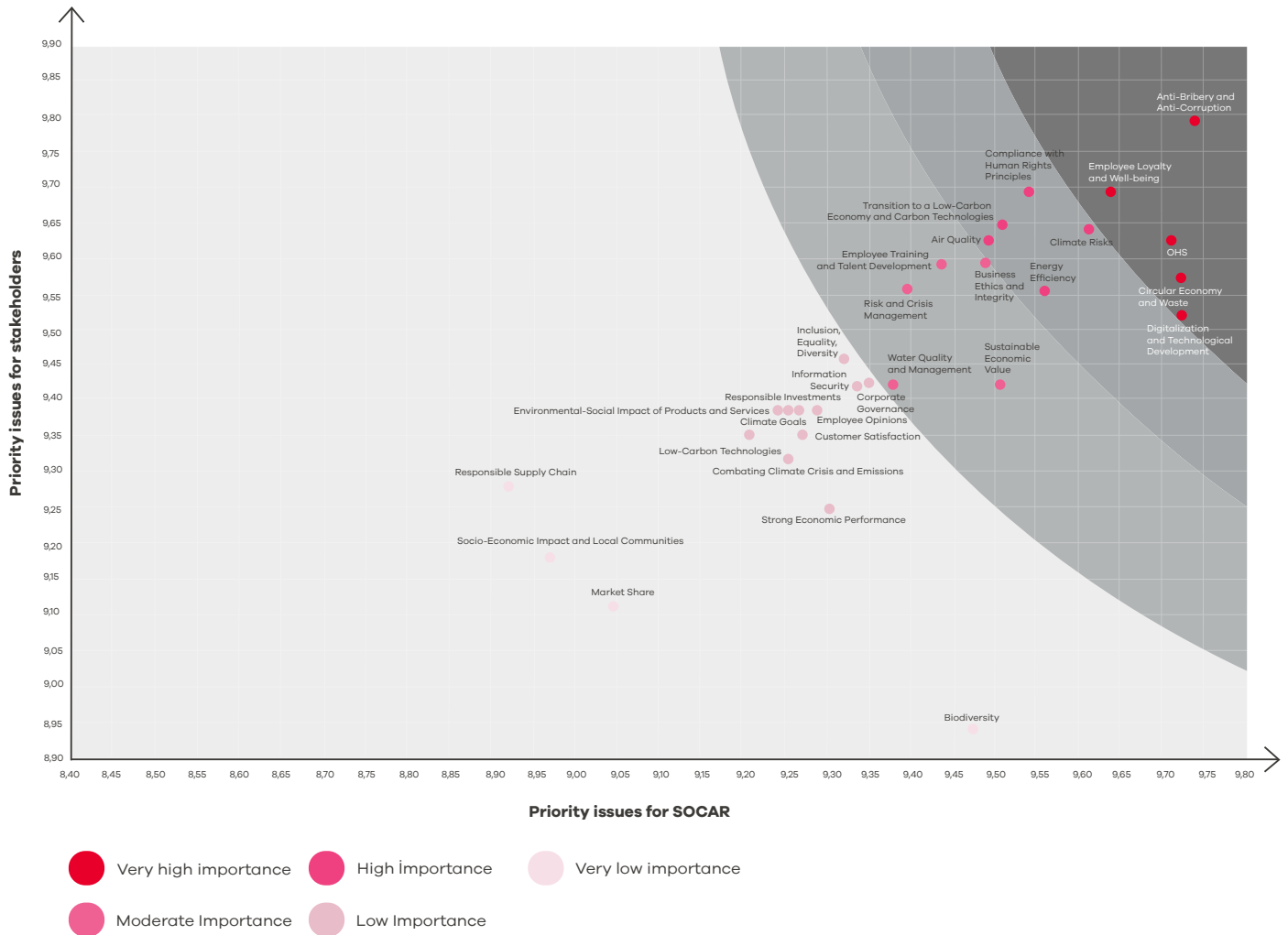
In this context, a total of 15 environmental, social and governance issues were identified as SOCAR Türkiye's Sustainability Priorities.



SOCAR Türkiye Material Topics

The following matrix shows the outcomes of the materiality analysis used to decide which sustainability-related issues we will concentrate on.

MATRIX



The results from the study, which we repeated this year, reveal that, in contrast to the results of past years, the significance of human and governance issues has increased in comparison to last year for stakeholders. These issues include bribery and corruption, occupational health and safety, employee engagement, and welfare. On the other hand, energy, environmental impact and climate crisis are again among our key issues, similar to last year.

The materiality analysis based on our business units, which we conducted for the first time this year, allowed us to obtain results for our different business units.

The findings reveal that while some issues were more significant in particular business categories, "Occupational Health and Safety," "Anti-Bribery and Anti-Corruption" were the most crucial issues in all business units.

For example, "Transition to a Low-Carbon Economy and Carbon Technologies" is a higher priority for the Natural Gas business unit, while "Circular Economy and Waste" is a higher importance for the Refinery and Petrochemicals Business Unit.

However, it was found that the materiality level of some ESG issues, including "Climate Risks," and "Water Quality and Wastewater Management," did not differ significantly by business unit.

| | Refining and Petrochemicals business unit | Natural Gas business unit | Other business unit |
|--|---|---------------------------|---------------------|
| Anti-Bribery and Anti-Corruption | | | |
| OHS | | | |
| Employee Loyalty and Well-being | | | |
| Digitalization and Technological Development | | | |
| Circular Economy and Waste | | | |
| Climate Risks | | | |
| Compliance with Human Rights Principles | | | |
| Energy Efficiency | | | |
| Transition to a Low-Carbon Economy and Carbon Technologies | | | |
| Air Quality | | | |
| Business Ethics and Integrity | | | |
| Water Quality and Wastewater Management | | | |
| Employee Training and Talent Development | | | |
| Risk and Crisis Management | | | |
| Sustainable Economic Value | | | |

High importance Moderate Importance

Low Importance

At SOCAR Türkiye, we will continue to monitor our material issues and align them with our corporate risk management processes, including the potential impact on our company's performance, development and position, as well as the potential environmental and social impact of our activities on our stakeholders.
























Compliance with Sustainable Development Goals of the United Nations

Building a shared future, the United Nations Sustainable Development Goals (SDGs) are a universal call to action to address global challenges. At SOCAR Türkiye, we are aware of our obligation to take part in this group effort and make sure to minimize any potential negative effects while utilizing whatever chances we have to better prepare our society for the future. At SOCAR Türkiye, we care about conducting all of our activities in accordance with the SDGs.

We work to guarantee that our actions contribute to a sustainable future for all by continually improving our contribution to the SDGs through our activities, programs, collaborations, and initiatives.

SOCAR Türkiye's short, medium, and long-term goals and the Sustainable Development Goals (SDGs) we serve, as well as the activities we carry out in line with our key issues are listed in the table below.

| Key Issue | Description of the key issue | Associated SDG | Related Strategies and Programs |
|---|--|----------------|---|
| Occupational Health and Safety | Healthy and safe working environment | | Hazard Identification and Risk Assessment Procedure, OHS-E Procedure |
| Anti-Bribery and Anti-Corruption | Prevention of bribery and corruption in all business processes and ensuring compliance with anti-bribery and anti-corruption legislation | | SOCAR Türkiye Code of Ethics, Diversity, Inclusion and Equality Policy |
| Climate Risks | Assessing climate risks, monitoring climate risks and integrating climate risks into business processes, efforts to mitigate climate risks | | |
| Business Ethics and Integrity | Ensuring high ethical standards and transparency in business activities, combating bribery and corruption, preventing discrimination, forced labor, child labor, freedom of association and right to unionize, compliance with competition | | SOCAR Türkiye Code of Ethics, Diversity, Inclusion and Equality Policy, Sexual Harassment and Violence Prevention Committee Guideline |
| Employee Loyalty and Well-being | Stress management, increasing well-being and workplace welfare, contributing to employee happiness and employee rights, giving importance to employee training, talent and career development | | Diversity, Inclusion and Equality Policy, Employee Orientation Principle |
| Energy Efficiency | Reducing energy consumption in all activities, spending on new equipment that uses energy efficiently and/or implementing renovation practices that reduce energy use, making energy efficiency investments | | Refinery and Petrochemical Business Unit Energy Policy, ISO50001 |
| Compliance with Human Rights Principles | Improving compliance with human rights standards and practices in all business activities | | Human Rights Policy |

| Key Issue | Description of the key issue | Associated SDG | Related Strategies and Programs |
|--|--|---|--|
| Transition to a Low-Carbon Economy and Carbon Technologies | Reducing greenhouse gas emissions and increasing efforts to transition to a low-carbon (technologies) economy |     | Decarbonization strategy |
| Air Quality | Reducing air pollution from activities, compliance with air quality standards |   | Decarbonization strategy |
| Water Quality and Wastewater Management | Improving water quality and ensuring wastewater recovery |   | OHS-E Policy |
| Employee Training and Talent Development | Increasing the competencies of employees and facilitating their continuous employability |   | Diversity, Inclusion and Equality Policy |
| Risk and Crisis Management | Effectively managing risks and crises that may impact strategy, objectives, and business practices to ensure continuity and quality of services provided in times of risk and crisis, management of supply chain risks, and monitoring credit and market risks. (Example: Climate crisis, global energy crises, pandemics and natural disasters, managing indirect economic impacts on equipment and energy supply.) |    | Enterprise Risk Management Policy |
| Circular Economy and Waste | Being able to effectively manage waste generated due to materials, products and services used in the operations |  | OHS-E Policy, Circular Economy Strategy |
| Digitalization and Technological Development | Implementing measures to adapt to technological developments and digitizing new services, processes and methods |     | Business Continuity Policy |
| Sustainable Economic Value | Supporting sustainable financial growth, contributing to the national economy, employment and local development |    | Business Continuity Policy |



Communication with Stakeholders

Communication Methods with Key Stakeholders

Establishing communication channels that enhance employee involvement in management and foster information sharing is a priority for SOCAR Türkiye and its group entities. In this context, SOCAR Türkiye employees are contacted through numerous communication channels, continuously, periodically or immediately depending on the type of communication. Depending on the demands for communication, different channels may be employed for subsidiaries. The most commonly used communication channels include the company's integrated intranet, internal surveys, emails and e-bulletins, corporate television, posters and banners, reputation and satisfaction surveys, training, the performance management system, discussions and interviews, working groups and committees, and the complaints and suggestions system.

Many communication channels, especially the complaints and suggestions system, are also accessible to employees of external companies working on activity sites.

SOCAR Türkiye and its group companies use various channels to create participatory, timely, transparent and two-way communication with its external stakeholders and its employees. Stakeholder communication method is also included in many of the applied management systems. Although it is essential to strengthen communication with all stakeholders, stakeholders with whom communication is frequent include customers, shareholders and investors, public institutions and local governments, trade unions, suppliers and contractors, professional associations and non-governmental organizations, financial institutions, educational institutions, the media and local communities.

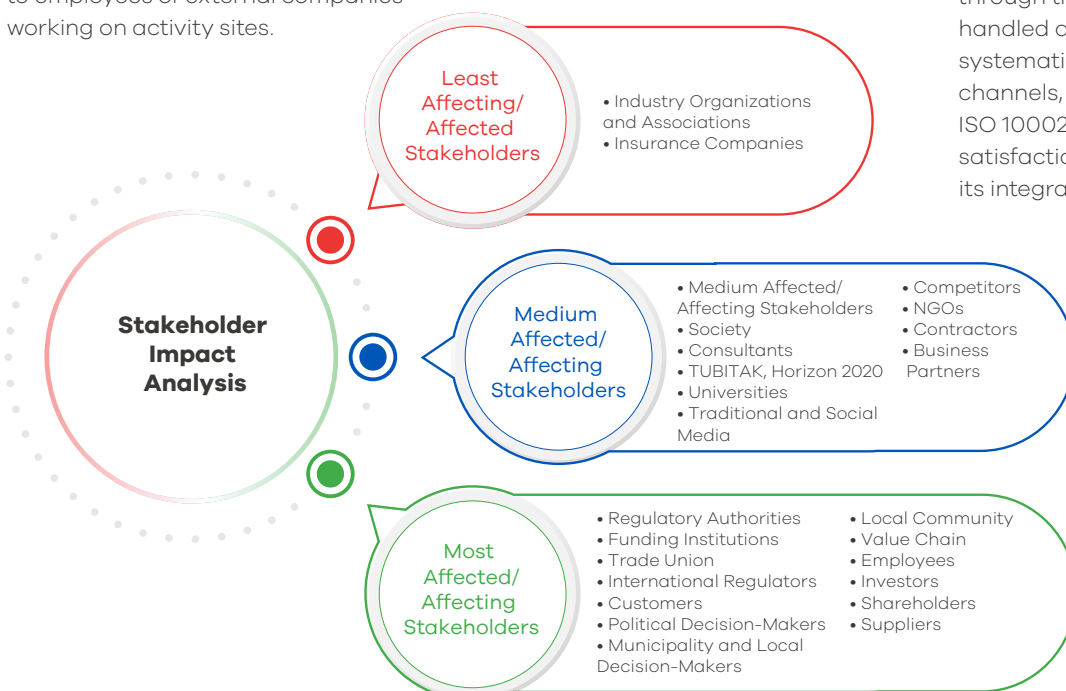
In communicating with stakeholders, tools such as the corporate website, contact forms, social media, email communication, annual reports, sustainability report, press releases and meetings, announcements, mutual interviews, social projects and sponsorships, external training

sessions, meetings and presentations, corporate films, research and surveys are systematically used.

In addition, the impacts of our investments on our stakeholders are reported according to international performance standards by conducting Social Impact Management and Stakeholder Interaction studies in our projects realized through International Funds.

The reputation survey, conducted centrally by SOCAR Türkiye, is a fundamental tool for measuring and evaluating the satisfaction of stakeholders such as customers, local and national media, professional associations, non-governmental organizations, financial institutions, and public bodies with their relationship with SOCAR Türkiye.

Ethical notice channels, suggestions and complaints systems are accessible to employees as well as contractors, suppliers and the local community. Complaints and suggestions submitted through these channels are carefully handled and finalized. To ensure systematic management of these channels, Petkim incorporated the ISO 10002 standard for customer satisfaction management system into its integrated management system.







Environment and Climate Change Mitigation

Environment

SOCAR Türkiye's OHS-E Policy provides the framework for environmental management. Under this policy, the company is committed to proactively identifying and implementing opportunities for the following issues:

- Developing energy in a manner that increases economic prosperity, promotes social well-being, and continuously protects the environment
- Using natural resources or energy more efficiently
- Reducing greenhouse gas emissions
- Reduction of water consumption
- Reduction of air emissions and wastes
- Management and minimization of wastewater
- Minimization of soil degradation and acceleration of reclamation
- Avoiding operations in areas with the highest biodiversity value
- Implementing the environmental management system with a life cycle approach
- Creation of environmental awareness
- Pursuit of technological improvements
- Consultation with stakeholders on environmental issues
- Monitoring the company's environmental performance
- Regular reporting on environmental issues

In addition, the Biodiversity Policy titled 'SOCAR Türkiye's Position on Biodiversity' was published in 2021.

The expectations for environmental management in SOCAR Türkiye group companies are included in the SAFE OHS-E Management System Principle 9 "Environmental Assessment and Management".

In its activities, SOCAR Türkiye focuses on preventing pollution, reducing waste and emissions, and minimizing resource consumption and impacts on biodiversity. For this reason, management at all levels carries out the necessary activities to limit and control environmental impacts.

As part of the environmental management activities, a waste management system based on zero-waste principle was established, and all processes from the source of waste generation to intermediate storage and delivery to the final waste processing facility are managed using waste management software. In addition, regular internal audits are conducted, environmental incidents and accidents are monitored through the incident reporting process, actions are defined and followed up. As part of improving emergency preparedness and response capabilities, land-based spill and marine pollution response drills are conducted at regular intervals.

Before loading and unloading ships docked at the STAR Refinery piers, the ships are surrounded with barriers and a pre-booming procedure is applied. In this way, environmental impacts caused by a possible spillage from ships are taken under control.

Through the channels and within the deadlines specified in the law, the corporation provides notices and declarations on the environmental impact of the present actions to the relevant authorities (Ministry of Environment, Urbanization and Climate Change, and Environment, Urbanism and Climate Change Provincial Directorates). The process of evaluating the environmental impact of new projects and obtaining approval to implement them will continue. For projects for which EIA approval has been obtained, monitoring reports are prepared and submitted to the Ministry within the parameters and timeframe prescribed by law. The Ministry is informed of the studies conducted within the framework of the EIA, and legislative requirements are met in this regard. Procedures relating to decommissioning of facilities and cleanup of sites in case of termination of activities are carried out in line with obligations. External audits on a regular basis are applicable to all work performed. All businesses engage in environmental monitoring operations, including inspections by government agencies (Ministry, Provincial Directorates), inspections by certifying organizations (Bureau Veritas, TSE, CICERT, etc.), and inspections by rental businesses (RINA).

Our subsidiary SOCAR Energy Trading sold “green energy” certified with the International Renewable Energy Certificate (I-REC) for 13.5%, or 382 million kilowatt-hours, of our present electricity end-user portfolio in 2022 to lessen and negate the carbon footprint of end-users. Additionally, the product lineup made available to consumers now includes international carbon certification services like the Gold Standard and the Verified Carbon Standard (VCS). The variety of products made available to consumers expanded in 2022 with the addition of intermediate trade services for the installation of solar energy systems.





Over the past 20 years, the oil and gas industry has made great strides in its environmental management to respond to global developments and new issues.

Risk management takes into account the environmental effects of SOCAR Türkiye's and its affiliates' operations. Environmental management processes are evaluated with various tools developed within the scope of risk management, necessary actions are determined to minimize the effects and these actions are implemented by the relevant units. In light of this, SOCAR Türkiye Aliağa Special Industrial Zone's environmental management was reorganized in line with the integration process, which was started at the end of 2019 and put into effect in 2020. The OHS-E Vice President and Environmental Directorate is now in charge of overseeing environmental processes.

SOCAR Türkiye strives to prevent pollution, decrease waste and emissions produced by its production activities, use resources wisely, and lessen the effect of its operations on biodiversity as part of its environmental management approach. This philosophy guides SOCAR Türkiye's efforts to reduce and manage its environmental effect.

At Petkim, STAR Refinery, SOCAR Storage, SOCAR Terminal, Bursagaz, and Kayserigaz, regular measurements, monitoring, and analysis are performed to ensure compliance with both local legislation and international standards, regarding procedures for monitoring the quality of the receiving environment.

While wastewater discharged after treatment is monitored by continuous wastewater monitoring systems, stack emissions, which are subject to continuous monitoring, are monitored by continuous emission measurement systems. The recorded data is then sent via online platforms to the Ministry of Environment, Urbanization, and Climate Change of the Republic of Türkiye. Level 2 and Level 3 Quality Assurance System measurements and Annual Validity Tests are carried out using continuous emission measurement systems. Additionally, as part of the continuous wastewater monitoring systems, measurements known as Integrated Comparative Tests are performed every three months, and the outcomes of the analyses are sent to official institutions. In addition, Scope 1 and Scope 2 greenhouse gas emissions are monitored and reported, by being verified through the calculations made within the scope of the national legislation.

SOCAR Türkiye measures greenhouse gas emissions within Petkim and STAR Refinery on a monthly basis and aims to reduce annual averages of CO₂ emissions by 1% between 2021 and 2025.

Online training, on-site hands-on training, OPRC/HNS training, workplace safety talks and bulletins are prepared and published at regular intervals to raise environmental awareness. In addition, subject and facility-specific spot trainings are also organized.

All processes are covered by the environmental impact and risk assessments carried out as part of the ISO 14001 Environmental Management System. By evaluating the possibilities and effects of the dimensions, the acceptable level is reduced. The activities that were carried out were planned in accordance with SOCAR Türkiye's corporate risk rationale.

In addition, SOCAR Türkiye also provides operation management services for Renewable Energy Power Plants. The SOCAR terminal has completed its work on measurement of carbon footprint in compliance with ISO 14064-1 and is working for obtaining Green Port Certification while Petkim switches to using renewable energy sources for electricity generation with the commissioning of the wind power plant. According to our calculations, 53.28% of the terminal's equipment is powered by electricity. Water, fuel, and energy usage on a monthly basis is tracked, and variations between months are examined. If the results are not in compliance with the standards, necessary measurements are taken.



Tackling Climate Change and Decarbonisation

The oil and gas industry is one of the most significant polluters, with oil and gas extraction and usage accounting for more than half of worldwide greenhouse gas emissions connected to energy consumption, according to a report by the Carbon Disclosure Project (CDP). The usage of goods manufactured by the oil and gas industry accounts for 90% of global carbon emissions. The crucial process of business model adaption being carried out by oil and gas businesses is enabling the transition to low-carbon energy. The Paris Climate Agreement and the most recent Intergovernmental Panel on Climate Change assessment contrasting the impacts of global warming of 1.5°C vs. 2°C clearly define the carbon emissions and energy consumption of oil and gas companies. There are various practical and efficient ways to cut greenhouse gas emissions and prepare for human-induced climate change, according to the Intergovernmental Panel on Climate Change.

In order to achieve the main objective of the Paris Climate Agreement, which is to keep the increase in the global average temperature to 1.5°C, and to increase resilience to the adverse effects of climate change, SOCAR Türkiye supports development based on low greenhouse gas emissions and increasing adaptive capacity, with a focus on using renewable energy sources.

Considering the sectors in which we operate, production operations and product characteristics as SOCAR Türkiye and its group companies, our activities to reduce greenhouse gas emissions that cause climate change are of critical importance. The results of international regulations such as the Paris Climate Agreement and the increasing expectations in parallel with social awareness are increasing the importance of the issue.

SOCAR Türkiye is methodically addressing the issue of climate change in light of the opportunities and challenges it presents in different areas. On national and international platforms, we actively monitor all developments pertaining to climate change and the reduction of greenhouse gas emissions and create strategic plans on the subject. In light of this, we've established our short- and long-term action plans:

In line with SOCAR Türkiye's Decarbonization Strategy, we focus on four areas.

1. Operational Moves;
2. Issues Requiring Investment;
3. Strategic New Areas;
4. Carbon Offsetting.

We monitor the capabilities necessary to achieve transformation in these areas and utilize the governance infrastructure as a tool to support organizational improvements.

Greenhouse Gas Emissions (Ton CO_{2e})

| SCOPE 1 | 2020 | 2021 | 2022 |
|----------------|--------------|--------------|--------------|
| STAR Refinery* | 1,914,451.00 | 2,010,170.00 | 2,451,866.91 |
| Petkim | 1,887,965.00 | 1,881,861.00 | 1,833,499.00 |
| SOCAR Terminal | - | 2,287.38 | 1,745.76 |
| Bursagaz | 1,083.96 | 1,665.36 | 1,294.49 |
| Kayserigaz | 1,447.43 | 1,448.37 | 723.62 |

| SCOPE 2 | 2020 | 2021 | 2022 |
|----------------|------------|------------|------------|
| STAR Refinery* | 432,560.57 | 428,453.97 | 403,876.02 |
| Petkim | 84,744.58 | 101,690.33 | 29,725.58 |
| SOCAR Terminal | - | 4,283.92 | 3,940.00 |
| Bursagaz | 504.36 | 662.55 | 740.00 |
| Kayserigaz | 252 | 265.26 | 340.00 |

*STAR Refinery emission amount verification process continues.

1. Operational Moves

Through energy efficiency improvements, the use of flare solutions, and insulation improvements in refinery and petrochemical processes, we aim to reduce emissions intensity of 1% annually until 2025.

We are working to manage the emissions that may cause climate change arising from our SOCAR Türkiye operations. The first step of our reduction efforts is to reduce emissions from our refinery and petrochemical operations with projects on energy efficiency, flare combustion management, insulation works.

The two main focuses of our mitigation effort are to reduce energy consumption and to obtain energy from renewable sources as much as possible.

The most notable initiatives are those undertaken to create value through energy efficiency and digitalization, which are ongoing under the "My Value Platform" where all improvements are managed centrally.

In addition to the sustainability impact of the initiatives followed under the My Value Platform, a diagnostic study in our refinery and petrochemical business unit will be carried out in the near future, with an energy efficiency diagnostic study, and a comprehensive compilation of energy efficiency projects will be prepared by considering the outputs strategically.

These projects will be prioritized and adapted to the decarbonisation roadmap with their impact and implementation date.

In accordance with regulatory obligations, greenhouse gas emissions are monitored, reported and verified by verification bodies and the relevant reports are shared with the competent authorities. SOCAR Türkiye, in line with its long-term sustainability goals, created a monitoring plan within the Refinery and Petrochemical Integration by classifying them according to the categories of scope 1 greenhouse gas emission sources. In line with the prepared plan, we calculate the amount of greenhouse gas emissions on a monthly basis and monitor the percentage of compliance with the targets set.





Our efforts include reducing greenhouse gas and pollutant air emissions and improving air quality through: monthly calculation of target-based greenhouse gas emissions and reduction of greenhouse gas emissions by on average 1%, calculation of Scope 2 emissions, use of renewable energy sources in electricity generation (Petkim WPP), Continuous Emission Measurement Systems (CEMS) monitoring and related fuel optimization, publication of 'Procedure for Monitoring and Reporting Greenhouse Gas Emissions', publication of 'Continuous Emission Measurement Systems Procedure', publishing the 'Air and Environmental Noise Management Procedure', examining source-based emission data and creating emission reduction programs, creating a toolbox on "Let's Reduce Our Carbon Footprint", on "Management and Monitoring of VOC Emissions", and a bulletin on "Management and Monitoring of Air Emissions" within the scope of training and awareness raising activities, and adding impact analysis on greenhouse gas emissions, air emissions and energy consumption to the investment evaluation system. Energy efficiency gains relevance in the management of climate change risks along with initiatives to track and calculate greenhouse gas emissions resulting from operations.

The calculation of greenhouse gas emissions in this context complies with legal requirements, is confirmed by organizations approved by the Ministry, and is reported yearly to the Ministry of Environment, Urbanization, and Climate Change. Utilization of opportunities makes up the second dimension of activities to tackle climate change.

Even though the demands outlined in the EU's European Green Deal, especially during the reporting period, present risks for industries and product groups that produce a lot of emissions, there are a number of opportunities for businesses that conduct R&D and planning to lessen the intensity of emissions. In this regard,

the petrochemical industry in particular stands out. By capturing the carbon dioxide produced during production, storing it, and utilizing it in industrial procedures, value-added products can be obtained. The initiatives started by the Research, Development, and Innovation Center of SOCAR Türkiye with this objective in mind are expected to give the business a competitive edge over time.

The Ministry of Energy and Natural Resources awarded Petkim a grant in 2022 for 4 efficiency-enhancing projects carried out as part of energy efficiency and conservation initiatives, totaling about 900,000 TL. On March 31, 2022, applications for two new efficiency-enhancing projects were delivered to the Ministry of Energy and Natural Resources. The Ministry conducted an initial on-site inspection of these new projects on July 27, 2022, and it was concluded that the projects could move on to the phase of on-site implementation. Petkim anticipates receiving 2,8 million TL in cash support with the execution of the corresponding projects.

A total of 32 sustainability-related projects were carried out at the STAR Refinery in 2022 as part of the Değer Benim program, saving 76,000 tonnes of water. At Petkim, 24 projects have been completed, saving 32,000 tonnes of water and 48,000 tonnes of CO₂ emissions while promoting sustainability.

The following projects, for instance, will be completed in 2022:

– **Optimizing refinery TGTU unit's AVF fuel gas pressure control valve set has been optimized:** Positive pressure is produced in acid flare lines using fuel gas. The fuel gas pressure control valve set settings were altered in order to find the optimal quantity of consumption for fuel gas. In 2022, the project will have prevented the emissions of about 2 tonnes of CO₂ and about 650 tonnes of fuel gas.

– **Lowering the methane slip value in the hydrogen production unit's reformer furnace:** Natural gas is utilized to produce hydrogen in the reformer furnace of the hydrogen production unit. Efficiency relies on how well methane is converted to hydrogen. The temperature of the reformer furnace is changed to more effectively convert methane to hydrogen. As a result, it takes less natural gas to produce the same amount of hydrogen. About 3,000 tonnes of natural gas were saved in 2022. 9,000 tonnes of CO₂ emissions were avoided based on this gain.

– **Optimization of the DCU unit HCGO stripping column:** When everything is working properly, the HCGO stripping column receives stripping steam from the DCU unit. The supplied steam essentially acts as a control mechanism to achieve the correct T5 in this instance and to reduce light ends in the finished product. According to field experiments, the current arrangement may accomplish the requisite T5 in accordance with the planning approach without steaming the HCGO stripping column. Around 18,000 tonnes of steam were conserved, and 3,000 tonnes of CO₂ emissions were averted in 2022.

– In 2022, we implemented our HCU PSA Gas to Fuel Gas Supply System Connection project. By sending the flash gas stream to the PSA in the HCU unit, the residual gas is purified, and pure hydrogen is obtained. During this operation, the residual gas coming out of the PSA unit is compressed by the compressor and sent to the refinery fuel gas system. The compressor does not have a backup and since the residual gas cannot be fed to the fuel gas during any maintenance period, it is sent to the chimney and burned. With the new line, this residual gas can be given directly to the fuel gas line, not to the chimney, in case of any problem in the compressor. Thus, fuel gas was recovered.



**Other projects:****Reduction of power consumption**

Unloaded Air Compressor in STAR Refinery Air Generator Unit Operating in Mode - There are 3 compressors in the instrument air production area of the STAR Refinery that produce the instrument air of the refinery. Two of these compressors are driven by electric motors, and one is a steam-driven turbine. Under normal conditions, one of these compressors is always kept in reserve. In reviewing the refinery instrumentation air consumption data for 2020 with the project team, it was determined that the air produced by the two compressors was in excess of the refinery's demand and the excess was being discharged through the atmospheric relief valve.

In this context, one of the electric compressors was switched to no-load mode, thus providing electricity gain. The difference between unloaded and loaded mode is; The electric compressor operating in no-load mode is activated and sends air to the system. In loaded mode, the compressor pushes the air into the refinery.

Savings in natural gas and fuel gas

STAR Refinery Hydrogen Balance Optimization - During refinery unit shutdowns; Due to the minimum limit (45%) where the capacity of the hydrogen production unit could decrease, excess hydrogen was burned and sent to the atmosphere. The hydrogen balance optimization project was carried out to avoid losses due to hydrogen combustion.

As part of the project, optimizations were made to the hydrogen production unit and the hydrogen could be fed into the purge gas. In addition, the opening of the control valve on the feed drum in the HCU plant (hydrocracking) was increased and the supply of hydrogen to the fuel gas of the CCR plant (continuous catalyst regeneration) was continuously controlled. 942 tonnes of hydrogen and CO₂ emissions were saved as a result.

Chemical Cleaning Application of Petkim Ethylene F101H Oven - Cleaning the convection section of ethylene ovens with chemicals increases heat transfer and saves energy. The F101H furnace at the ethylene factory underwent chemical cleaning, which decreased the quantity of fuel gas utilized and stopped CO₂ from being released.



| Energy Consumption (GJ/year) | 2020 | 2021 | 2022 |
|-------------------------------|---------------|---------------|---------------|
| Natural gas | 29,540,089.20 | 31,260,544.50 | 22,859,115.94 |
| Ethylene | 17,801,786.60 | 17,397,214.99 | 13,932,961.00 |
| Aeration gas | 32,835.25 | 40,088.10 | 18,315.50 |
| Hydrogen | 568,117.58 | 323,308.15 | 391,989.00 |
| Received Steam | 2,581,045.10 | 2,126,417.04 | 1,903,677.00 |
| Diesel | 12,179.66 | 9,194.90 | 38,783.12 |
| Total Electricity Consumption | 2,219,918.50 | 2,294,495.03 | 351,513.31 |
| Combustible Gas | 16,879,289.00 | 16,443,021.02 | 23,331,625.00 |

Use of Water and Steam

Reduction of LS steam used in the air heaters of Petkim's steam generation plant. The combustion air entering Petkim's boilers is heated in air heaters and economizers to reduce the boilers' energy consumption. Hot gases exiting the boilers are vented to the atmosphere through boiler stacks. To avoid sulfuric acid corrosion in the chimneys, the chimney temperatures must be above the dew point. The flue gas temperature is set with the LS consumed in the air heaters. Under normal conditions when natural gas is burned in boilers, the flue gas temperature is approximately 120°C. During hot weather in the months of June to October, the flue gas temperature is 120°C, and the LS steam in the air heaters is completely shut off. The project attempted to reduce the amount of LS in the air heaters during the winter months. The flue gas dew point was calculated and the LS quantity was optimized to be slightly above this point. This LS steam savings saved 2,195 tonnes of natural gas per year.

The project contributes to sustainability by reducing 6,000 tonnes of carbon emissions annually.

Recovery of Steam Discharged to the Atmosphere in the STAR Refinery Sulfur Production Unit - The sulfur production unit heats the HP steam fed to the common pipe in the chimney. This superheated steam is then fed into the refinery's HP header. In order to prevent the growth of cracks due to tube cracks in the heat exchanger, LP steam was started to be passed through it.

Since 34 tonnes per hour of LP steam could not be routed into the HP header, it was discharged to the atmosphere. The project attempted to bring this steam discharged into the atmosphere into the refinery's steam balance. Tie-in points were created to feed the steam into the LP and MP headers. By recovering 34 tonnes of LP steam per hour for the refinery's steam system, CO₂ emissions will be reduced.

Flare Management

Fuel Gas Optimization in STAR Refinery HCU Flares - PCV set values were reduced from 0.5 kg/cm² g to 0.4 kg/cm² g in order to reduce the amount of fuel gas sent to the flare in the HCU unit. This increased the volume flow and saved 130 Nm³ of fuel gas per hour. Petkim Aliaga Energy Optimization Petkim transfers some of the HS it produces to the STAR refinery to increase reliability and benefit from each other's different cost structures. Total steam and power costs will be minimized with the modeling that dynamically alters the quantity of HS delivered from Petkim to STAR Refinery, and energy optimization will be accomplished based on electricity market prices, natural gas prices, and boiler efficiency.

A total of 32 sustainability-related projects were carried out at the STAR Refinery, saving 76,000 tonnes of water. At Petkim, a total of 24 sustainability-related projects were completed, saving 32,000 tonnes of water.



Energy Management and Efficiency

Breakthroughs in the oil and gas industry today are driven by rapidly evolving technology, market dynamics, energy policy, and social trends. Global energy trends, the Sustainable Development Goals, and the Paris Climate Agreement projections for the oil and gas industry are transforming energy management systems. In accordance with the Paris Climate Agreement, a scenario is presented in which greenhouse gas emissions from the oil and gas sector are brought under control and a net-zero target is attained to guarantee energy security while reaching goals for cleaner air and universal energy access. In order to attain net-zero emissions in the oil and gas sector, national institutional energy management strategies are being designed, and clean energy production and renewable energy are being highlighted.

At SOCAR Türkiye, low carbon energy, high efficiency and emission reduction are the focus of our energy management system. By creating projects that meet the needs of its clients and the scope of its current portfolio, SOCAR Türkiye offers energy management services. In this regard, we act in a manner that prioritizes becoming our clients' energy solution partner.

In accordance with our strategy for services provided as a business concept, we have decided to provide services to our customers in order to support their energy management. In this regard, we have decided to serve as customers' energy solution partner with a portfolio of different products and services, including electricity, green electricity, and services for products used in the generation of electricity. The energy management system's rules are put into practice in SOCAR Türkiye group companies. The goal of the Energy Management Directorate of Petkim, STAR Refinery, and SOCAR Storage units is to manage energy consumption across the entire peninsula (STAR Refinery, Petkim, and SOCAR Storage), as well as to put the necessary improvements in place for long-term, safe, and sustainable production routes in the refinery with the least amount of energy expenditure. Bursagaz and Kayserigaz and Enervis are based on carbon emission reduction, efficiency and optimization efforts in line with SOCAR's Corporate Strategic Objectives. The aforementioned organizations have a strategy for efficient use of energy required for continuous and safe natural gas distribution, without deviating from the budgets.

The goal of Bursagaz and Kayserigaz's energy management strategy is to revamp the system for managing energy by establishing goals and objectives for managing energy as well as to improve the system's performance over time. In addition to these; energy risks within the Company are determined together with the relevant units according to the risk and opportunity assessment table risk matrix. The assessments are repeated when a new risk or opportunity arises that could have an influence on energy performance, and the procedure is analyzed annually.

Internal and external audits are conducted within the scope of ISO 50001 Energy Management System. A certified auditing agency conducts an external audit of Petkim and STAR Refinery once a year. The Business Processes and Quality Management Systems Department also performs internal audits at least once a year. At least one internal and one external audit is performed annually at Bursagaz and Kayserigaz. The RMS boilers, one of the most energy-intensive regions of Bursagaz and Kayserigaz, also undergo flue gas emission tests every two years, with results reported to the Ministry of Environment, Urbanization, and Climate Change.

The "Supply Planning Function," which is outlined in SOCAR Türkiye's procedure, was put in place to help carry out the most effective purchase of the energy required by the Group's businesses and clients. The main purpose of establishing this function is to enable customers and group companies to generate and manage their own electricity by taking advantage of the installation of solar energy systems. In addition, group companies and customers are offered market management of their own electricity generation through the Power Plant Management and Market Operations services.





2. Projects in need of investment

In order to lower emissions from our refining and petrochemical activities through new investments, SOCAR Türkiye regularly monitors legislative developments. The second part of our company's carbon reduction strategy focuses on making new investments to lower emissions from our petrochemical and refining activities. Energy efficiency programs are essential for reducing emissions even if we view them as an essential aspect of the first component, operational carbon reduction.

We intend to invest in innovative technologies and procedures that will significantly lower carbon emissions from our activities. The following areas may be the first focus of these investments:

Additionally, the assessment of investment opportunities and decisions will be significantly impacted by Türkiye's emissions trading scheme and national or international carbon pricing mechanisms. We are assessing these projects to see if they are feasible and what effect they might have on emissions. Our efforts to decarbonize our operations and lower our carbon footprint will continue, but we are not yet in a position to publicly share detailed information about these initiatives.

3. Strategic New Areas

According to the strategy of SOCAR, SOCAR Türkiye intends to increase its portfolio in the petrochemical, as well as following advancements in hydrogen, which is viewed as the energy of the future in the gas and energy industry, are all part of the company's long-term goal to create a circular economy through recycling investments in chemicals. The third component focuses on new strategic areas with the goal of developing new revenue streams that are consistent with the patterns of the energy transition. We generally concentrate our efforts on chemical recycling and bio-input possibilities. Determining the appropriateness and processability of bio-inputs that we can use in our operations is the aim of this initiative.

Increased environmental sustainability is a goal of chemical recycling, which permits the reprocessing of recyclable waste like the plastics used in our operations. This process consumes fewer natural resources because it reuses recycled parts.

We are also looking into how well-suited and easy to use bio-inputs are for our procedures. Bio-inputs are organic materials produced from biomass and other renewable resources. These materials can substitute for fossil fuels and cut carbon emissions. Investigating cooperation models like co-processing is on the table if adding bio-inputs into our processes produces results that are both technically and commercially advantageous.

Although we are not yet in a position to openly discuss the feasibility of these processes, we are devoted to carrying on with our work to make strategic transformational moves toward realizing our sustainability objectives in our businesses.

Partnership for Market Readiness (PMR) in Türkiye with the World Bank: Future Emissions Trading System (ETS) With the aim of replicating in Türkiye an example of emissions trading systems that are effectively used in combating climate change, the Government of the Republic of Türkiye, with the support of the World Bank, launched the Market Readiness Project in Türkiye (PMR). The project seeks to develop a market-based instrument as a facilitating factor for reducing greenhouse gas emissions. SOCAR Türkiye takes part in workshops, which are attended by specialists and representatives from several sectors.

At Petkim, 24 projects have been completed, saving 32,000 tonnes of water and 48,000 tonnes of CO₂ emissions while promoting sustainability.

4. Carbon Offsetting

Through verified carbon offset activities, we strive to offset emissions from our business operations. In order to lessen the effects of climate change, our organization understands how critical it is to reduce our carbon footprint. Through operational enhancements, new investments, and strategic transformation projects, our main objective is to decarbonize our company. We are nonetheless aware that we can also achieve our emission reduction objectives through offset schemes.

Our immediate objective is to search for potential opportunities in Türkiye's voluntary carbon markets and give high-quality projects priority in order to offset our inevitable emissions. Projects that meet internationally recognized standards and clearly benefit society and the environment will be given precedence by us. We believe that voluntary carbon markets may help sustainable development by giving local communities a significant source of income.

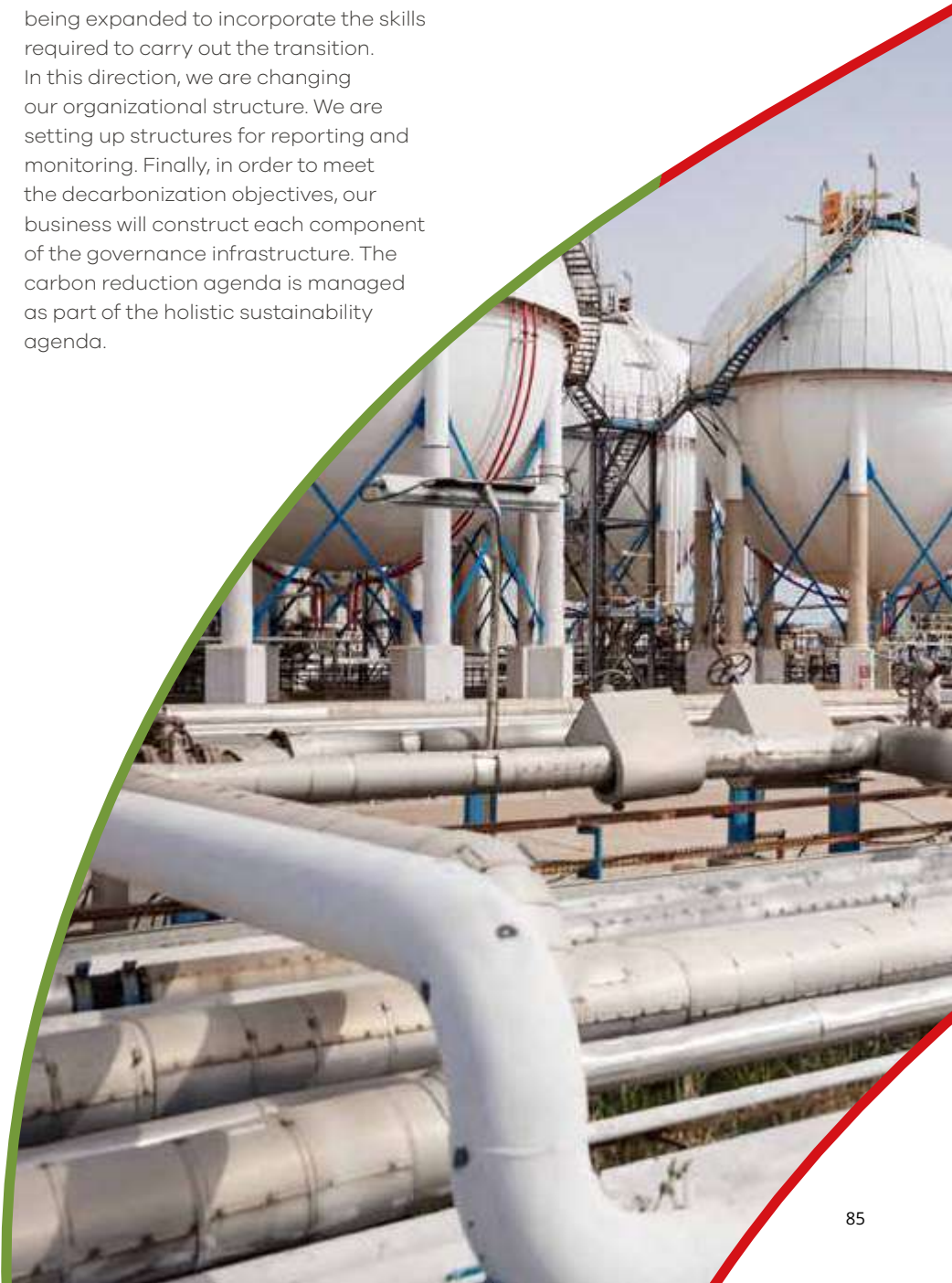
In the long term, based on the financial effects of carbon pricing mechanisms like a carbon tax, we intend to evaluate the potential for purchasing existing offset projects, if needed. This will be carried out with the participation of key stakeholders, such as our clients and suppliers, and in a way that also maintains the monetary stability of our company.

As part of our carbon reduction plan, we seek to ensure that our carbon offsetting efforts are effective and credible through our applications for globally recognized certifications in scope of carbon offsetting activities. We believe that this approach will help carbon offset projects deliver real and additional emission reductions, while contributing to sustainable development in the communities where they are implemented. In the future, we will continue evaluating opportunities to invest in high-quality carbon offset projects that align with our sustainability goals and values.

Governance infrastructure

The staff at SOCAR Türkiye is currently being expanded to incorporate the skills required to carry out the transition. In this direction, we are changing our organizational structure. We are setting up structures for reporting and monitoring. Finally, in order to meet the decarbonization objectives, our business will construct each component of the governance infrastructure. The carbon reduction agenda is managed as part of the holistic sustainability agenda.

In the My Value Platform, created for the centralized management of improvement efforts across SOCAR Türkiye as part of the My Value Platform Integration project, projects that can be resolved using approaches like lean 6 sigma, kaizen, and flexible management are evaluated and monitored under the value creation category while projects involving multiple group companies are placed under the integration category.





Air and Water Quality

Air

As part of our ongoing efforts to reduce emissions, SOCAR Türkiye continuously monitors and controls the sources of its emissions. For the protection of the local air quality, our refinery and petrochemical facilities must have all their emission sources controlled and managed.

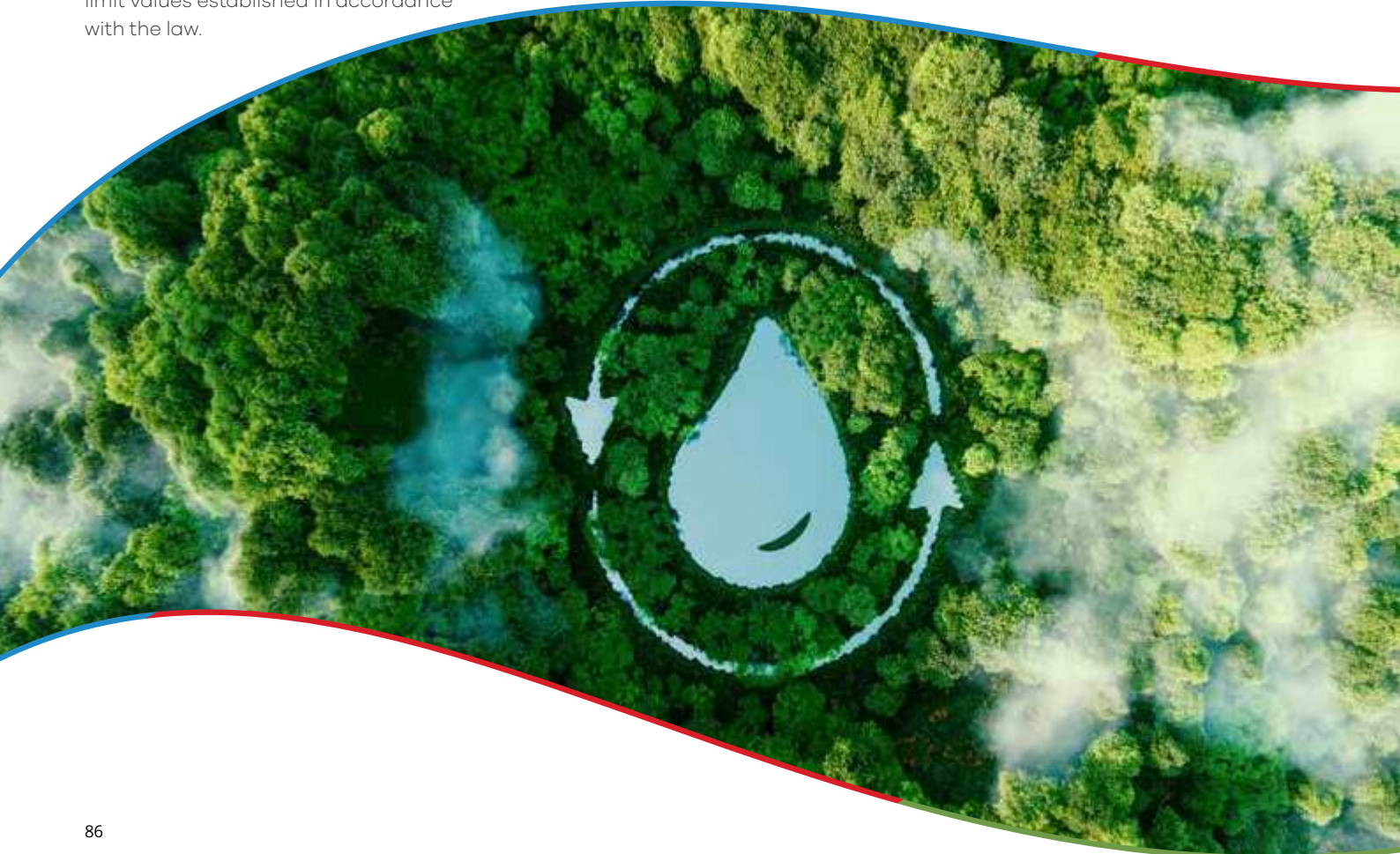
At Petkim and STAR Refinery, accredited laboratories conduct annual measurements of flue gas emissions and air quality, while at SOCAR Storage, emission tests are conducted every two years. In accordance with the legislation published by the Republic of Türkiye Ministry of Environment, Urbanization and Climate Change, we have Continuous Emission Measurement Systems (CEMS) in our chimneys. With the use of Continuous Emission Measurement Systems, the official institution can monitor online if the emissions brought on by the operations of the units comply with the limit values established in accordance with the law.

Air Emissions (ton/year)

| Petkim | 2021 | 2022 |
|--------|----------|----------|
| NOx | 2,227.16 | 2,040.92 |
| SOx | 1,040.96 | 631.68 |
| PM | 10.64 | 7.35 |

Air Emissions (ton/year)

| STAR Refinery | 2021 | 2022 |
|---------------|--------|--------|
| NOx | 597.86 | 878.41 |
| SOx | 299.13 | 601.77 |
| PM | 5.2 | 86.75 |



Water

We at SOCAR Türkiye view the use of water during operations as having a substantial environmental impact. We use water, a finite resource on our world, effectively while also reducing the amount of clean water we use through recycling. The production procedures carried out by our Refinery & Petrochemicals Business Unit involve significant water usage. We are aware of how crucial it is to manage our activities' water consumption. In order to do this, we make sure that water consumption is decreased by identifying and quickly fixing leaks in the cooling, process, and extinguishing water systems used in factories. We also track and record water use and put improvement measures into place.

Thanks to the work we've done at Petkim to reduce water use, less natural resources are being consumed, and there is more understanding and awareness across the field. The purpose of this procedure is to regulate water use in the factories, take action in the event of any water leaks, and guarantee that they are quickly repaired. Thanks to our efforts, our water use, which was an average of 250 t/h in 2021, was decreased to 120 t/h in 2022.

Water Withdrawal by Source (m3/year)

| | 2021 | 2022 |
|------------------------|---------------|---------------|
| Surface Water | 20,601,862.00 | 17,523,735.00 |
| Groundwater | 0.09 | 0.13 |
| Municipal Water | 6,543,393.90 | 7,378,628.19 |
| TOTAL Water Withdrawal | 27,145,260.27 | 24,902,368.87 |

*Consolidated data of SOCAR Türkiye.



Biodiversity

At SOCAR Türkiye, we acknowledge the value of biodiversity protection and consider it to be a shared responsibility within the parameters of our biodiversity policy, which we have made public since the second half of 2021. We are committed to protecting the communities and natural environments in which we live and work.

We recognize that our activities may affect local ecosystems and biodiversity. We continue to strive to avoid and minimize significant impacts of our projects and activities on sensitive species, habitats and ecosystems.






In this context, biodiversity assessment studies were initiated in land and marine environments with the participation of experts in the SOCAR Türkiye Refinery and Petrochemicals Business Unit Special Industrial Zone.

Waste Management


Waste

Waste and chemical management is one of the issues where great efforts still need to be made in the industry for a sustainable future. The fundamental tenet of the waste management system put in place at SOCAR Türkiye is to take steps to reduce waste before it is generated and to guarantee recycling by source segregation. We are dedicated to "Reducing Waste, Increasing Recycling Rate, and Reducing Consumption of Natural Resources" in accordance with the company's objectives, as stated in our Quality Management System policy. In this context, our OHS-E Policy and SAFE Principles and Expectations, which we developed to uphold our commitments, serve as the framework to manage our operations.






Amount of Waste (ton/year)

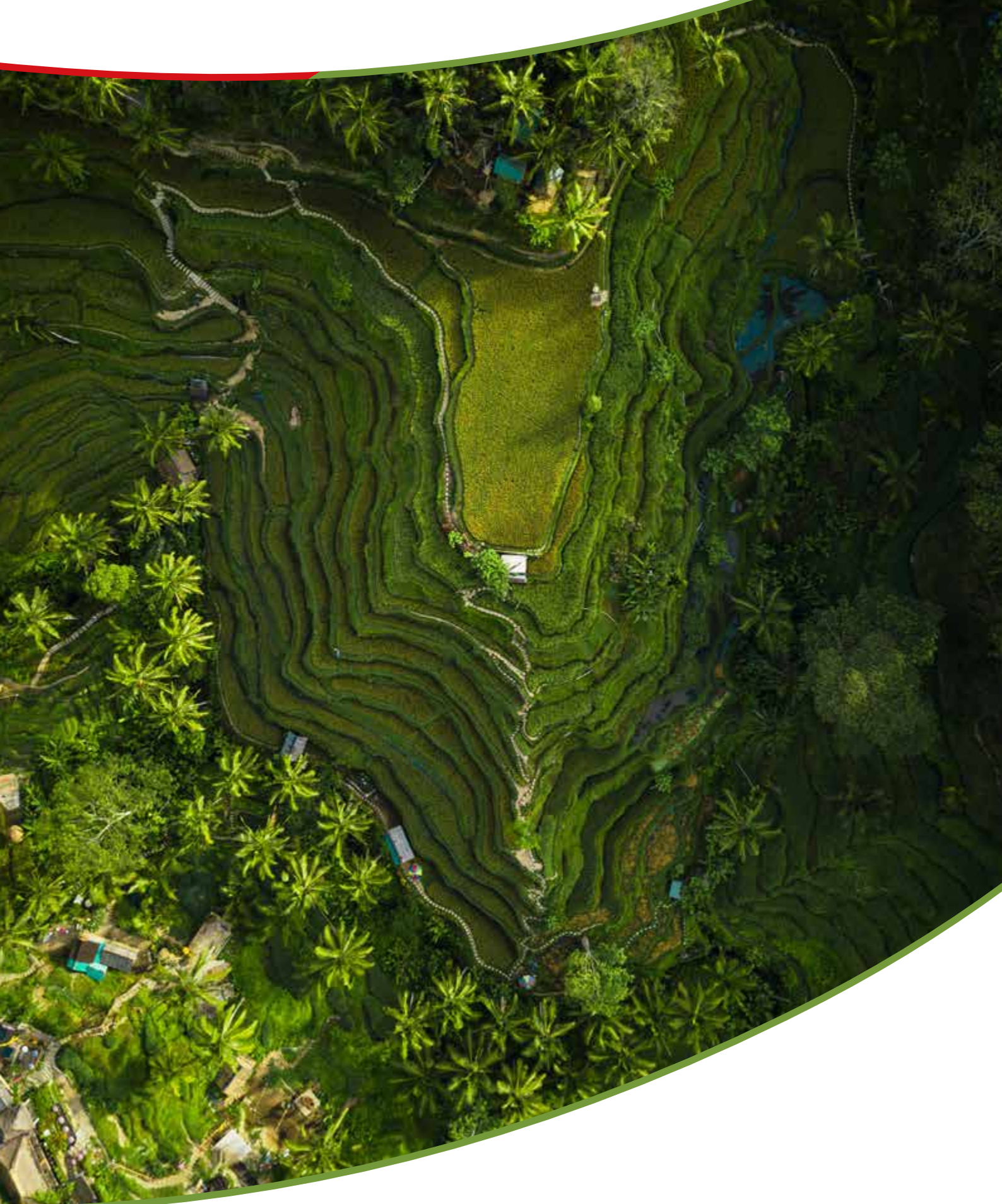
| SOCAR Türkiye Headquarters | 2021 | | 2022 | |
|--|--------------------|----------------------------|--------------------|----------------------------|
| | Hazardous Waste | Non- Hazardous Waste | Hazardous Waste | Non- Hazardous Waste |
|  Reuse | | | | |
|  Recycling | | 8.47 | | 13.6 |
|  Recovery | | | | |
|  Storage | 0 | 19.91 | | 14.5 |
|  Incineration | 0.03 | | 0.065 | |
| TOTAL | 28.408 | | 28.165 | |

Amount of Waste (ton/year)

| Petkim | 2021 | | 2022 | |
|--|--------------------|----------------------------|--------------------|----------------------------|
| | Hazardous Waste | Non- Hazardous Waste | Hazardous Waste | Non- Hazardous Waste |
|  Reuse | | | | |
|  Recycling | 11.26 | 7.68 | 22.35 | 5.73 |
|  Recovery | | | | |
|  Storage | 1.73 | 15.75 | 2.08 | 219.99 |
|  Incineration | 0.58 | | 0.93 | |
| TOTAL | 37.510 | | 251.080 | |






Amount of Waste (ton/year)

| STAR Refinery | 2021 | | 2022 | |
|--|--------------------|----------------------------|--------------------|----------------------------|
| | Hazardous Waste | Non- Hazardous Waste | Hazardous Waste | Non- Hazardous Waste |
|  Reuse | 0.021 | 0.02 | 0.01 | 0.0001775 |
|  Recycling | 0 | 0 | 0 | 0 |
|  Recovery | 20.94 | 0.83 | 7.56 | 0.58 |
|  Storage | 2.43 | 1.47 | 1.38 | 0.46 |
|  Incineration | 0 | 0 | 0 | 0 |
| TOTAL | 25.711 | | 9.990 | |





Amount of Waste (ton/year)

| SOCAR Storage | 2021 | | 2022 | |
|--|-----------------|---------------------|-----------------|---------------------|
| | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
|  Reuse | | | | |
|  Recycling | | | | 0.004 |
|  Recovery | 0.188 | 0.038 | 0.29 | |
|  Storage | | | 0.01 | 0.039 |
|  Incineration | | | | |
| TOTAL | 0.226 | | 0.343 | |






Amount of Waste (ton/year)

| SOCAR Terminal | 2021 | | 2022 | |
|--|-----------------|---------------------|-----------------|---------------------|
| | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
|  Reuse | | | | |
|  Recycling | 0.01288 | | 0.006682 | 0.04602 |
|  Recovery | 0.020889 | 0.08 | 0.016154 | 0.0058 |
|  Storage | | | 0 | 0.16769 |
|  Incineration | 0.000007 | | | |
| TOTAL | 0.114 | | 0.242 | |

Amount of Waste (ton/year)

| Bursagaz | 2021 | | 2022 | |
|--|-----------------|---------------------|-----------------|---------------------|
| | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
|  Reuse | | | | |
|  Recycling | | 0.79112 | | 0.104316 |
|  Recovery | 0.00068 | | 0.002636 | |
|  Storage | | | | |
|  Incineration | 0.0021 | | | |
| TOTAL | 0.794 | | 0.107 | |

Amount of Waste (ton/year)

| Kayserigaz | 2021 | | 2022 | |
|--|-----------------|---------------------|-----------------|---------------------|
| | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
|  Reuse | | | | |
|  Recycling | | 0.00136 | | 0.001029 |
|  Recovery | | | | |
|  Storage | 0.3 | | | |
|  Incineration | | | | |
| TOTAL | 0.301 | | 0.001 | |

We place a high value on innovative recycling investments. Our “Development of Raw Materials Suitable for Refinery and Petrochemical Inputs from Waste Polyolefin” Project was started with this goal in mind. The initiative, which we started in partnership with METU, aims to use chemical processes to convert plastic trash into raw materials for the petrochemical industry. As a result, while some of the harmful consequences of plastic pollution are mitigated, we will be making progress with the circular economy. Additionally, we are attempting to employ granules that are 50% recycled in Petkim’s packaging manufacture.

Plastic Recycle Project

The Plastic Processing Plant produces defective and unusable FFS Rolls, production waste, and garbage from the packaging units, all of which are gathered and sold to different authorized companies through bids as packaging production waste. Instead of being sold, it is intended to send these packaging production wastes to a certified recycling company outside so that they can be converted into granules that can be used to make FFS Rolls once again.

Wastewater

Processes for managing wastewater, another significant aspect of water use, have an indirect and direct impact on biodiversity and the preservation of water resources. At SOCAR Türkiye, we place a high value on protecting natural resources and ethically passing them on to future generations. In wastewater treatment facilities, the water used in our operations and activities is cleaned up to the discharge limits outlined in the legislation before being released. We implemented continuous wastewater monitoring systems (CWMS) at the wastewater discharge locations to regulate the discharge quality.

With the use of this system, we can continuously check that wastewater discharges are adhering to the legal limitations and confirm that they are. In order to identify the reasons behind variations in the quantity of municipal water use and put improvement measures in place, we installed separate meters on the fire water line, on the water lines to the administrative buildings, and on the water lines to the fields under SOCAR terminal in 2021.

Treated Water Discharge (m³/year)

| | 2021 | 2022 |
|----------------------------|------------|------------|
| Discharge of Treated Water | 10,482,341 | 12,016,241 |
| Total Water Discharge | 10,482,341 | 12,016,241 |

*The table indicates Petkim, STAR Refinery and SOCAR Storage data.



Responsible Supply Chain

SOCAR Türkiye's value chain need a procurement operation appropriate to the scale of the business. Therefore, a sizable portion of the value chain's sustainability impact is produced in the supplier facilities where goods are purchased. SOCAR Türkiye prioritizes the management of social, economic, and environmental risks in its procurement operations and supplier selection, adhering to the principle of impact management throughout the value chain in sustainability management. Social risks include those related to employee conditions, human rights, occupational health and safety, etc. while environmental risks relate to material and service purchases of a certain scope and size, environmental management system and requirements, emission management, water management, etc. All procurement operations are performed in accordance with SOCAR Türkiye Procurement Values. The same standards of business ethics must also be followed by SOCAR Türkiye's business partners in the procurement sector. Additionally, suppliers must abide by the anti-corruption and trade control policy as well as the code of business ethics of SOCAR Türkiye. As a result, a compliance process is applied to all parties with whom commercial interactions are established.

Therefore, prospective business partners of SOCAR Türkiye and all of its subsidiaries are strongly encouraged to study, comprehend, and, to the extent necessary, apply the Code of Ethics and to undertake initiatives in this respect. In accordance with SOCAR Türkiye's compliance standards, all parties with whom commercial interactions are established, applicable to all companies in our group, are submitted to SOCAR's compliance process and approval is acquired from the Compliance Department.

SOCAR Türkiye's activities are carried out in accordance with the Constitution of the Republic of Türkiye, the United Nations Universal Declaration of Human Rights and the main conventions of the International Labor Organization. In 2022, conformity assessments were performed at 1148 supplier factories for the STAR Refinery, Petkim, and SOCAR Storage.

Crude oil supplies and purchases of non-crude oil goods and services can be separated into two categories in SOCAR Türkiye, Petkim, and STAR Refinery's procurement activities. Crude oil supplies include crude oil and purchases of semi-finished and finished products. Service, equipment, and consumable purchases are prioritized in non-crude oil purchases. Suppliers include large-scale companies as well as small and medium-sized companies.

Supply assurance is ensured through long-term material and service supply agreements and/or having approved alternative suppliers in the supplier portfolio. As of November 2019, in line with integration efforts, purchases by group companies, particularly STAR Refinery and Petkim, were centralized in order to be carried out in an integrated manner. For orders over \$100,000, suppliers are evaluated based on their performance in this context. Contractors are subject to on-site inspections by the Refining and Petrochemicals Business Unit's procurement division. 33 audits were conducted as part of compliance assessments in 2022. Contractors that are not performing to the required standard are directed to fix the flaws using the audit questionnaire, which includes specific questions on compliance with the contract, environmental issues, and employees. For purchases over \$500,000, a prequalification (PQ) procedure is applied. Information about OHS-E policy, ISO 45001 occupational health and safety management system and ISO 14001 environmental management system certificates and practices, risk assessment, emergency response plan, number of accident reports, and quality management procedures are requested from suppliers during registration under the main framework of OHS-E and Quality Management.

Management created and approved a green procurement policy in 2022. This policy states that where there is a chance for implementation during the procurement phase, the concerns of resource conservation, energy consumption, pollution avoidance, and human health protection shall be assessed.

Local Supply Development / Localization Project

The Domestic Manufacturing Service is a component of the Refining and Petrochemicals Business Unit's procurement structure and develops technical specifications for spare parts and machinery that were initially purchased from foreign suppliers in order to more efficiently purchase them from domestic producers. The Localization Commission was founded and got to work in September 2020 with the goal of accelerating purchases from local suppliers. The Commission examines applications and determines products fit from procurement from local sources, and the Purchasing Department solicits bids from domestic markets. It was determined to focus on the Material Category in compliance with the 2022 Decision; filters that are crucial to the STAR Refinery were addressed. In the last period, an average of 80% of the filters used in the refinery were procured from local sources, and the 868 filters purchased were locally manufactured. Taking into account foreign purchase prices, local purchase of filters generated an economic benefit of \$400,000.

Number of Suppliers (pcs)

| | Total Supplier | Number of Local Suppliers in Total Number of Suppliers | Total Local Supplier Rate |
|---|----------------|---|------------------------------|
| STEAŞ, Petkim, STAR Refinery, SOCAR Storage, SOCAR Ticaret, Azoil, SOCAR R&D, SOCAR Terminal | 1,862 | 1,670 | 89.6 % |
| Bursagaz, Kayserigaz, SETAŞ, Enervis, STDGYAŞ | 609 | 606 | 99.5% |





Installation of Online Measurement System at Petkim Wastewater Plants Wastewater Outlet (Prior to Wastewater Treatment Plant) Points

With online measuring devices to be deployed at the wastewater outlet sites of our Petkim manufacturing plants, it is intended to boost the treatment efficiency of the Wastewater Treatment Plant by taking immediate quality measurements of wastewater for important parameters.



Petkim GCC (Global Carbon Council) Certification Project

We support the studies conducted within the framework of the Global Carbon Council ("GCC"), Voluntary Emission Reduction Certification process in order to disseminate the impact of our Petkim Wind Power Plant (WPP) for renewable energy generation and to document the greenhouse gas emission reduction provided by the project on an international scale.



Optimizing Furnace Load and Fuel Gas Consumption at NHT Unit in Furnace 120F-001

By changing the burner types, it was hoped to lower the amount of fuel gas used by the 120F-001 furnace. The new burner types allow the furnace to run at a reduced load as well.



Project for Electric Pool Vehicles

At STEAŞ Headquarters, a gasoline-powered vehicle that was utilized as a pool car was swapped out with an all-electric one. (This is a pilot project that is meant to be expanded upon.)



Renovating package stacking methods for PP and AYPE-2:

The 1991 model stacking machines in the PP and Aype-2 packaging lines were replaced with Ehcolo branded servo-motor stacking machines in the 2022 TA shutdown. These serve-motor systems allowed for energy savings of up to 70%.



Replacing the dark-colored panels of Aype packaging roof:

The dark-colored roof panels of the packaging area were replaced with transparent panels and sunshine was employed for lighting and energy savings were achieved.



Use of electric forklifts:

Utilizing 26 electric forklifts as transportation and packaging equipment in product packaging and storage areas rather than diesel forklifts: Work has begun to replace 26 of the 34 diesel forklifts used in the product packaging and storage areas with electric forklifts, which were put into use in March 2023.



Rail transport:

The Adana-Gaziantep region, which used to be supplied by road, was alternatively supplied by rail, resulting in a 1.07 kt/year reduction in carbon emissions.



Chemical cleaning of the convection section of the ethylene plant

It is planned to increase energy efficiency in the furnaces via chemical cleaning in the convection section of furnaces F101A/G, F102 and FN101H. In January 2018, the pilot application in furnace F101E resulted in an increase in the amount of XHS produced and the energy efficiency of the furnace. The application was then expanded to all furnaces. The efficiency of the furnaces is monitored and regular cleaning activities are carried out.



Determination of the Industrial Emission Strategy of Türkiye (DIES) Project under the Integrated Pollution Prevention and Control Institution (IPPC)

The Ministry of Environment, Urbanization and Climate Change is working on the implementation of the EU Integrated Pollution Prevention and Control (IPPC) Directive into national law. As a project partner for the chemical industry, SOCAR Türkiye Refinery and Petrochemicals Business Unit Petkim, a subsidiary, took part in the IPPC's Determination of Türkiye's Industrial Emission Strategy (DIES) Project, which was carried out to create the IPPC system's infrastructure, carry out sectoral compliance analyses, and establish compliance requirements. Desk studies and field studies were carried out throughout the year with the working group, which was made up of Ministry experts, university representatives, and domestic and international sector experts from the project partners. The studies evaluated our industry's investment needs and level of harmonization in relation to the EU Best Available Techniques (BAT) checklists.



Monitoring of greenhouse gas emissions on a monthly basis

SOCAR Türkiye Refining and Petrochemicals Business Unit subsidiaries (Petkim, STAR Refinery) track the quantity of greenhouse gas emissions per unit of product on a monthly basis.



Zero Waste Initiatives and On-site Waste Management Projects

A zero waste management system was set up in the operational regions of our companies of the SOCAR Türkiye Refining and Petrochemicals Business Unit (Petkim, STAR Refinery, and SOCAR Storage) to segregate garbage at its source and decrease the amount of waste while increasing the recycling rate. This system enables the source-level classification of non-process waste into seven broad types, each of which is subsequently managed separately for economic gain.



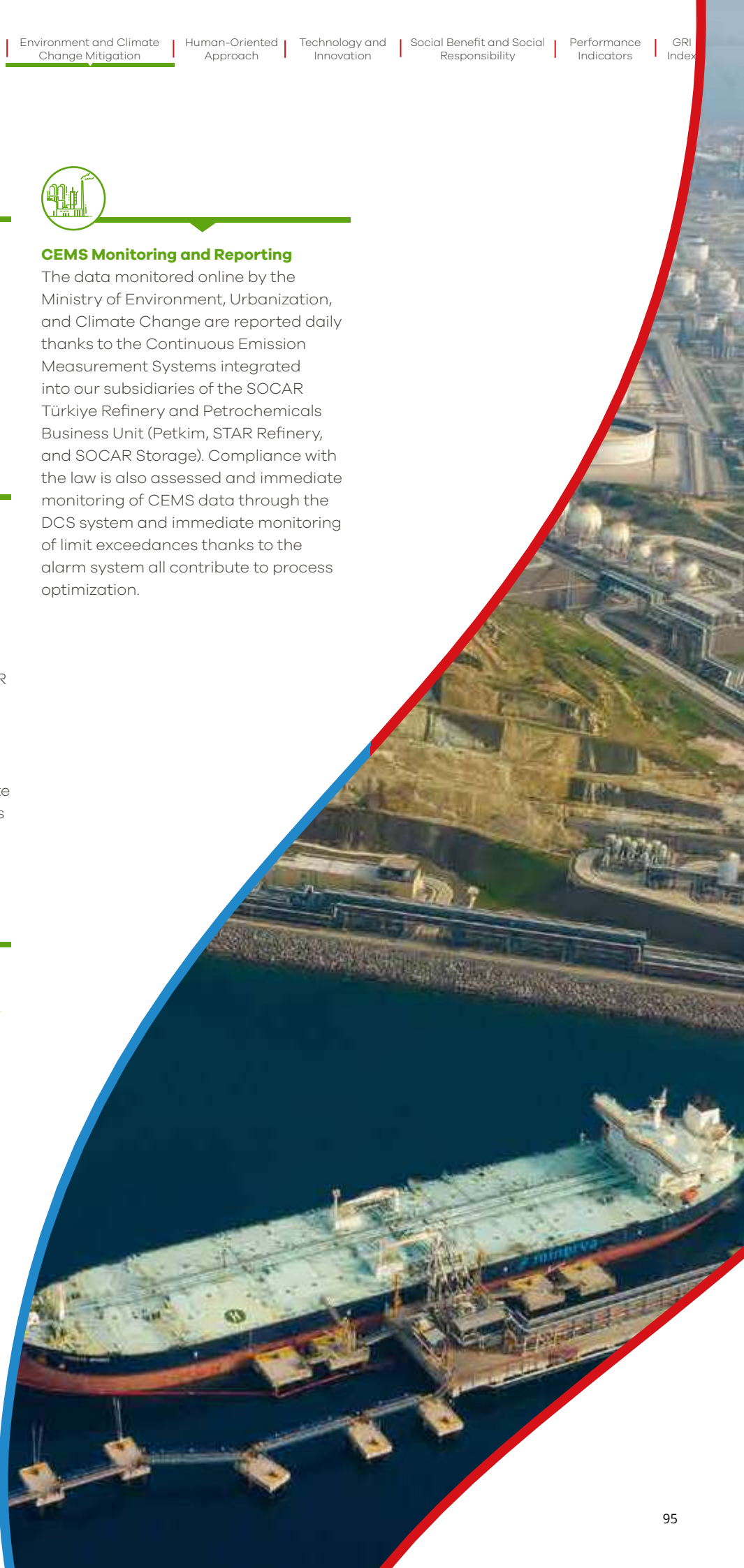
Preparation of "Biodiversity Assessment Report" and "Biodiversity Action Plan"

As a result of the research done to identify and assess the biological diversity in the land and marine environments of SOCAR Türkiye Refining and Petrochemicals Business Unit (Petkim, STAR Refinery, and SOCAR Storage) subsidiaries and their surroundings (Petkim Peninsula), a "Biodiversity Assessment Report" was created. To decide the steps to be done to protect the biological diversity mentioned in the study, a "Biodiversity Action Plan" was also prepared.



CEMS Monitoring and Reporting

The data monitored online by the Ministry of Environment, Urbanization, and Climate Change are reported daily thanks to the Continuous Emission Measurement Systems integrated into our subsidiaries of the SOCAR Türkiye Refinery and Petrochemicals Business Unit (Petkim, STAR Refinery, and SOCAR Storage). Compliance with the law is also assessed and immediate monitoring of CEMS data through the DCS system and immediate monitoring of limit exceedances thanks to the alarm system all contribute to process optimization.





Human-Oriented Approach

Human Rights

As SOCAR Türkiye, we prioritize the fundamental rights and well-being of our stakeholders by following a human-oriented business approach. To this end, we comply with all national and international laws and norms, including the United Nations Universal Declaration of Human Rights and the ILO conventions, and ensure their implementation and dissemination throughout the value chain

We treat all our employees equally and without discrimination based on language, religion, race, gender, sexual orientation, or any individual innate quality, beginning with our equal opportunities approach to the recruitment process.

As SOCAR Türkiye, we do not tolerate any behavior among our stakeholders that we consider to be incompatible with our ethical values and rules, including such practices as pressure, intimidation and discrimination. We share these internal and external rules with all our stakeholders in writing through our Code of Ethics manual and organize regular trainings while monitoring the entire value chain.

We implement practices aimed at the prevention of forced or involuntary labor and child labor, both within SOCAR and throughout its supply chain, in line with the principles of the International Labour Organization (ILO), Turkish Labour Law No. 4857 and all other relevant legislation, and prioritize the basic human and employment rights of all our employees. We follow all legal requirements related to our employee profile in line with our diversity, equity and inclusionary approach.

Gender Equality

At SOCAR Türkiye, we are aware that social development and progress in business life can only be achieved through the empowerment of women, we work to strengthen the role of women in business life beyond merely increasing the employment of women. Accordingly, as a signatory of the Women's Empowerment Principles (WEPs) – a joint initiative of UN Women and the UN Global Compact – we pay close attention to diversity, equality and an inclusionary approach in all our business processes. As SOCAR Türkiye, we endeavor to create for our employees a working environment that prioritizes their well-being and safety, while remaining open to development and following an participatory approach based on respect for human rights. We have set out to establish ourselves as a brand that is fair, inclusive and diverse in its business life, and to build a business culture in which the focus is on equality.

At SOCAR Türkiye, we know that our differences are our greatest asset. We adopt an approach to diversity, equality and inclusion in our business processes through our gender equality and human rights initiative under the motto "Our Energy comes from our Diversity". We believe that all of our colleagues add value to our company through their color, preferences, thoughts, abilities and beliefs, and seek to develop a culture that accepts diversity as an asset. To support the creation of an equal, fair, transparent and participatory working environment, we involve our employees in management processes, keeping in mind the diversity- and inclusion-based policies and the Women's Empowerment Principles we have adopted in the "Our Energy comes from our Diversity" initiative.

We operate the "Our Energy comes from our Diversity" initiative in line with the United Nations' Women's Empowerment Principles, to which SOCAR Türkiye is a signatory. We constantly improve our business environment through the day-to-day development of practices that benefit both our female and male colleagues.

We support the self-development of our employees through our training courses on Diversity in Recruitment, Intergenerational Communication, Leading a Team of Different Generations, Fighting Bias in an Organization, Being Open to Diversity and Actively Encouraging Diversity in Participation, all of which have been prepared as part of the Initiative.

We carry out the necessary studies to provide a more convenient working environment for our employees. We offer 20 weeks of paid leave to our female employees who have given birth, and 10 working days of paternity leave to new fathers. In addition to the annual support we provide to our colleagues with children studying in schools, we also provide monthly nursery assistance to our female colleagues. Also, we provide an additional day of excused leave per month that they can use during their terms. We also offer additional leave to our colleagues in cases of adoption and fostering. For those adopting or fostering a child under the age of 3 years, we give 20 weeks of leave to our female colleagues and 10 working days to our male colleagues.



We support the rights of women to equality and freedom in the business world and in all segments of society. Our HR policies are based on a principle of equal opportunities, according to which we are endeavoring to increase the ratio of women in employment in every field. To this end, we have identified steps to be taken in the short, medium and long term. We take action for the steps identified for the short term.

We organize awareness-raising events that are open to all our stakeholders and develop internal and external communication strategies. We prepare guidance documents and guidelines on the use of egalitarian language within the institution with a view to overcoming the stereotyping of roles and maintaining equality. We place importance on the use of visual materials and language in a more inclusive way. To avoid stereotyping in the marketing activities for our products and services, we have prepared a "Language Equality Guide" that we have shared with all our stakeholders.

Based on our leading position in the energy sector, we published the "SOCAR Türkiye Human Rights Policy and Guidelines" and "SOCAR Türkiye Diversity, Equality and Inclusion Policy" within the scope of "Our Energy comes from our Diversity" initiative. As SOCAR Türkiye, we will continue in our efforts to make business life more comfortable and efficient for all our colleagues.

Our Commitments:

- Equal Participation in Business Life
- Prevention of Discrimination, Harassment and Violence
- Establishment of Responsible Relationships with the Community and Stakeholders
- Diversity and Equal Opportunities
- Supporting the Development of Women in Business Life
- Open and Transparent Communication



Number of Employees by Sex (persons/year)

| | 2021 | | 2022 | |
|---|---------|-------|---------|-------|
| | Females | Male | Females | Male |
| SOCAR Türkiye Corporate Headquarters | 41 | 85 | 42 | 87 |
| Petkim | 167 | 2,208 | 178 | 2,171 |
| STAR Refinery | 83 | 1,000 | 90 | 979 |
| SOCAR Storage | 6 | 71 | 6 | 77 |
| SOCAR Terminal | 29 | 268 | 32 | 284 |
| Bursagaz, Kayserigaz, STDGYAŞ, Enervis, SETAŞ | 142 | 659 | 140 | 674 |
| Other (SOCAR Turkey Ortak Yön. Hiz. A.Ş., SOCAR Ticaret, SCR Müşavirlik, SOCAR R&D) | 160 | 260 | 169 | 281 |
| Board of Directors | 3 | 33 | 4 | 37 |

Women Operators Training Program

Within the scope of a project aimed at increasing the number of women in employment, women have been employed as Rubber-Tyre Gantry (RTG) crane operators at our port. Crane operators must complete a long training and professional competence certification process. The training and certification processes of our female operators are continuing as part of our continued efforts to increase the employment of women.

Increasing the Number of Female Engineers in Workforce

As SOCAR Türkiye, we aim to involve women more in the field of engineering. Accordingly, new female graduates of Departments of Chemical Engineering have started work in the LDPE, PA, PVC and EO/EG Plants affiliated with the Petkim Production Management Directorate. Our aim is to increase our employment of female engineers, to overcome the misconception that engineering professions are a male domain, and thus to make a difference and to bring innovation to the works of our factory by taking a fresh female perspective.

Breakdown of Employees by Age (persons/year)

| | 2021 | | | 2022 | | |
|---|------------|-------|------------|------------|-------|------------|
| | < 30 years | 30-50 | > 50 years | < 30 years | 30-50 | > 50 years |
| SOCAR Türkiye Corporate Headquarters | 26 | 91 | 9 | 25 | 95 | 9 |
| Petkim | 228 | 2,023 | 124 | 258 | 2,017 | 74 |
| STAR Refinery | 303 | 673 | 107 | 317 | 670 | 82 |
| SOCAR Storage | 14 | 57 | 6 | 21 | 57 | 5 |
| SOCAR Terminal | 39 | 251 | 7 | 35 | 275 | 6 |
| Bursagaz, Kayserigaz, STDGYAŞ, Enervis, SETAŞ | 190 | 588 | 23 | 202 | 590 | 22 |
| Other (SOCAR Turkey Ortak Yön. Hiz. A.Ş., SOCAR Ticaret, SCR Müşavirlik, SOCAR R&D) | 48 | 343 | 29 | 69 | 352 | 29 |
| Board of Directors | 0 | 18 | 18 | 0 | 26 | 15 |

Employee Turnover Rates by Sex (%)

| | 2021 | | 2022 | |
|--|---------|------|---------|------|
| | Females | Male | Females | Male |
| | 19% | 7% | 8% | 6% |

White Collar Employee Rotation

We ensure the rotation of the Chief Engineer and engineering operatives at our Petkim production plants with other plants, giving them experience working in locations other than their initial workplaces as part of our talent management goals. In this context, we aim to provide talent management. The aim in this project is to increase the knowledge and improve skills and competencies of our white-collar staff, to ensure the dissemination of good practices throughout our factories, to contribute to problem resolution, to prevent operational blindness, to decrease monotony in work and thus increase motivation, and to improve the communication of employees working in different factories.

Total Number of New Employees (persons/year)

| | 2021 | | 2022 | |
|--------------------------------|---------|------|---------|------|
| | Females | Male | Females | Male |
| Number of New Employees by Sex | 109 | 233 | 83 | 294 |



SOCAR Türkiye OHS-E Management System (SAFE - SOCAR Aims For Efficiency)

One of the most important criteria for creating a competitive value chain in the refining and petrochemicals sector in which SOCAR Türkiye operates is human resources with high professional knowledge and experience. As a responsible employer, SOCAR Türkiye offers its employees a safe and healthy workplace, a working life where fairness and equal opportunity are ensured, and which facilitates individuals to realize their personal potential in accordance with its corporate values and ethical principles.

SOCAR Türkiye has a culture adopting the industry's best OHS-E practices that form the basis for achieving Occupational Health, Safety and Environmental excellence. In this regard, occupational health and safety is seen as an area of continuous improvement, and each goal realized is a prelude to the next. The occupational health, safety and environmental management principles applicable throughout SOCAR Türkiye operations are outlined in the OHS-E Policy. With this understanding, SAFE OHS-E Management System is developed and business processes are designed according to this strategic structure. "SAFE" is a tool that provides a structured approach for OHS-E management and realization of OHS-E targets in the operations of all SOCAR Türkiye group companies.

"SAFE" is based on 4 Principles and 16 Guidelines that reflect SOCAR Türkiye's corporate OHS-E vision and constitute the basis for strong OHS-E practices across SOCAR Türkiye group companies, and activities are planned, realized, audited and developed accordingly.

In addition to the SAFE OHS-E Management System, business units also comply with different international management system standards in the management of occupational health, safety and environmental processes. Our facilities are accredited with ISO 45001 Occupational Health and Safety Management System and ISO 14001 Environmental Management System.

SOCAR Türkiye integrates occupational health, safety and environmental issues into the sustainable development of the company by synchronizing its work with plant product designs, annual target setting, operational practices and employee development and performance programs.

We strive to stay one step ahead of the existing national occupational health and safety legislation in force to ensure the health and safety of the employees who work in our facilities or offices, and even those working from home. In the processes we monitor by assessing international standards; we work to ensure the health and safety of all our stakeholders, to prevent major industrial accidents, to minimize their effects, and to manage operations in a safe, efficient and sustainable manner.



| Accident Statistics | SOCAR Türkiye Corporate Headquarters | | Petkim | | STAR Refinery | | SOCAR Storage | |
|--|--------------------------------------|------|--------|------|---------------|------|---------------|------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 |
| Total Number of Recordable Incidents | 0 | 0 | 8 | 12 | 6 | 2 | 0 | 0 |
| Number of Fatal Accidents | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Number of Lost Days Due to Occupational Disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Recordable Incident Rate (per 200,000 working hours) | 0 | 0 | 0.36 | 0.52 | 0.46 | 0.19 | 0 | 0 |
| Occupational Disease Rate (per 200,000 working hours) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Accident Statistics | SOCAR Terminal | | Bursagaz ¹ | | Kayserigaz ¹ | |
|--|----------------|------|-----------------------|------|-------------------------|------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 |
| Total Number of Recordable Incidents | 2 | 2 | 1 | 1 | 2 | 1 |
| Number of Fatal Accidents | 0 | 1 | 0 | 0 | 0 | 0 |
| Number of Lost Days Due to Occupational Disease | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Recordable Incident Rate (per 200,000 working hours) | 0.42 | 0.40 | 0.18 | 0.24 | 0.76 | 0.19 |
| Occupational Disease Rate (per 200,000 working hours) | 0 | 0 | 0 | 0 | 0 | 0 |

¹Includes Enervis, Bursagaz and Kayserigaz.

Process Safety Management

Process safety is concerned with the prevention and control of incidents that have the potential to release hazardous substances or energy, managing proactive measures to ensure the integrity of the business and prevent the release of hazardous materials through good design principles, engineering, maintenance and operational practices.

At SOCAR Türkiye, where the vision of being a company which is reliable in the sector, sensitive to life and nature, and innovation is adopted, the Process Safety Management System implemented consists of the following topics.

- Process Safety Management and Organization
- Performance Management and Continuous Improvement
- Operational Discipline
- Audits

- Process Safety Leadership Coaching
- Process Safety Culture and Talent Development Program
- Process Safety Information (Process and Equipment Design Information, P&ID - etc.)
- Process Hazard Analysis (What-if Analysis, HAZOP & LOPA etc.)
- Process Safety Change Management (Technology & Facilities)
- Pre-Commissioning Safety Review (PSSR)
- Operating Procedures
- Incident Investigation and Reporting
- Competency Development
- Emergency Response and Planning

The Process Safety Management (PSM) Project we are conducting across STAR Refinery, Petkim and SOCAR Storage aims at preventing major industrial accidents, reducing their impacts and improving OHS-E performance and OHS-E culture and the activities within this scope has continued throughout 2022.

The project integrates the industry's best practices regarding process safety into SOCAR Türkiye's processes. Regarding planned changes to existing equipment, materials, process control systems, operating systems or application/work management at our sites, process hazard analysis studies are carried out through the conduct of Process Safety Management of Change (MOC) process before field applications.



The Process Safety Change Management System ensures that the design for the change includes all necessary details, is evaluated in terms of all necessary engineering and administrative disciplines, is technically correct, that the change is processed in all relevant documents and related systems and included in programs and software, and that all planned actions are completed before the change is commissioned or put into use. After the changes have been implemented in the field, Pre-Commissioning Safety Review (PSSR) processes are coordinated prior to commissioning to ensure that all necessary checks have been performed and that all issues to be checked for commissioning up to that point are safe. On-site review and evaluation of checklists are carried out in a multidisciplinary way.

Necessary activities are carried out in accordance with the "Safety Systems By-pass Procedure" at the sites and approval processes are implemented for all activities in the Refinery and Petrochemical Business Unit where process protection systems/safety systems are deactivated or partially changed in terms of effectiveness level due to compulsory reasons such as equipment or component failure, protective/preventive maintenance activities, etc. Work on the digitalization of safety systems by-pass applications was completed in 2022, while the digital system was commissioned and trainings were held for system users.

In cases where it is necessary to disable / bypass safety systems, the management, monitoring and recording of the process has become much more effective with the digitalization of the process applied to identify potential hazards by performing risk analyses and to ensure that the necessary measures are taken for safety and reliability during the bypass.

Operational HAZOP (Hazard and Operability Analysis) & LOPA (Layers of Protection Analysis) studies are continued at the Refinery and Petrochemical facilities, and HAZOP & LOPA studies are carried out for many projects developed within the scope of optimization and flexibility in production for the Refinery and for projects developed with the need for integration and modernization for Petrochemicals.

In order to investigate the root causes of process safety incidents occurring at the facilities and to determine the actions to be taken to prevent similar incidents, incident classification is carried out in line with SOCAR Türkiye procedures, incident investigation teams are established and incident investigation processes are coordinated.

Standards are prepared and developed in line with the principles of the SAFE OHS-E Management System and industry best practices, and trainings are organized for their implementation. In order to raise employee awareness and develop a safety culture, bulletins on Process Safety issues are prepared and trainings organized on different topics within the scope of the Process Safety Management System.

Within the scope of Process Safety Management (PSM), key performance indicators are monitored and reported on a monthly basis.

Emergency Situation Management

Systems and tools suitable for immediate response to an emergency situation that may occur throughout SOCAR Türkiye operations are established 24/7. Risk assessments carried out in the light of international standards and local regulations are transformed into emergency response plans by experts. These plans are prepared according to risk-based operational needs as well as the requirements of national and international standards.

There are many systems and tools for managing emergencies in the Aliğa Special Industrial Zone area of influence. Active warning systems are established throughout the peninsula, and emergency management systems are in place to immediately detect emergencies and safely shut down all facilities. In addition to facilities, there are systems and marine vessels to ensure coastal safety. In order to respond to possible pollution on the sea surface, a trained and professional team that can serve 7 days/24 hours, as well as marine pollution response materials, equipment and marine vessels with the capacity to serve the entire peninsula are kept ready. Besides this, an emergency response vessel equipped with specialized equipment to sweep the sea surface has also been deployed. The intervention ship is kept ready to intervene at any time against any problem that may occur in the region. It is of great importance for the region that the emergency response ship is constantly in the area and has the capability to be activated in a short time against a possible marine pollution. Communication systems have also been established to ensure fast and direct communication with relevant business units, emergency personnel, neighboring organizations, key local stakeholders, and public institutions responsible for emergencies such as AFAD and fire departments.

Another dimension of preparedness to prevent emergencies before they occur and to take control of the situation with minimal impact when they do occur is the preparedness of employees for such situations. Regular drills are conducted for this purpose.

Earthquake Preparedness

Türkiye is located in a geography with a large number of active faults where earthquakes can occur. Earthquake risks are also present in the regions where SOCAR Türkiye operates. For this reason, during the investment decision process, an engineering project has been adopted in accordance with the most severe earthquake scenarios that may arise in the region. In addition to being ready for an earthquake that may occur in terms of asset design, necessary measures have been taken in many areas such as the earthquake preparedness of the people on site, the management of indirect situations that may occur due to an earthquake, rapid response to spills and leakages that may occur due to an earthquake, and the formation of teams to respond to search and rescue needs that may arise in and around the facility. Training programs also include activities to be carried out before, during and after an earthquake and earthquake evacuation practices in emergency drill scenarios. In addition, discussions have been made with AFAD and accordingly all of the Facility Security Search and Rescue team have been trained in disaster search and rescue for 2022.

Disaster Preparedness and Social Support Program

Within the scope of disaster preparedness and social support programs and projects at Petkim and STAR Refinery, earthquake and fire drills were conducted at Petkim Primary School and Gazi Middle School in Aliğa Lodgings area, and drills were also held with neighboring organizations. Moreover, procedures for disaster preparedness have been shared with AFAD to ensure necessary coordination and meetings are held at the Ministry of Energy and Natural Resources for coordinating the Emergency and Crisis Management of the Oil and Natural Gas Sector.

Within the scope of our disaster preparedness and social support programs and projects within Bursagaz and Kayserigaz; Bursagaz Search and Rescue Team was established within Bursagaz in line with an emergency

procedure and its follow-up. AFAD Disaster Awareness Training was provided for Emergency Teams.

OHS-E Training

SOCAR Türkiye group companies determine employee competencies and training needs by taking into account the OHS-E legislation and the OHS-E dimensions of the activities carried out. The competency of personnel is regularly assessed, taking into account changes in legislation, processes and activities. A training participation tracking system is in place to ensure that tasks are performed only by competent personnel. Employees are encouraged to participate in systematic OHS-E management and risk mitigation processes through OHS-E trainings.

OHS-E trainings are assigned and completed by employees through the "SuccessFactor - Learning Center" platform.

Contractors, visitors and newly recruited or replaced personnel are provided with initial training and on-site orientation covering site-specific OHS-E rules and emergency procedures.

Realization of OHS-E training plans is evaluated within the framework of OHS-E objectives and site-specific OHS-E training matrices. The trainings are organized as face-to-face, online or video trainings, depending on the need, in order to ensure that visitors, contractors and employees may access them more effectively and efficiently.

OHS-E Training

Total OHS-E Training Delivered (Hours/Year)

| | |
|---------------------------------------|---------|
| SOCAR Türkiye Corporate Headquarters | 6,179.5 |
| Refinery Petrochemicals Business Unit | 139,684 |
| Natural Gas Business Unit | 19,534 |
| Portfolio Management Business Unit | 4,257 |

Hours of Training Received by Employees on OHS (hours/year)

| Years | 2020 | | 2021 | | 2022 | |
|--------------|----------|------------|----------|------------|----------|------------|
| Employee | Females | Male | Females | Male | Females | Male |
| Blue Collar | 1,531.16 | 101,524.75 | 2,151.50 | 130,512.50 | 1,435 | 111,806.85 |
| White Collar | 9,142.53 | 32,132.31 | 13,278 | 40,787 | 12,788.5 | 43,624.95 |
| Executives | 5 | 0 | 75 | 230 | 46 | 284.5 |

Average Hours of Occupational Health and Safety Training Received by Suppliers (hour/year)

| 2020 | 2021 | 2022 |
|-----------|--------|----------|
| 20,998.50 | 30,305 | 47,347.5 |



OHS-E Good Practices at SOCAR Türkiye

In addition to the trainings organized, some of the OHS-E programs and best practices were implemented in 2022 in order to provide a safe work environment for employees and to increase their OHS-E awareness. Some of these practices: All Accidents Can Be Prevented Awareness Program, Behavior-Oriented Occupational Safety Program, Occupational Health, Safety and Environment Award and Incentive Program, Road Safety Program, Digitalization activities, OHS-E Communication Program, Field Inspection Program (PFI-Periodic Field Inspections), Nutrition-Friendly and Physical Activity Supporting Workplace Program, Incident / Accident Root Cause Analysis Training Program.

All Accidents Preventable Program

We believe that all accidents are preventable in line with our main principles set out in SOCAR Türkiye OHS-E Policy. "All Accidents Can Be Prevented Program" is a program where we aim to prevent all possible accidents altogether by working in accordance with our OHS-E Management System. Within the scope of this program; evaluation surveys, video messages, OHS-E bulletin, slogan posters, stickers, announcements are shared and awards given.

Road Safety Program

Within the scope of the Road Safety Program, activities such as raising employees' awareness on road safety practices, organizing theoretical and practical trainings to improve employees' skills on safe driving techniques, creating and implementing documentation in accordance with legal regulations and international standards on road safety, and conducting controls and audits are systematically coordinated.

Root Cause Analysis - (RCA) Program

It is a process designed to identify systematic root causes in an incident or accident and develop effective solutions to eliminate or reduce the likelihood of recurrence.

The investigation team assigned after the incident/accident presents the investigation report by using the Root Cause Analysis (RCA) technique; collecting evidence, conducting interviews examining the human factor, determining the visible and systemic causes of the incident/accident, and identifying corrective/improvement actions to prevent recurrence.

The in-house developed "Root Cause Analysis" training is implemented in order to make the Root Cause Analysis (RCA) methodology systematic and consistent in all SOCAR Türkiye group companies and to improve the competency of the incident/accident investigation team members on this subject.

Periodic Field Inspection (PFI) Program

The Periodic Field Inspection (PFI) Program is an internally developed program that ensures effective planning, regular field tours, risk-based compliance assessment and systematic method development for the elimination of identified nonconformities within the scope of compliance with OHS-E practices.

The elimination of non-conformities identified in field inspections conducted with the help of checklists is ensured through effective management of actions and reporting. Teams observed to have performed well within the scope of the implementation are rewarded at regular intervals.

OHS-E Communication Program

Bulletins and on-the-job talks, which play an important role in the development of the Occupational Health, Safety and Environment culture, are regularly shared with employees throughout the company. These short-term training meetings, which bring together small teams and working groups, aim to provide an efficient and safe working environment in the workplace. It is also an opportunity to learn lessons from incidents in the workplace and an educational tool to create an exchange of ideas among employees to understand problems and generate solutions under common ideas. Effective communication methods are used to convey the work carried out by OHS-E disciplines to all our employees in order to manage the risks that may arise at SOCAR Türkiye sites, to increase the level of awareness of employees on OHS-E practices and to establish an OHS-E culture. The communication methods applied within the scope of the OHS-E Communication Program consist of the following titles.

- OHS-E Bulletins,
- OHS-E Minute Implementation,
- OHS-E Reminder Note,
- Lessons Learned from Incidents,
- Job Specific Safety Talk

HSE Synergi Life OHS-E Reporting Program

It is a software program commissioned to monitor, manage and report all OHS-E related processes across all SOCAR Türkiye group companies through a single common platform for reporting and analysis of OHS-E key performance indicators, recording observations, actions, risk assessments, OHS-E audits and legal compliance monitoring, as well as management of OHS-E incidents and investigations. In 2022, within the scope of the extension project, access authorization was provided to the relevant white-collar users.

Behavior Based Safety - (BBS) Program

The main function of the program is to identify and reduce behaviors of employees which include risks, and to conduct observation and feedback in order to adopt and increase safe behaviors.

The program contributes to the development of an occupational health and safety culture at the workplace by influencing the thoughts, behaviors and actions of employees through the implementation of Behavior-Based Safety Talks.

The program, whose implementation principles and forms were developed in-house, proceeded in 2022 through the training of all employees in the target group and the expanded implementation of the program.

OHS-E Award and Incentive Program

The program, which is based on the proactive participation of employees of SOCAR Türkiye group companies in OHS-E activities, aims to promote and develop an Occupational Health, Safety and Environment culture. In this context, employees' participation in on-the-job safety meetings, reporting and monitoring of unsafe behaviors and situations through the OHS-E Observation system, active participation in the periodic field audit program and working tendencies in accordance with SOCAR Türkiye OHS-E rules are taken into account and evaluated within a systematic framework, while positive behaviors focused on occupational safety and environmental protection are rewarded.

Electronic Work Authorization Project

The digitalization of the manual and paper-based work authorization system in the R&P Business Unit aims to save time and labor and strengthen the effective control mechanism in the field. Through the application that allows online observation with tablets and computers, minimization of personnel errors is targeted.

Adaptation of Video Analytic Technology to OHS-E Control Processes

Video analytics technologies adopt a signal processing approach to the digital analysis of video images for the detection and identification of threats, suspicious events or real-time behaviors. Based on the most advanced artificial intelligence and image processing technology, violations are detected instantly, monitored 24/7 and reported autonomously. The system processes images from multiple cameras simultaneously, raises the alarms defined for specific situations identified with artificial intelligence software that runs in the background when a violation occurs, and submits the reports. The application complies fully with the Law on the Protection of Personal Data (LPPD), and thus the personal data of our employees is fully protected.

In the light of the data garnered during the project, it was determined that after delivering training to the operators the number of alarms raised due to contraventions of the rules governing vehicular use decreased, and that risky situations that occur in our facilities were reduced by 89%. The number of alarms decreased by 70% following the arrangements made in the field and the delivery of trainings within the scope of 5S audits.

ADR Vehicle Control and Annunciation System

It is a system developed to ensure that the operation processes related to the filling of hazardous substances in facilities are carried out safely within the scope of the legislation. By means of the ADR Control and Annunciation System software and handheld tablets, statistical data analysis of the controls is carried out, information is shared with official institutions in case of need, and the non-compliances found in the field may be visually recorded. In this way, a sustainable operation support process is established through the establishment of an end-to-end recording and control system.

Management of Risks of Working at Height

In order to increase OHS-E awareness and prevent occupational accidents that may occur as a result of negative situations and behaviors within the scope of work carried out at heights at SOCAR Türkiye sites, a systematic working methodology is implemented by hiring professional services to check the installation conditions of the scaffolds installed and to routinely inspect whether safe usage conditions are ensured during the period they remain installed.

Toxicological Analysis Based Chemical Risk Assessment Program

The Toxicological Analysis Based Chemical Risk Assessment Program is developed with a proactive approach to protect the health of our employees by identifying possible chemical exposures at the unit and site and preventing such exposures. As a result of the output of the analysis results within the scope of the program, activities such as monitoring for follow-up, identification of relevant departments and parameters, root-cause analysis performed with the relevant departments, identification of possible emission sources will be conducted, and the habit of using PPE will be increased.

Nutrition Friendly Workplace Program to Support Physical Activity

It is a program carried out by the Ministry of Health's General Directorate of Public Health, which promotes healthy nutrition and physical activity among employees at workplaces, thereby increasing efficiency and productivity at work and supporting healthy living in society.

Within the scope of the program, services offered to our employees include nutrition counseling and dietitian services, on-site laboratory services, an 'Employee Support Line' that provides medical information, consultancy and psychological support, events that support physical activity, live chats with health recommendations on various topics and publications that raise awareness on health issues.



Employee Engagement and Well-being

Being aware of the importance of maintaining and improving the loyalty and satisfaction of all our employees, as SOCAR Türkiye, we work to offer fair and equal rights to our employees in all our business units. At the same time, we care about the feedback from our employees and implement programs to support their career development.

We provide various fringe benefits and performance bonuses to all our employees without any discrimination in our operations. These rights are; Although it may vary according to the level of title, it is provided with an equal approach to all employees, taking into account the principles of humane working and humane living, without any discrimination such as gender, religion, language, ethnicity or any similar.

At this point; We have applications such as meal card or cafeteria support, holiday allowance, funeral allowance, service and transportation support, company vehicle for senior management, seniority incentive awards, marriage, newborn and circumcision gifts, back-to-school allowance, monthly nursery support for female employees. Among the other side rights we provide; Uniform and gift cards for service personnel, professional qualification support (in accordance with the procedure), moving aid in case of a change of duty, food and clothing aid, shift bonus, overtime payment, natural disaster support, and incentive premium for union membership above the Turkish Labor Law. Among our social benefits; We are trying to make a difference for our employees with the practices such as leave, maternity leave, paternity leave, and special day leave (1 day per month) for female employees in case of being a foster family and adoption, which exceed the legal limits specified in the laws.

All of our group companies are subject to the Human Resources policy of the SOCAR Türkiye group and the Human Resources procedures such as Total Earnings and Benefits and similar. In line with these procedures, as part of our commitment to a sustainable business model, we attribute our sustainability goals to our performance management system and approach them seriously. We attach importance to the presence of key performance indicators (weight between 10% and 25%) regarding the EMS, in line with the areas of expertise of the managers, in the scorecards of the CEO and senior management. We also associate our reward systems with the realization of these goals.



Maternity Leave and Rate of Returns to Work (persons/year)

| | 2021 | | 2022 | |
|---|---------|------|---------|------|
| | Females | Male | Females | Male |
| Total number of employees entitled to maternity leave | 39 | 329 | 32 | 260 |
| Total number of employees using maternity leave | 39 | 329 | 32 | 260 |
| Total number of employees returning to work after the end of maternity leave | 39 | 329 | 32 | 260 |
| Total number of employees returning to work after maternity leave ends and continuing to work 12 months after returning to work | 35 | 316 | 32 | 256 |
| Return to work and retention rates of employees on maternity leave | 90% | 96% | 100% | 98% |

We conduct employee satisfaction surveys at SOCAR Türkiye companies with a holistic and inclusive approach. According to the study we conducted in 2022, our culture survey score was determined as 74. With this score, we are in the top 2nd quarter among the companies surveyed. Being aware of our corporate structure and human resources practices, as SOCAR Türkiye, we aim to constantly move society forward. We are always trying to achieve our mission of being a good example in Türkiye and in the world with our practices in and out of the sector, and we are looking for ways to further increase the welfare of our employees.



Our priority projects and programs determined for the years 2022-2023

- Creating a dual (Technical) career structure for our employees
- Leadership Programs (Leadership Factory, Pathfinders Journey)
- Strategic Talent Development Program, CAMS (Competency Assurance Management System)
- Projects and actions aimed at increasing the happiness and loyalty of our employees
- Title studies for agile and technical functions
- Initiatives on Diversity, Equality and Inclusion (Our Energy comes from our Diversity, Woman Energy), new social rights
- Creating a digital “Total Reward Table” for white-collar employees

As SOCAR Türkiye, we regularly monitor the development of our employees and the programs we establish for them. We organize heart rate surveys and focus group meetings to gain feedback from our employees and to learn their expectations. We carry out performance management feedback surveys and remote work feedback surveys with a view to improving our processes.

We observed from the results of the conducted surveys that the Employee Support Program implemented in the first half of 2020 attracted great attention among our employees and their first-degree relatives and increased their satisfaction levels. The program covered a comprehensive range of topics, addressing medical, psychological, legal, healthy nutrition, baby care, ergonomics, technological, veterinary and financial issues. Support program specialists continue to serve our employees on a 24/7 basis throughout the week, and are reachable by phone or the Internet.

Remote Working on one of day of a week in the Refinery and Petrochemical Business Unit

All of our white-collar employees working from the Refinery and Petrochemical Business Unit Operations Department work remotely on Wednesday in rotation. Our aim with this practice is that our employee is able to maintain daily routine operations, devote time to desk work, focus on project management and to manage their own time schedule and be more efficient.

“In My Opinion” Suggestion System

“In My Opinion” is a suggestion system through which SOCAR Türkiye employees contribute to company activities with their creative and innovative ideas, and to evaluate opinions with or without financial gain, and to implement and record them in the most effective way. Under the system, rewards the suggestion owners by encouraging innovative suggestions by the employees in order to strengthen their sense of belonging.

Employee Development

Within SOCAR Türkiye, aside from the obligatory training, employees receive the necessary professional and personal development training for their jobs from academicians and professionals who are experts in their respective fields, and who are believed to bring vision.

In addition to the face-to-face training, online mentoring, training videos, webinars and simulation training content developed specifically for SOCAR Türkiye are delivered to employees online through digital platforms as part of a blended learning approach of development plans. In addition to the various external training methods that have been adopted, internal trainers are trained and included in the training processes in order to maintain and disseminate the level of knowledge within SOCAR Türkiye. Examples of development programs in 2022:

- Leadership Factory (Leadership program for Middle Management)
- IMD Pathfinders Journey (Leadership program for Senior Management)
- Sabancı University Mini MBA Program
- Mentorship Programs
- Business Acumen Program
- Effective Leadership and Professional Maturity Program
- Gen-D (Digital in You)

The IT and Digital Transformation department of SOCAR Türkiye is engaged in proactive studies in line with the digitalization needs of all the business units, aiming to bring maximum benefit to our organization in its business transformation through the management of short-, medium- and long-term roadmaps. We are aware that the transformation of our workforce is the key to our digital transformation, and so our strategic priority is to develop projects through which our employees can acquire digital competencies.

SOCAR Energy School

SOCAR Energy School (SES) is a leading certified training program organized by SOCAR Türkiye in cooperation with Sabancı University. The program examines global and regional energy issues, and brings together relevant public and private sector managers, academicians, international policy makers and energy experts with an interest in the energy policies of the Caspian Basin, Türkiye and Azerbaijan and specializing in these issues.

The goals of the program can be listed as follows:

- To provide the participants with a 360-degree perspective of the different sub-fields of energy.
- To encourage the training of competent experts in global and regional energy issues, and to contribute to the training of professional staff with expertise in energy issues, especially in Türkiye and Azerbaijan.
- To establish an effective platform that brings together public and private sector managers, academicians, international policy makers and energy experts operating in relevant fields, and participants with an interest in specializing.

From among the more than 650 applications received, 65 applicants were selected to take part, including doctoral students, post-doctoral researchers, associate professors, professors, faculty members, public administrators, diplomats, members of the press, private sector employees and NGO officials. All the costs of the program were covered by SOCAR Türkiye. The courses were given by a team of competent instructors that included 35 academicians and industry experts. In addition to the lectures, the program included also a number of panels and discussions with international experts on many energy policy issues.

Hours of Training Provided to Employees (hours/year)

| | Category | Hours |
|--|-----------------|------------|
| Total Training Hours by Employee Level | Manager | 3,519.75 |
| | Expert | 76,095.3 |
| | Technical Staff | 37,652.8 |
| | Worker | 137,786.1 |
| Total Training Hours by Employee Level | Male | 221,538.45 |
| | Females | 33,515.5 |

Average Hours of Training Provided (hours/year)

| | 2020 | | 2021 | | 2022 | |
|--------------------------------------|---------|-------|---------|-------|---------|-------|
| | Females | Male | Females | Male | Females | Male |
| SOCAR Türkiye Corporate Headquarters | 46.08 | 42.57 | 61.02 | 45.89 | 21.17 | 16.91 |
| Petkim | 41.17 | 40.15 | 56.35 | 50.73 | 63.76 | 52.10 |
| STAR Refinery | 54.85 | 48.62 | 65.99 | 71.31 | 67.52 | 63.89 |
| SOCAR Storage | 19.57 | 55.32 | 32.6 | 90.13 | 41.34 | 60.32 |
| SOCAR Terminal | 5 | 12 | 86 | 47 | 43.5 | 19.55 |
| Bursagaz | 10 | 19 | 19 | 22 | 32.01 | 46.43 |
| Kayserigaz | 16.86 | 31.2 | 8.39 | 25.26 | 32.22 | 51.41 |
| SOCAR Ticaret | 4.81 | 16.4 | 31.29 | 36.08 | 25.07 | 26.73 |
| Enervis | 14.06 | 17.3 | 9.45 | 8.96 | 67.47 | 25.67 |
| STDGYAŞ | 3.37 | 2.56 | 19.14 | 15.74 | 34.99 | 33.99 |
| SETAŞ | 4.3 | 0.67 | 13.4 | 5.61 | - | 0.42 |



Port Sector Vocational Trainings

There are many positions in the port sector that are not subject to an external training and certification process (due to port-specific processes and equipment). These positions are filled by people who are employed from within the region, who receive the necessary training for their special positions from the port. We are following various processes, including obtaining the certificates approved by the Ministry of National Education and obtaining the certificates of the Vocational Qualifications Authority are carried out. It is thus ensured that the residents of the region have knowledge of the available professions related to port management.

Unionization

Collective Bargaining Agreements have been signed for three years at the Petkim, Star and Storage business units and for four years at SOCAR Terminal. During the interview process, our employees are informed about the changes, and are given booklets detailing the new employment conditions. Some 77% of the employees working in these three business units are members of a union.





Technology and Innovation

Digital Transformation:

Digital Transformation, one of the 3 main strategic factors determined by SOCAR Türkiye to realize its vision, was among the critical success factors in all functions of its organization. Due to its impact on efficiency and optimization as well as its contribution to sustainability goals, work in the field of digital transformation continued unabated in 2022 as well. Our following projects can be put forward as examples in this regard:

Petkim & STAR Daily Natural Gas Consumption Estimation Model

Petkim and STAR production facilities makes use of natural gas as an energy source, and the Energy Management unit is required to report the next day's natural gas consumption forecast to the natural gas distribution company on a daily basis. In the event of any inconsistency between the natural gas forecast and the actual consumption, Petkim and Star are subject to penalties in accordance with their agreements with the distribution companies. With the natural gas estimation programs established for Petkim and Star, we have minimized the potential penalties. The accuracy of our estimations as a result of our project have increased our reputation ahead of other companies. We also provided a helpful tool through which energy management teams can carry out forecasting on a daily basis.

Electricity Demand Prediction (EDP) Module

Under the Electricity Demand Prediction project, electricity consumption data from meters can be monitored in real time, allowing the creation of an electricity distribution day-after-day prediction model based on instant data. In this way, by increasing the accuracy of electricity demand predictions, imbalance penalties will be minimized. Within the scope of the project, consumption distribution is estimated based on historical consumption data provided by the meters. The project allows the hourly monitoring of electricity consumption data from the meters within a single system, maximizing the accuracy of electricity demand estimations, and thus minimizing imbalance penalties arising from demand differences.

Aliağa Energy Optimization (AEO)

SOCAR Türkiye's Refinery and Petrochemical Business Unit, located on the Aliağa peninsula, includes the STAR Refinery, Petkim, power generation and transformation units, as well as steam collectors at different pressure levels of these facilities, and Wind Power Plants (RES). Aliağa Energy Optimization is a SOCAR Türkiye project that provides energy optimization by managing the balance between energy sources and consumers, including electricity and steam, on the peninsula.

The transfer of steam from Petkim to STAR through AEO, external electricity exchange of facilities including Petkim RES, increases or decreases of internal electricity production, how much steam is to be produced at what pressure, or how much steam will be converted through which channels between different pressure levels are optimized. This contributes to sustainability by ensuring optimum efficiency in steam and electricity generation-consumption.

HCU (Hydrocracker Unit) Diesel Flash Point Prediction & Optimization

Within this project, the flash points of the diesel pool in the HCU unit and the diesel mixing pool are estimated based on analytical models developed using big data, and an optimization model has been developed that suggests heavy naphtha be added to obtain the optimum flash point. The developed models have since been made available to the planning team. The project aims to calibrate the flash points of the diesel pool in real time, thus preventing quality-related losses. Efficiency is expected to increase due to the financial benefits and ease of management related to loss prevention.

ARU Energy Opt. Via Sulphur Inferential (SGP + UGP)

The sulfur compounds found in "sour gas" produced in our refinery units are separated by amine compounds in absorbers and cleaned and converted into fuel gas. Within this project, absorber performance is modeled in real time without the use of laboratory measurement results of the sulfur compounds remaining in the fuel gas, with the aim being to reduce the amount of amine used in the cleaning process through optimization. In this way, savings are ensured in the steam required for the re-cleaning of contaminated amine. The goal in this regard is to optimize the amine cycle and to reduce the refinery's outlay for such processes, as well as the CO2 emissions resulting from the process. The initial project outputs are a reduction in the upper values associated with refinery emissions and steam savings. The most significant output of the project in terms of sustainability is the reduction of 3,728 tons in carbon dioxide emission.

Citizen Developer Program





We launched the Citizen Developer program in October 2021 in partnership with UiPath and VBM with a view to accelerating our digital transformation through Robotic Process Automation technologies, and ensuring our employees gain digital competences in this field.

As is commonly known, Citizen Developers are users that lack sufficient coding/software experience to perform their own process automations but make use of low-code/no-code platforms. Our program, which we started for the 54 Citizen Developer, is achieved by our employees selected from different business units who have no software/automation experience before, taking 15–20 hours of training, and automating their prioritized processes using automation method using a specially licensed low-code platform. has been put into practice. Users with this license will ultimately be able to fulfill different automation needs both for themselves and for their business units. Our RPA CoE (Robotic Process Automation Center of Excellence) team, established as part of the Digital Transformation efforts, has completed the selection and prioritization of the processes that will be the subject to automation, and has provided training and technical support in the use of the tools, the calculation of benefits and value, and following the action of our users who have completed the learning process, we followed the participants closely. Within the scope of the program, 63 projects have been developed by 38 active employees, and 8,500 employee hours have been gained.

The main innovations brought by the Citizen Developer program can be listed as follows:

- The ability to benefit from the automation of different functions within all SOCAR Group companies
- Organizational transformation through which business units are empowered to support their digital transformation
- Employee involvement in the

transformation process through the raising of their digital awareness

- Digital activation of daily routine activities
- Establishment of a sustainable digital transformation focus
- Technological adaptation of the organization and people
- Obtaining the necessary infrastructure and awareness for the hyperautomation transformation through process mining, RPA and other digital tools

SOCAR Energy Digital Assistant (S.E.D.A)

The process automation studies that were started in 2020 continue without interruption involving the continuous monitoring and realization of the automation needs of different business units and processes. “Robotic Process Automation” (RPA) refers to automation technologies in which business processes that are repetitive, routine and require no human decision-making mechanisms are carried out by software robots, making use of automation technologies.

Adopting the approaches defined as rule-based artificial intelligence (AI), workflow automation and “screen scraping”, this automation form, which has survived to the present day, offers the opportunity to perform repetitive tasks that do not require human interpretation and require precision, through machine learning. In this way, many predefined tasks can be performed in various environments and group companies, e-mails can be checked, connections can be made with authorized applications and systems, calculations can be made, skills can be gained in many areas, from invoice amount verifications to database access, and various analyses and comparisons can be made.

By achieving fast and consistent results with technologies that allow the automation of various flows and processes in such fields as human resources, financial services and accounting, supply chain management, sales, marketing, information technologies and customer services in

many group companies, it is ensured that human resources are used more efficiently, operational burdens are reduced, the margins of error and risk are reduced to zero, costs are reduced, and employee satisfaction and decision competence are increased.

The realization of tasks that require no decision-making mechanisms and that create a high operational load by repeating them frequently by robotic process automation are important smart automation steps in our digital transformation roadmap. Process determination and development studies have been carried out within all of the SOCAR Türkiye’s business units with capacity for process automation. Among the main benefits of the project are increased productivity through the automation of time-consuming tasks that employees perform routinely, and increased productivity in processes that can be run 24 hours a day, 7 days a week using RPA software.

Digitalization of the Material Delivery Form

The aim is to transform all material order and delivery reservation (Material Delivery Form, PPE and Stationery Request Form, etc.) processes that currently involve the taking of physical printouts with manual effort through the application of digital technologies, and to minimize the time lost and the manual effort involved in the process. Within the project, which was implemented over a period of 1 year, the aim is to reduce the use of paper considerably, as well as the amount of CO2 used associated with it. In addition, in cases where retrospective archive scanning is required, the transformed process archive scanning will be facilitated.

The outcomes of project include:

- Paper waste amounting to 100,563 sheets of paper per year prevented
- 101 trees saved
- A reduction of 251.4 kg in CO2 emissions
- 740.7 man hours saved

Installation and Dissemination of "Trendminer" Software

Facilitating the visualization and analysis of real-time field data, the value proposition study (POC) of "Trendminer" software, which includes templates for the development, deployment and alarm generation of data models that are critical for decision-making in production, was carried out and disseminated with wide participation.

Trainings were organized for production and process teams, and the software was opened to their use. The project aims to increase data usage and the value derived from the data, especially by the teams working closely with the field. Using this software, which facilitates the easy interpretation of data, teams can quickly create the necessary models and gain the associated benefits. Through the project, the digital and data analysis competencies of the teams were improved, the number of projects was increased and the time to gain benefit from the project was shortened. Teams have switched to Trendminer from the old platform that they used for data analysis. It was ensured that the project increased data democratization within the teams and adapted the employees to the digital and data-based ways of doing business.

3D Mapping Project

Under the "3D Mapping Project" we will prepare and disseminate 3D maps for the entire 1,453-hectare area in Aliğa in which all SOCAR Türkiye's subsidiaries are located for the identification of a "Special Industrial Zone". Creating a 3D map of the region will allow a number of activities to be carried out remotely, removing the need for physical access to the site, and will contribute to the improvement or increased efficiency of some of our existing processes. Providing a virtual reality experience through the use of the 3D maps that will be obtained as a result of project with AR/VR glasses; producing data for the "Metaverse", which is considered as the technology of the future; and creating a Digital Twin, referring to the creation of a process or an environment within

a virtual environment, are just a few of the unique features of the project. The total budget for the project is 1,506,400 TRY (80,000 USD), and the timeframe required for the completion of the project is four to six weeks.

DCU Coke Make Reduction

DCU operations are modeled to provide real-time recommendations for key operational parameters, ensuring profit maximization. Big data provided by more than 500 different sensors over three years have been analyzed for the modelling of key DCU processes. This historical data has been used to develop 17 state-of-the-art machine learning models and an optimizer on top of them. Finally, a user dashboard was created comprising control pages for model usage, restriction settings, simulation pages for possible operating alternatives, and Monitoring and Trend Analysis pages for the comparison of model performances and actual observations. This is a custom modular portal that uses the best possible UI/UX for up-front daily operations. The DCU project was initiated locally by SOCAR Türkiye. Through this project, white products have been maximized and reduced coke production has been ensured.

Wenovation Platform

The Wenovation platform is an online open innovation platform created for components of the ecosystem (start-ups, academia, individuals) that focuses on the Digital Transformation of petrochemical, refinery and natural gas industries to reach SOCAR Türkiye teams and become a part of our ecosystem network. Applications can be made to the platform, where project ideas related to energy and digital transformation are evaluated year-round. Start-ups, entrepreneurs, academicians, companies with digital transformation ideas, through www.wenovation.socar.com.tr, with the launch of our platform in order to enable companies with a digital transformation focus to reach SOCAR Türkiye in an easy and transparent way. They find the opportunity to become SOCAR Türkiye's business partners by sharing their projects.

"Flare Inspection with UAV" (Flare Inspection with Drone) Project

The inspection activity, which is carried out in our factories after production (every 4-5 years) with the help of scaffolding, crane, rope with the physical access of our maintenance teams to 80-100 meter high flame chimneys, can be carried out more safely, without stopping factory production and at the desired time/period by using drones. Within this project, 11 flare chimneys in the production areas were inspected using drones without stopping production. Thanks to our project, correct/necessary equipment supply before maintenance/repair activities, crane, scaffolding etc. for inspection activities. We no longer need such equipment since there is no working at height, the OHS-E risks are reduced, there is no need to halt production, inspections can be carried out at any time and an accessible recorded image archive is created.

One of the outstanding features of the project is that a process once considered high risk in terms of OHS-E can now be carried out using new technologies in the form of a remote-controlled drone, requiring no downtime in the plant and minimizing OHS-E risks. Our work in this project, which was completed at a cost of approximately 30,000 USD, contributed considerably to the safety of our colleagues.

WhatsApp Chatbot

We operate a Logistics WhatsApp line that we use to collect the contract documents of our customers in a digital environment in the activation phase. While we could only serve our customers who wrote to this line with a Customer Representative, thanks to Chatbot we can now provide simple automatic directions and information and understand our customer's need before transferring them to a representative. In this way, we reduced the repeat rate from 57% to 31%. We also reduced our AFRT time from 21 minutes to 4 minutes. (AFRT: Average first response time). Through the allocation of 20,144 TL per year and 20 days, we managed to recover the 0.5 agent cost per month for our company.



Developments in Mobile Applications

In this project, through which we endeavor to continuously improve our digital channels, we aid our customers in carrying out easy and fast transactions without the need for support, thus reducing our call center costs. Access our mobile application has been made easier by switching from an 8-digit password structure to an instant 4-digit OTP login structure, speeding up customer access to the application. In addition, we increased the session duration in the application from 1 day to 90 days, further easing customer use. We are now planning to move customer transactions, which are currently possible only through our online transactions center, to the mobile application. Once this integration has been made, while we will be required to pay a separate fee to the application company for each area we want to add, we will gain the ability to manage changes in the relevant processes within our own structure, removing our dependence on the company should we need to make changes in the relevant areas in the future. Through the project, the initial 35,000 TL outlay will bring about an estimated 300,000 TL in annual savings to our company.

E-Government Portal

In order to start the subscription process in the current structure, we are transforming our process of collecting printed documents with wet signatures into a structure that will be approved by our customers digitally via E-Government.

Data Input Processing Platform Phase-1

After SOCAR Türkiye A.Ş. acquired 80% of Bursagaz and Kayserigaz companies in 2019, all processes and operations began to be reviewed and more efficient processes were created with various optimizations. In the integration studies carried out in this context, it was determined that a great deal of labor was spent to prepare the reports (~750 units per annum) requested by EMRA from all distribution companies with a certain methodology and template reports.

It was seen that a new systematic setup was necessary in order to make this inefficient process faster and more accurate. However, a new system to be integrated into the main systems was not possible due to the high cost and complexity of the processes. Just at this point, the DATA INPUT DATA PROCESSING PLATFORM Project setup was created and presented to the senior management, explaining how to overcome bottlenecks. With the support of the top management and project stakeholders, the process was initiated and the project was implemented with the participation of all units. In this systematic setup developed, the job responsibilities of 14 departments were determined, it was decided which employee of the department would give the data in the template reports, the data was collected regularly and transparently with the platform created in the companies' common area folders, the compatibility of the data sent with the data sent in the previous years and months could be checked with algorithms. The possibility of sending erroneous data has been reduced since the test system has come into use (with the commissioning of the test system, the rate of sending erroneous data has been reduced from 6% to 0.7% on average by 0% as of the first four months of 2023), with the robots starting to prepare the reports, the reserved data for this work. Efficiency was achieved by reducing the workforce. (55.3 Days/250 Business Days – Estimated 21% Process Improvement Contribution)

Roadmap:

- **Phase 1:** Operational Efficiency has been improved, and through consolidation, a process previously performed by four people over 1 month is now carried out by one person in 1 hour.
- **Phase 2:** By reducing the time spent on the creation and consolidation of reports by business units, the relevant personnel will be better able to focus on their core tasks. (55.3 Days/250 Business Days – Estimated 21% Process Improvement Contribution)

- **Phase 3:** With the transition to SAP HANA, all reports will be created directly within the system, controlled and analyzed using artificial intelligence, which will learn the processes, and uploaded to EBIS. By analyzing the interdependent relations between the reports, which are parts of a whole, the basis for operational efficiency and strategic decision mechanisms will be established.

Ideathon

The Ideathon program was implemented over 4 weeks in 2021 and 2022, and considering the most common use of this program by corporate bodies around the world, it can be considered an opinion generation marathon. Our Ideathon program, which was implemented first in 2021, is an intensive brainstorming activity for the identification of problems and digital transformation opportunities within our current business processes, and for the discussion of the most appropriate solutions by bringing together people from different backgrounds and with different skills and interests from various departments. Established on the basis of a design-oriented thinking methodology, our Ideathon program continues for 4 weeks and is carried out in four steps, focusing on employee engagement, innovation, creativity, outside-the-box thinking and team building, allowing the exploration of countless digital opportunities. This program allows the crowdsourcing of ideas and new perspectives in support of a successful digital transformation, and enables learning, collaboration, innovation and change.

The program is announced throughout SOCAR Türkiye, and participation application forms are examined in detail. The program brings together 25 employees from different departments and locations who are selected based on their motivations, and five cross-functional teams are established. The 4-week activity, the participants generate and prioritize ideas based on discussions of their goals and needs. Finally, they submit the results and the produced and tested prototypes to the executive board with their solution proposal.

Following the 4-week Ideathon program, five digital ideas developed by the five teams were deemed viable and to have strong business benefits and were duly included on the 2022 digital transformation roadmap. All of the digital ideas were studied in detail with the relevant Business Units. The main outputs of the event were the empowerment of business units in support of their digital transformation, and the transformation of the organization; involving employees in the transformation process by increasing digital awareness; the digital activation of daily processes; the establishment of a sustainable digital transformation model; and ensuring the adaptation of the organization and workforce to the use of technologies.

Benefits of the Ideathon idea marathon to the Company were as follows:

- Bringing together SOCAR Türkiye employees from different units, levels and locations to work together for 6 weeks,
- Implementing a Design-Oriented Thinking methodology, which starts with empathy and is focused on the “human” element,
- Changing points of view and ensuring the development of ideas to suit needs rather than focusing on the solution in the first place,
- Offering the opportunity to think without limits,
- Supporting the process from idea generation to prototyping, including field studies and output testing,
- Creating the opportunity to draw inspiration from practices in Türkiye and around the world,
- Having the opportunity to seek support from expert consultants and the digital transformation team throughout the process.

Alarm Management

The DCS system in our factories has to deal with too many alarms come from the field. It is aimed to manage the process with the “Alarm Management System” in order to prevent the Process Technicians from missing “High” and “Urgent” alarms.

Operator Round Application

The field value forms received periodically by our Field Equipment Technicians can be transferred to an electronic media with ex-proof field tablets and the data can be followed online. Through this project, we can access recordings of the field values in the electronic memory and the periodicity of the value taking form online. As an additional benefit, performance monitoring can be made more active. One of the most important outputs of the project is the ability gained to transfer information stored as hard copies to an electronic media, making permanent information accessible in every environment. In addition, thanks to the value ranges we enter in the form, we color the values that go out of the limit, and ensure that the equipment works more sustainably with the actions taken during the shift. In the future, we will transfer all data to PHD, providing us with easy and rapid access to past data.

Safety System By-Pass Process and Online Tracking System

We can now follow the ESD Bypass Procedure applications that used to be made on paper and with wet signatures through an online system. The aim of the project is to allow the online reactivation and monitoring of safety system by-passes as soon as possible.



R&D Activities

SOCAR R&D and Innovation Center carries out R&D studies for all group companies and contributes to the increase of environmental performance and resource efficiency in all activities of companies. R&D Center activities ensure that SOCAR Türkiye group companies rank at the top of their sectors. The R&D Center also assumes a leadership role in technological development both in Türkiye and in the world, with the partnerships and collaborations it has established. SOCAR R&D and Innovation Center; With the awareness of environmental responsibility of all group companies operating in the energy, refinery and petrochemical chain, it aims at the transition of the European Union to a carbon-free economy by 2050. Horizon 2020 - aims to take part in R&D and Innovation projects within the scope of the European Green Deal Call. Currently, 2 European Union projects are being carried out in the field of SOCAR R&D, Horizon 2020 - Carbon Capture - Storage and Use (CCSU). These; CARMOF and CO2Focus projects. SOCAR R&D and Innovation Center, CO2 capture and energy There are 5 projects (CO2Fokus, NEFERTITI, CARMOF, Circular TwAln, LOUISE) funded by the European Union in the field of transition, renewable energy digital transformation and environmental solutions. The total grant amount of the projects is 1 million Euros.

The NEFERTITI Project

Project was awarded funding in December 2020 and started to be carried out at SOCAR R&D in 2021, aims to produce chemicals such as ethanol and isopropanol from carbon dioxide with heterogeneous catalysts by utilizing solar energy. This project, which aims to convert carbon dioxide and water into chemicals, will significantly increase R&D experience in diversifying the use of renewable energy sources.

The Circular TwAln Project

The Circular TwAln Project is the first digital project developed by the SOCAR R&D and Innovation Center to be funded by HORIZON EUROPE. The project, which aims to maximize sustainability and energy efficiency through artificial intelligence and digital solutions, is the fourth project of SOCAR Türkiye R&D and Innovation A.Ş. to be funded by the EU.

The LOUISE Project,

which aims to prepare for the pre-commercial demonstration of an innovative process for the conversion of solid waste-derived fuels, namely Chemical Looping Combustion (CLC), by providing a concentrated CO2 stream ready for transport and storage or use, has been funded by the Horizon 2020 grant scheme.

Development of Domestic and Original Design, Materials, Production and Machine Technologies for 3D Additive Manufacturing

SOCAR Türkiye R&D and Innovation A.Ş.'s project application titled " within the scope of TÜBİTAK-SAYEM (Industry Innovation Network Mechanism) was found worthy of support by all referees assigned within the framework of TÜBİTAK Innovation Support Program Implementation Principles. The project involves 23 project partner companies and universities that are well-known in Türkiye and around the world and are experts in their fields. Our R&D project titled "Sustainable Bioplastic Production from Agri-Food Wastes (BIOLINK)", which is in line with SOCAR Azerbaijan's vision to contribute to global sustainability through low carbon emissions, circular economy and the development of environmentally friendly operations, was entitled to be supported within the scope of Türkiye-Spain Eureka 2021 Network Projects.

Sustainable Bioplastic Production from Agri-Food Waste (BIOLINK)

Our R&D project named "Sustainable Bioplastic Production from Agricultural Food Wastes (BIOLINK)" in line with SOCAR Azerbaijan's vision of contributing to global sustainability through the development of low carbon emissions, circular economy and environmentally friendly operations, Türkiye-Spain Eureka 2021 Network Projects entitled to support.

Gebze Technical University Technopark – SOCAR R&D Gebze Process Systems Center

In 2021, SOCAR R&D Gebze Process Systems Center was established in Gebze Technical University Technopark. Commercialization projects were initiated in cooperation with established start-ups and universities in process development areas such as sustainability, energy transition, waste management and digital transformation. In this way, the experience of the SOCAR R&D Center will be transferred to universities and start-ups, and the synergy necessary for the development of domestic commercial products will be achieved. [LDPE Factory Catalyst Cocktail Development](#)

Within SOCAR, projects aiming to increase production efficiency and reduce carbon emissions through the development of an innovative catalyst cocktail at the LDPE plant, chemical recycling of waste plastics, obtaining petrochemical input raw materials through process and catalyst development, with the development of Polymer Processing Aid Masterbatch (PPA MB), energy savings and reduction of production loss in plastics processing processes with the PPA MB product, and with the development of environmental biotechnology products, effective treatment of wastewater in Petkim and STAR Refinery waste treatment units, zero carbon practices and clean energy use have been developed and implemented.

Catalyst Development Project for DME Synthesis from Carbon Dioxide

The project, carried out with Izmir High Technology Institute (IYTE) within the scope of University-Industry cooperation, aims to develop a catalyst and process to convert carbon dioxide, which is emitted into the atmosphere in Petkim's production factories, into dimethyl ether (DME), a valuable product. Within the scope of the project, catalyst development and testing of the performance of these catalysts continue in the laboratory of the SOCAR R&D and Innovation Center. As a result, catalyst formulations with high performance indicators were identified and the installation of infrastructure for high pressure testing of catalysts began. In addition, negotiations have been initiated with international companies for the commercialization of these catalysts with high performance indicators.

from Waste Polyolefins

The Project for the Development of Raw Materials Suitable for Refinery and Petrochemical Inputs from Waste Polyolefins, initiated in cooperation with SOCAR R&D and Innovation Center and METU, aims to develop a more efficient catalyst and process with high selectivity for the synthesis of raw materials suitable for petrochemical inputs in the chemical recycling of plastic waste. This project, which aims to transform waste polyolefins into high value-added products under milder conditions with catalysts, is important for reducing the negative impacts of plastic pollution and developing a circular, sustainable economy.

Development of Raw Materials Suitable for Refinery and Petrochemical Input





Social Benefit and Social Responsibility

Corporate Social Responsibility

As SOCAR Türkiye, in addition to the employment and economic values we create thanks to our activities and products, we also support social development in the regions where we operate and nationally, through corporate social responsibility projects, donations and sponsorships we carry out. In line with the United Nations Sustainable Development Goals, in 2022, we allocated a significant amount of resources to corporate social responsibility activities. At SOCAR Türkiye, we divide our corporate responsibility projects that support social and economic development with a multi-faceted approach and create added value for society into three categories: Education, Environment and Social issues. We measure the social impact of our projects and report our contribution to social development in accordance with international standards.



Social Projects

SOCAR Türkiye Turkish Physically Handicapped Sports Federation – Boccia National Team Main Sponsorship

- In 2022, we continued the main sponsorship support we have been providing to our Boccia National Team with our group company Petkim since 2018. During the year, our Boccia National Team successfully represented our country at the Veldoven 2022 World Boccia Tournament, which is included in the competition calendar of the Turkish Federation of the Physically Disabled, at the Poznan 2022 World Boccia Tournament and at the Rome 2022 World Boccia Tournament. Boccia sport is the only sport that the most severely disabled individuals can play, and it is an area of great importance for SOCAR Türkiye in terms of the participation of disabled individuals and their families in social life and contributing to the goal of an inclusive society.

Ege University Aliğa Vocational School Sports Fields Renovation

- In 2022, we made a significant contribution to the sports infrastructure of Aliğa by carrying out the renovation and expansion of the sports fields of Ege University Aliğa Vocational School, which trains qualified technical staff for our sector and is in the social impact area of our company, in order for young people to perform sports activities in more suitable physical conditions.

Turkish National Police Foundation – Support to the İzmir Provincial Police Department for Fund Drive for a Vehicle

- We provided a donation to the Turkish National Police Foundation to support fund drive for a vehicle campaign launched by the İzmir Provincial Police Department, which plays a key role in the security of the region.





Education Projects

Female Engineers for Türkiye Project

- Our support for the Engineer Girls of Türkiye Project, of which we are a stakeholder in 2021 and which contributes to the personal and professional development of future female engineer candidates studying in engineering faculties, continued in 2022 as well. As part of our support, we provided scholarships, English education, mentorship and internship opportunities to 10 chemical engineering students. In addition, we hosted students at our production facilities in Aliağa in 2022. Having the opportunity to closely examine the production processes, the students also met with their mentors, consisting of SOCAR Türkiye Volunteers. This project, which is important for women's participation in business life and their equal representation in our sector, has been carried out by the foundation, which has been its founder since 2015, in partnership with the Ministry of Family and Social Services, the Ministry of National Education and the United Nations Development Program.

Ege University CESIM Business Acumen Business Simulation Project

- In order to reinforce the theoretical knowledge taught at the university in a practical way, we implemented the "Business Simulation Project", our project to bring business simulation together with state universities, in 2021. In 2022, we provided the university with the rights to use two business simulations in the fields of "Global Competition" and "Marketing" from an international software company for 60 students studying at the Department of Business Administration at Ege University. In 2022, we expanded the scope of the project and cooperated with Dokuz Eylül University and supported the development of the use of theoretical knowledge and decision-making skills of 95 students in total with an additional 35 students.

"Go on SOCAR" Donation Campaign

- Through the "Go on SOCAR" competition, organized under the motto "Live Well, Feel Good", we donated for every 1 million steps taken by SOCAR Türkiye employees.

Birge and Sağlam Social Union Tohum Autism Foundation (TOV) collaboration project

- Tohum Autism Foundation (TOV) and Birge and Sağlam Social Union, which provides services for children with autism in Azerbaijan, signed a valuable cooperation in 2022. In this context, TOV shared its experiences with Birge and Sağlam Social Union by providing supervision so that children with autism in Azerbaijan can receive quality education based on science.

SOCAR Energy School (SES)

- SOCAR Türkiye and Sabancı University have cooperated in the implementation of a leading certified training program that provides specialization in the sector. Within the scope of the program, appropriate public and private sector managers, academicians, international policy makers and energy experts with an interest in the Caspian Basin, Türkiye and Azerbaijan's energy policies came together to discuss global and regional energy issues. Going forward with the program, we aim to establish an effective platform that brings together public and private sector managers, academicians, international policy makers and energy experts, and participants who want to specialize.
- Among the attendees of the 6-week program, held between November 12, 2022 and December 17, 2022, were a large number of doctoral students, post-doc researchers, associate professors, professors, faculty members, public administrators, diplomats, members of the press, private sector employees and NGO officials. We funded 65 people in the scope of this program as SOCAR Türkiye support.

Türkiye's first Science and Fairy Tales Festival: "Science in Wonderland" Project

- We organized the "Science in Wonderland" Project, Türkiye's first science and fairy tale festival, which we realized in cooperation with Science Virus, in İzmir (Aliağa and Karşıyaka), Bursa and Kayseri, where our group companies are located. We hosted nearly 150 children between the ages of 12-14 in the magical world of science and fairy tales. At the same time, we pioneered the development of scientific thinking and imagination by bringing children together with chemistry and energy workshops and workshops on many different subjects, which our volunteers support with their presentations.



Environment Projects

SOCAR Terminal «Blue Climate Ambassadors» Project with TURMEPA

- Through the Blue Climate Ambassadors project, carried out together with Turmepa, Türklım and Wista Türkiye, we are increasing the number of female employees at ports, and implementing a zero waste blue transformation, offering solutions to issues related to climate change. Within the scope of the project, Zero Waste training was given to port workers with the support of SOCAR Terminal, one of the SOCAR Türkiye group companies. In addition, within the scope of the Blue Climate Ambassadors Project, which targets Zero Waste and addresses the issue of climate change, we carried out a coastal clean-up of Aliağa Public Beach and Karşıyaka Deniz Kabuğu Island.

“Lifelong Sustainability Transformation Workshops for the Future of the World” in cooperation with the Aegean Contemporary Education Foundation (EÇEV)

- In recognition of the importance of raising the awareness of children of the need for sustainability during early education, we have implemented the “Lifelong Sustainability Transformation Workshops for the Future of the World” in cooperation with the Aegean Contemporary Education Foundation (EÇEV). With this project, the importance of sustainability was discussed in detail with the participation of a total of 187 students and 60 parents during 2-day workshops, with the aim being to encourage sustainability in the home through the education of families.

Disposal and Recycling Project for a Sustainable Future

- As a result of archival studies for SOCAR Türkiye and our group companies, we started a recycling project for our disposal materials, whose storage period has expired, aiming to give life to nature for a sustainable future. We established the “SOCAR Türkiye Volunteers Memorial Forest” by donating saplings to the Aegean Forest Foundation with the income obtained after the recycling service of 40 tons of paper..





SOCAR Türkiye Volunteers

As SOCAR Türkiye, in addition to the corporate responsibility projects, donations and sponsorship activities of the group companies, we have implemented the SOCAR Türkiye Volunteers platform to make use of the good will of SOCAR Türkiye's employees in 2021. SOCAR Volunteers – a volunteer program under which the employees of Petkim and other group companies put forward suggestions and ideas – contributes to the development of the social responsibility awareness of employees and their internalization through active participation in studies.

SOCAR Volunteers is a social responsibility community founded by approximately 500 employees, and acts in line with the UN Sustainable Development Goals in the implementation of social responsibility projects in six teams addressing issues related to education, the environment, health, sports, animal protection and social issues.

SOCAR Volunteers are continuing their activities in the Haydar Aliyev Schools and Petkim schools in İzmir, Adana, Kars, Ankara and Kocaeli.

As part of our environmental protection efforts, SOCAR Volunteers cleaned 5 tons of solid waste in the Aegean Sea. We planted nearly 280 thousand trees. In support of children and education, we distributed coloring books and toys to disadvantaged children in İzmir, Bursa and Kayseri.

Under HAYTAP's animal aid campaign, we meet the needs of stray animals in need of care. Our volunteers visit animal shelters periodically with food donations. Our volunteers, who make animal kennels by evaluating the waste, also carry out awareness-raising activities to spread the "purchase owner" culture through SOHO – the company's internal communication platform.

Our employees develop solutions to meet the needs of the communities in which they live. SOCAR Volunteers have received international awards for their projects that are clear evidence of the value they create for society. They have been recognized with Communitas Awards in the "Community Service and Leadership in Corporate Social Responsibility" category, and Global Business Excellence Awards in the "Outstanding Society Initiative" category.





2022 Activities of SOCAR Türkiye Volunteers

SOCAR Türkiye Volunteers Activities in 2022 Projects for Disadvantaged Groups

SOCAR Türkiye Volunteers 2022 EÇEV "Make a Wish" Campaign

- SOCAR Türkiye Volunteers contributed to the realization of the dreams of 605 children with a project implemented in cooperation with the Aegean Contemporary Education Foundation (EÇEV), under which they attempted to make the wishes of disadvantaged children come true for the New Year. On 29.12.2022, we delivered gifts to children in need during a visit to the Yamanlar Training Center with SOCAR Türkiye Volunteers.

"Caps of All Colors Turn into Hope" Campaign with the Spinal Cord Paralysis Foundation

- SOCAR Türkiye Volunteers collaborated with the Turkish Spinal Cord Paralysis Association (TOFD) for "One hope, one happiness". To contribute to efforts to supply of wheelchairs to people with paraplegia, we collected 6471 kg of plastic caps in total in "Covers of All Colors Turn into Hope" boxes placed in the offices in Kayseri, Bursa and İstanbul, offices in İzmir - Aliağa and in the field.





Education Projects

Education Activities of SOCAR Volunteers

- SOCAR Türkiye Volunteers' 2nd semester of 2021-2022 academic year and 2022-2023 academic year 1 of the "Safe and Efficient Natural Gas Usage Training" series, which was planned jointly with Bursa Provincial Directorate of National Education with the participation of students and teachers of 374 schools in Bursa. Term sessions were held successfully. 53,487 students and teachers attended the presentation, which was held with the online participation of 1,790 classes.

Book Collection Campaign for Aliğa Petrochemical Secondary School Library

- SOCAR Türkiye Volunteers organized a book collection campaign for the newly opened library of Aliğa Petrochemical Secondary School and contributed to its renovation. We delivered 365 books that we collected with the contribution of volunteers to the authorities.



Environment Projects

November 11 National Afforestation Day Donation OGEMVAK Sapling Donation Campaign

- For the November 11 National Afforestation Day, 964 saplings and 24,100 TL were delivered to the Forest Fire Fighting Services Support Foundation (OGEM-VAK) under a campaign supported by SOCAR Türkiye Volunteers. We donated 50,000 thousand TL in total to OGEM-VAK by planting saplings twice the donation made by SOCAR Türkiye employees.

SOCAR Türkiye Volunteers Memorial Forest, Aegean Forest Foundation Tree Planting Event

- SOCAR Türkiye recycled 62 tons of paper upon the completion of the obligatory storage period, together with the group companies. In this way, 1,056 trees were prevented from being cut down. The income from the recycled paper was donated to the Aegean Forest Foundation in the form of 10,000 saplings that were planted to create the SOCAR Türkiye Volunteers Memorial Forest in Menemen. We organized a tree planting event with the participation of SOCAR Türkiye Volunteers, who work, produce and think for our future.





Animal Protection Projects

SOCAR Volunteers Bursa Animal Feeding Event

- For our lovely friends on the street, we visited 11 shelters in Bursa and Kayseri and in locations far from the city together with SOCAR Türkiye Volunteers, sharing 500 kg of food and spending a pleasant time with them.

SOCAR Volunteers Visit Aliğa Patipark

- SOCAR Türkiye Volunteers visited the stray animals being looked after in the PatiPark Temporary Animal Care Center of Aliğa Municipality. The Volunteers brought food for their four-legged friends, and spent a pleasant day taking care of the them. Established with the support of Petkim, PatiPark is Türkiye's largest dog park.



Sports Projects

TEV Foundation and SOCAR Volunteers İzmir Marathon Run

- SOCAR Türkiye Volunteers supported the "Turkish Education Foundation" this year in the 2022 İzmir Marathon. Their donation, amounting to 30,629 TRY, was used to ensure equal opportunities in education to 38 successful young people through TEV's "Don't Let it to Stay Half Finished" project.

World Run for Life with SOCAR Volunteers Spinal Cord Paralysis Association

- At the 2022 "Wings for Life" World Run İzmir, 85 SOCAR Türkiye Volunteers ran on behalf of those who could not run, with donations passed on to spinal cord paralysis treatment research.

44th İstanbul Marathon Community Volunteers Foundation Campaign

- SOCAR Türkiye Volunteers ran in the 44th İstanbul Marathon in support of the Community Volunteers Foundation (TOG) and collected donations amounting to 30,410 TL which was used to support the accommodation, nutritional and cultural needs of 76 young people.

International Turkcell Granfondo İzmir Cycling Competition

- 36 of our volunteers participated in the Turkcell Granfondo competition, which was held under the main sponsorship of SOCAR Türkiye, and shared the excitement of all the participants.





Performance Indicators

Operational Performance

Petkim

2022

| | |
|---|------------------|
| The Rate of Meeting Türkiye's Need for Petrochemical Products | 12% |
| Annual Gross Production Capacity | 3.6 million tons |
| Total Production | 2.2 million tons |
| Capacity Utilization Rate | 63.9% |
| Ethylene-Propylene Efficiency | 46.1% |
| PX, OX and Benzene Efficiency | 36.6% |
| Total Assets (2022) | 54.7 billion TL |
| Total Number of Employees (2022) | 2,335 |

STAR Refinery

2022

| | |
|--|-------------------|
| The Ratio of Meeting Türkiye's Processed Crude Oil Needs | 25% |
| Annual Crude Oil Processing Capacity | 11 million tons |
| Total Production | 11.9 million tons |
| Capacity Utilization Rate | 112% |
| Nelson Refinery Complex | 9.2 |
| White Product Efficiency | 88% |
| Medium Distillate and Reformate Efficiency | 74.3% |
| Total Assets (2022) | 181.41 billion TL |
| Total Number of Employees (2022) | 1,129 |

SOCAR Storage

| | |
|----------------------------------|------------------------|
| Number of Terminals | 5 |
| Fuel Product Storage | 530,000 m ³ |
| LPG Storage Capacity | 45,000 m ³ |
| Total Number of Employees (2022) | 83 |

Petkim (WPP)

| | |
|----------------------------------|----|
| Total Installed Capacity (MW) | 51 |
| Total Number of Turbines | 17 |
| Total Investment (million euros) | 55 |

Bursagaz**2022**

| | |
|---------------------------|------------------------------|
| Number of Subscribers | 1,154,938 BBS |
| Number of Gas Users (BBS) | 1,070,059 BBS |
| Total Employees 2022 | 244 |
| Natural Gas Supply 2022 | 2.34 billion Sm ³ |
| Network Size | 7,356 km |
| Satisfaction Rate | 93.72% |

Kayserigaz**2022**

| | |
|----------------------------------|------------------------------|
| Number of Subscribers (2022) | 630,038 BBS |
| Number of Gas Users (2022) | 613,286 BBS |
| Total Number of Employees (2022) | 153 |
| Natural Gas Supply (2022) | 0.77 billion Sm ³ |
| Network Size | 6,179 km |
| Satisfaction Rate | 91.19% |

SOCAR Energy Trade**2022**

| | |
|------------------------------|--|
| Trade and Sales Volume (TWh) | 17 TWh |
| Total Turnover (Billion TL) | 20 billion TL |
| Shareholding Structure | 100% SOCAR Turkey Doğal Gaz Yatırım A.Ş. |

Enervis**2022**

| | |
|------------------------|-----|
| Total Employees (2022) | 343 |
|------------------------|-----|

SOCAR Fiber**2022**

| | |
|--------------------------|-------------------------------|
| Line Length Approx. (km) | 1,850 |
| Route Covered | 20 provinces ve 67 districts |
| Investment Cost | 80 |
| Shareholding Structure | 100% SOCAR Turkey Enerji A.Ş. |

**SOCAR Terminal****2022****Site**

| | |
|------------------------------|------------------------|
| Handling Capacity (TEU/Year) | 1,500,000 TEU |
| Site Stacking Capacity (TEU) | 25,000 TEU |
| Refrigerated Container | 830 (380V) |
| Total Area | 420,000 m ² |

Equipment Park / Capacity

| | |
|---|---------------------|
| STS | 3 pieces / 65 tons |
| RTG / Capacity | 10 pieces / 41 tons |
| Full Container Stacking Equipment (RS) | 3 pieces / 45 tons |
| Empty Container Stacking Equipment (RS) | 3 pieces / 9 tons |
| Tow truck | 26 pieces / 65 tons |
| Forklift (FL) / Capacity | 8 pieces / 3 tons |
| Forklift (FL) / Capacity | 4 pieces / 5 tons |
| Forklift (FL) / Capacity | 1 piece / 16 tons |
| Forklift (FL) / Capacity | 1 piece / 28 tons |
| Forklift (FL) / Capacity | 1 piece / 33 tons |

Millenicom**2022**

| | |
|------------------------|--|
| Total Employees | 83 |
| Shareholding Structure | 100% SOCAR Turkey Doğal Gaz Yatırım A.Ş. |

SOCAR R&D**2022**

| | |
|------------------------|----------------------------------|
| Total Area m2 | 1,200 |
| Number of Researchers | 24 |
| Patent | 19 |
| Shareholding Structure | 100% SOCAR Turkey Enerji A.Ş. |

TANAP**2022**

| | |
|--|------------------------|
| Main Line Length (km) | 1,811 |
| Dardanelles Crossing | 17.5x2 (Twin Pipeline) |
| Highest Point Passed by Pipeline(m) | 2,760 |
| Deepest Point Passed by Pipeline (At Sea) (m) | -67.5 |
| Number of People Directly and Indirectly Employed During the Project Phase | 13,000 |
| Number of Cities on the TANAP Route | 20 |
| Approximate Investment Cost (Billion USD) | 6.5 |

Shareholding Structure

| | |
|-----------------------------------|-----|
| Southern Gas Corridor Company-SGC | 51% |
| BOTAŞ | 30% |
| BP Pipelines (TANAP) Limited | 12% |
| SOCAR Turkey Enerji A.Ş. | 7% |



Economic Value Created

| Economic and Administrative Performance (TL) | 2020 | 2021 | 2022 |
|---|-----------------|-----------------|------------------|
| Revenues | 31,247,111,000 | 89,445,890,000 | 251,804,966,669 |
| Revenue from Sustainable Product Categories such as Renewable Energy etc. | 0 | 1,137,677 | 4,501,036 |
| Economic Value Distributed | -32,956,563,000 | -89,407,824,000 | -238,512,801,325 |
| Economic Value Retained | -1,709,452,000 | 38,066,000 | 13,292,165,344 |

| SOCAR Türkiye Tax Payments (TL)(**) | 2020 | 2021 | 2022 |
|-------------------------------------|-------------------|------------------|-------------------|
| TOTAL | 11,488,496,318.59 | 6,304,584,520.34 | 17,262,702,990.17 |

| Number of Suppliers (number) | Total Suppliers | Total Number of Domestic Suppliers in Total Number of Suppliers | Domestic Supply Ratio |
|--|-----------------|---|-----------------------|
| STEAŞ, Petkim, STAR Refinery, SOCAR Storage, SOCAR Petroleum Trade, Azoil, SOCAR R&D, SOCAR Terminal | 1,862 | 1,670 | 89.6% |
| Bursagaz, Kayserigaz, SETAŞ, Enervis, STDGYAŞ | 609 | 606 | 99.5% |

Employee Demography

| Number of Employees by Age Group (person/year) | < 30 years | 30-50 | > 50 years | < 30 years | 30-50 | > 50 years |
|---|------------|-------|------------|------------|-------|------------|
| SOCAR Türkiye Corporate Headquarters | 26 | 91 | 9 | 25 | 95 | 9 |
| PETKİM | 228 | 2,023 | 124 | 258 | 2,017 | 74 |
| STAR Refinery | 303 | 673 | 107 | 317 | 670 | 82 |
| SOCAR Storage | 14 | 57 | 6 | 21 | 57 | 5 |
| SOCAR Terminal | 39 | 251 | 7 | 35 | 275 | 6 |
| Bursagaz, Kayserigaz, STDGYAŞ, Enervis, SETAŞ | 190 | 588 | 23 | 202 | 590 | 22 |
| Other (SOCAR Turkey Ortak Yön. Hiz. A.Ş., SOCAR Petrol Ticaret, SCR Müşavirlik, SOCAR Türkiye Ar-Ge | 48 | 343 | 29 | 69 | 352 | 29 |
| Boards of Directors | 0 | 18 | 18 | 0 | 26 | 15 |

| Employee Turnover Rates by Sex (%) | 2021 | | 2022 | |
|------------------------------------|---------|------|---------|------|
| | Females | Male | Females | Male |
| | 19% | 7% | 8% | 6% |

| Total Number of New Employees (person/year) | 2021 | | 2022 | |
|---|---------|------|---------|------|
| | Females | Male | Females | Male |
| | 109 | 223 | 83 | 294 |

Number of Employees by Sex (person/year)

| | 2021 | | 2022 | |
|---|---------|-------|---------|-------|
| | Females | Male | Females | Male |
| SOCAR Türkiye Corporate Headquarters | 41 | 85 | 42 | 87 |
| PETKİM | 167 | 2,208 | 178 | 2,171 |
| STAR Refinery | 83 | 1,000 | 90 | 979 |
| SOCAR Storage | 6 | 71 | 6 | 77 |
| SOCAR Terminal | 29 | 268 | 32 | 284 |
| Bursagaz, Kayserigaz, STDGYAŞ, Enervis, SETAŞ | 142 | 659 | 140 | 674 |
| Other (SOCAR Turkey Ortak Yön. Hiz. A.Ş., SOCAR Petrol Ticaret, SCR Müşavirlik, SOCAR Türkiye Ar-Ge | 160 | 260 | 169 | 281 |
| Boards of Directors | 3 | 33 | 4 | 37 |

Maternity Leave and Rate of Returns to Work (person/year)

| | 2021 | | 2022 | |
|---|---------|------|---------|------|
| | Females | Male | Females | Male |
| Total number of employees entitled to maternity leave | 39 | 329 | 32 | 260 |
| Total number of employees using maternity leave | 39 | 329 | 32 | 260 |
| Total number of employees returning to work after the end of maternity leave | 39 | 329 | 32 | 260 |
| Total number of employees returning to work after maternity leave ends and continuing to work 12 months after returning to work | 35 | 316 | 32 | 256 |
| Return to work and retention rates of employees on maternity leave | 90% | 96% | 100% | 98% |

Average Hours of Training Delivered (person/year)

| | 2021 | | 2021 | | 2022 | |
|--------------------------------------|---------|-------|----------|------------|---------|---------|
| | Females | Male | Females | Male | Females | Male |
| SOCAR Türkiye Corporate Headquarters | 46.08 | 42.57 | 2,080.50 | 122,311.50 | 1,423 | 119,096 |
| Petkim | 41.17 | 40.15 | 56.35 | 50.73 | 63.76 | 52.10 |
| STAR Refinery | 54.85 | 48.62 | 65.99 | 71.31 | 67.52 | 63.89 |
| SOCAR Storage | 19.57 | 55.32 | 32.6 | 90.13 | 41.34 | 60.32 |
| SOCAR Terminal | 5 | 12 | 86 | 47 | 43.5 | 19.55 |
| Bursagaz | 10 | 19 | 19 | 22 | 32.01 | 46.43 |
| Kayserigaz | 16.86 | 31.2 | 8.39 | 25.26 | 32.22 | 51.41 |
| SOCAR Energy Trade | 4.81 | 16.4 | 31.29 | 36.08 | 25.07 | 26.73 |
| Enervis | 14.06 | 17.3 | 9.45 | 8.96 | 67.47 | 25.67 |
| STDGYAŞ | 3.37 | 2.56 | 19.14 | 15.74 | 34.99 | 33.99 |
| SETAŞ | 4.3 | 0.67 | 13.4 | 5.61 | - | 0.42 |

Hours of Training Provided to Employees (hours/year)

| | Category | Hours |
|--|-----------------|------------|
| Total Training Hours by Employee Level | Manager | 3,519.75 |
| | Expert | 76,095.3 |
| | Technical Staff | 37,652.8 |
| | Worker | 137,786.1 |
| Total Training Hours by Employee Level | Male | 221,538.45 |
| | Females | 33,515.5 |



| Accident Statistics | SOCAR Türkiye Corporate Headquarters | | Petkim | | STAR Refinery | | SOCAR Storage | |
|---|--|------|--------|------|---------------|------|---------------|------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 |
| Number of Accidents | 0 | 0 | 8 | 12 | 6 | 2 | 0 | 0 |
| Number of Fatal Accidents | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Number of Lost Days Due to Occupational Disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Accident Frequency Rate (per 200,000 working hours) | 0 | 0 | 0.36 | 0.52 | 0.46 | 0.19 | 0 | 0 |
| Occupational Disease Rate (per 200,000 working hours) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Accident Statistics | SOCAR Terminal | | Bursagaz ¹ | | Kayserigaz ¹ | |
|---|----------------|------|-----------------------|------|-------------------------|------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 |
| Number of Accidents | 2 | 2 | 1 | 1 | 2 | 1 |
| Number of Fatal Accidents | 0 | 1 | 0 | 0 | 0 | 0 |
| Number of Lost Days Due to Occupational Disease | 0 | 0 | 0 | 0 | 0 | 0 |
| Accident Frequency Rate (per 200,000 working hours) | 0.42 | 0.40 | 0.18 | 0.24 | 0.76 | 0.19 |
| Occupational Disease Rate (per 200,000 working hours) | 0 | 0 | 0 | 0 | 0 | 0 |

¹Includes Enervis, Bursagaz and Kayserigaz.

OHS-E Training

Total HSE Training Delivered (hour/year)

| | |
|---------------------------------------|---------|
| SOCAR Türkiye Corporate Headquarters | 6,179.5 |
| Refinery Petro-Chemical Business Unit | 139,684 |
| Natural Gas Business Unit | 19,534 |
| Portfolio Management Business Unit | 4,257 |

| OHS-related Training Hours of Employees (hour/year) | 2020 | | 2021 | | 2022 | |
|--|----------|------------|----------|------------|----------|------------|
| Employee | Kadın | Erkek | Kadın | Erkek | Kadın | Erkek |
| Blue Collar | 1,531.16 | 101,524.75 | 2,151.50 | 130,512.50 | 1,435 | 111,806.85 |
| White Collar | 9,142.53 | 32,132.31 | 13,278 | 40,787 | 12,788.5 | 43,624.95 |
| Executives | 5 | 0 | 75 | 230 | 46 | 284.5 |

| Average Hours of Occupational Health and Safety Training Received by Suppliers (hour/year) (*) | 2020 | 2021 | 2022 |
|---|-----------|--------|----------|
| | 20,998.50 | 30,305 | 47,347.5 |

Environmental Performance

| Energy Consumption (Gj/year) | 2021 | 2022 |
|-------------------------------|---------------|---------------|
| Natural gas | 31,260,544.5 | 22,859,115.94 |
| Ethylene | 17,397,214.99 | 13,932,961 |
| Aeration gas | 40,088.10 | 18,315.5 |
| Hydrogen | 323,308.15 | 391,989 |
| Received Steam | 2,126,417.04 | 1,903,677 |
| Diesel | 9,194.9 | 38,783.12 |
| Total Electricity Consumption | 2,294,495.03 | 351,513.31 |
| Combustible Gas | 16,443,021.02 | 23,331,625 |

Greenhouse Gas Emissions (Ton CO₂e)

| SCOPE 1 | 2020 | 2021 | 2022 |
|----------------|--------------|--------------|--------------|
| STAR Refinery | 1,914,451.00 | 2,010,170.00 | 2,451,866.91 |
| Petkim | 1,887,965.00 | 1,881,861.00 | 1,833,499.00 |
| SOCAR Terminal | - | 2,287.38 | 1,745.76 |
| Bursagaz | 1,083.96 | 1,665.36 | 1,294.49 |
| Kayserigaz | 1,447.43 | 1,448.37 | 723.62 |

| SCOPE 2 | 2020 | 2021 | 2022 |
|----------------|------------|------------|------------|
| STAR Refinery | 432,560.57 | 428,453.97 | 403,876.02 |
| Petkim | 84,744.58 | 101,690.33 | 29,725.58 |
| SOCAR Terminal | - | 4,283.92 | 3,940 |
| Bursagaz | 504.36 | 662.55 | 740 |
| Kayserigaz | 252 | 265.26 | 340 |

*STAR Refinery emission amount verification process continues.

Air Emissions (ton/year)

| Petkim | 2021 | 2022 |
|--------|----------|----------|
| NOx | 2,227.16 | 2,040.92 |
| SOx | 1,040.96 | 631.68 |
| PM | 10.64 | 7.35 |

| STAR Refinery | 2021 | 2022 |
|---------------|--------|----------|
| NOx | 597.86 | 878.41 |
| SOx | 299.13 | 601.7737 |
| PM | 5.2 | 86.74853 |

**Water Withdrawal by Source (m3/year)****2021****2022**

| | | |
|-----------------------------|---------------|---------------|
| Surface Water (m3) | 20,601,862.00 | 17,523,735.00 |
| Groundwater (m3) | 0.09 | 0.13 |
| Municipal Water (m3) | 6,543,393.90 | 7,378,628.19 |
| Total Water Withdrawal (m3) | 27,145,260.27 | 24,902,368.87 |

Purified Water Discharge (m3/year)**2021****2022**

| | | |
|----------------------------|------------|------------|
| Discharge of Treated Water | 10,482,341 | 12,016,241 |
| Total Water Discharge | 10,482,341 | 12,016,241 |

Amount of Waste (ton/year)**2021****2022**

| SOCAR Türkiye Headquarters | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
|----------------------------|-----------------|---------------------|-----------------|---------------------|
| Reuse | | | | |
| Recycling | | 8.47 | | 13.6 |
| Recovery | | | | |
| Storage | 0 | 19.90 | | 14.5 |
| Incineration | 0.03 | | 0.065 | |
| TOTAL | | 28.408 | | 28.165 |

Amount of Waste (ton/year)**2021****2022**

| Petkim | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
|--------------|-----------------|---------------------|-----------------|---------------------|
| Reuse | | | | |
| Recycling | 11.260 | 7.68 | 22.35 | 5.73 |
| Recovery | | | | |
| Storage | 1.73 | 15.75 | 2.08 | 219.99 |
| Incineration | 0.58 | | 0.93 | |
| TOTAL | | 37.510 | | 251.080 |

Amount of Waste (ton/year)**2021****2022**

| STAR Refinery | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
|---------------|-----------------|---------------------|-----------------|---------------------|
| Reuse | 0.021 | 0.02 | 0.01 | 0.0001775 |
| Recycling | 0 | 0 | 0 | 0 |
| Recovery | 20.94 | 0.83 | 7.56 | 0.58 |
| Storage | 2.43 | 1.47 | 1.38 | 0.46 |
| Incineration | 0 | 0 | 0 | 0 |
| TOTAL | | 25.711 | | 9.990 |

| Amount of Waste (ton/year) | | 2021 | | 2022 | |
|----------------------------|--|-----------------|---------------------|-----------------|---------------------|
| SOCAR Storage | | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
| Reuse | | | | | |
| Recycling | | | | | 0.004 |
| Recovery | | 0.188 | 0.038 | 0.29 | |
| Storage | | | | 0.01 | 0.039 |
| Incineration | | | | | |
| TOTAL | | | 0.226 | | 0.343 |

| Amount of Waste (ton/year) | | 2021 | | 2022 | |
|----------------------------|--|-----------------|---------------------|-----------------|---------------------|
| SOCAR Terminal | | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
| Reuse | | | | | |
| Recycling | | 0.01288 | | 0.006682 | 0.04602 |
| Recovery | | 0.020889 | 0.08 | 0.016154 | 0.0058 |
| Storage | | | | 0 | 0.16769 |
| Incineration | | 0.000007 | | | |
| TOTAL | | | 0.114 | | 0.242 |

| Amount of Waste (ton/year) | | 2021 | | 2022 | |
|----------------------------|--|-----------------|---------------------|-----------------|---------------------|
| Bursagaz | | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
| Reuse | | | | | |
| Recycling | | | 0.79112 | 0.002636 | 0.104316 |
| Recovery | | 0.00068 | 0.79112 | 0.002636 | |
| Storage | | | | | |
| Incineration | | 0.0021 | | | |
| TOTAL | | | 0.794 | | 0.107 |

| Amount of Waste (ton/year) | | 2021 | | 2022 | |
|----------------------------|--|-----------------|---------------------|-----------------|---------------------|
| Kayserigaz | | Hazardous Waste | Non-Hazardous Waste | Hazardous Waste | Non-Hazardous Waste |
| Reuse | | | | | |
| Recycling | | | 0.00136 | | 0.001029 |
| Recovery | | | 0.00136 | | |
| Storage | | 0.3 | | | |
| Incineration | | | | | |
| TOTAL | | | 0.301 | | 0.001 |



GRI Index



2023

GRI 1

SOCAR Türkiye reported in compliance with GRI Standards for the January–December 2022 period.

The GRI Services Team has reviewed that the GRI Content Index-Essentials Service clearly includes the GRI content index in the report and that references to GRI 2-1, 2-5 and GRI 3 -1, 3-2 disclosures are included where relevant in the report content.

Applied GRI Sector Standard – GRI 11: Oil and Gas 2021

| GRI Standard | Disclosures | Page Number, Source and/or Direct Answers |
|--|--|--|
| GRI 1: FOUNDATION 2021 | | |
| GRI 2: GENERAL DISCLOSURES 2021 | | |
| GRI 2: General Disclosures 2021 | 2-1 Organization Details | About Report p.4 |
| | 2-2 Entities included in the organization's sustainability reporting | About Report p.4 |
| | 2-3 Reporting period, frequency and contact point | About Report p.4 |
| | 2-4 Restatements of information | Materiality Analysis p.64 |
| | 2-5 External assurance | Environment and Combating Climate Change p.72 |
| | 2-6 Activities, value chain and other business relationships | About SOCAR Global p.10 SOCAR Türkiye p.12 Value Creation Model p.58 |
| | 2-7 Employees | Human-Oriented Approach (Human Rights) p.96 |
| | 2-8 Workers who are not employees | Employee Engagement and Well-being p.52 |
| | 2-9 Governance structure and composition | Corporate Governance p.14 Board of Directors and Senior Management s.16 |
| | 2-10 Nomination and selection of the highest governance body | Board of Directors and Senior Management p.16 |
| | 2-11 Chair of the highest governance body | Board Messages p.6 Board of Directors and Senior Management p.16 |
| | 2-12 Role of the highest governance body in overseeing the management of impacts | Board of Directors and Senior Management p.16 |
| | 2-13 Delegation of responsibility for managing impacts | Board of Directors and Senior Management p.16 |
| | 2-14 Role of the highest governance body in sustainability reporting | Corporate Governance and Sustainability Committee p.16 |
| | 2-15 Conflicts of interest | Anti-Bribery and Anti-Corruption p.28 |

| GRI Standard | Disclosures | Page Number, Source and/or Direct Answers |
|--|---|---|
| GRI 1: FOUNDATION 2021 | | |
| GRI 2: GENERAL DISCLOSURES 2021 | | |
| GRI 2: General Disclosures 2021 | 2-16 Communication of critical concerns | Corporate Governance p.14 Corporate Governance and Sustainability Committee p.16 |
| | 2-17 Collective knowledge of the highest governance body | Board of Directors and Senior Management p.16 Sustainability Management p.22 |
| | 2-18 Evaluation of the performance of the highest governance body | Corporate Governance p.14 |
| | 2-19 Remuneration policies | Remuneration Committee p.16 Employee Engagement and Well-being p.106 |
| | 2-20 Process to determine remuneration | Remuneration Committee p.16 Employee Engagement and Well-being p.106 |
| | 2-21 Annual total compensation ratio | Committees p.16 |
| | 2-22 Statement on sustainable development strategy | Sustainability Management p.22 Contribution to UN Sustainable Development Goals p.22 |
| | 2-23 Policy commitments | Policies p.24 |
| | 2-24 Embedding policy commitments | Ethics, Compliance and Transparency p.26 |
| | 2-25 Processes to remediate negative impacts | Tackling Climate Change and Decarbonization p.76 |
| | 2-26 Mechanisms for seeking advice and raising concerns | Other Committees p.16 Employee Engagement and Well-being p.106 |
| | 2-27 Compliance with laws and regulations | Ethics, Compliance and Transparency p.26 |
| | 2-28 Membership associations | Corporate Memberships p.29 |
| | 2-29 Approach to stakeholder engagement | Communication with Stakeholders p.70 |
| | 2-30 Collective bargaining agreements | Unionization p.110 |



| GRI Standard | Disclosures | Page Number, Source and/or Direct Answers | Oil and Gas Sector Standard - Ref. No.: |
|---|---|--|---|
| GRI: 3 Material Topics 2021 | | | |
| Material Topics | | | |
| GRI 3: Material Topics 2021 | 3-1 Process to determine material topics | Materiality Analysis p.64 | |
| | 3-2 List of material topics | Materiality Analysis p.64 | |
| | 3-3 Management of material topics | Materiality Analysis p.64 | |
| Bribery and Corruption | | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.20.1 |
| GRI 205: Anti-Corruption 2016 | 205-1 Operations assessed for risks related to corruption | Anti-Bribery and Anti-Corruption p.28 | 11.20.2 |
| | 205-1 Operations assessed for risks related to corruption | Anti-Bribery and Anti-Corruption p.28 | 11.20.3 |
| Occupational Health and Safety | | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.9.1, 11.3.1 |
| GRI 403: Occupational Health and Safety 2018 | 403-1 Occupational health and safety management system | Management Systems p.25 | 11.9.2 |
| | 403-2 Hazard identification, risk assessment, and incident investigation | Occupational Health and Safety p.100 | 11.9.3 |
| | 403-3 Occupational health services | Occupational Health and Safety p.100 | 11.9.4 |
| | 403-4 Worker participation, consultation, and communication on occupational health and safety | Occupational Health and Safety p.100 | 11.9.5 |
| | 403-5 Worker training on occupational health and safety | Occupational Health and Safety p.100 | 11.9.6 |
| | 403-6 Promotion of worker health | Occupational Health and Safety p.100 | 11.9.7 |
| | 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | Occupational Health and Safety p.100 | 11.9.8 |
| | 403-8 Workers covered by an occupational health and safety management system | Occupational Health and Safety p.100 | 11.9.9 |
| | 403-9 Work-related injuries | Occupational Health and Safety p.100 | 11.9.10 |
| | 403-10 Work-related ill health | Occupational Health and Safety p.100 | 11.9.11 |
| GRI 416: Customer Health and Safety 2016 | 416-1 Assessment of the health and safety impacts of product and service categories | Occupational Health and Safety p.100 Management Systems Certificates p.25 | 11.3.3 |

Employee Engagement and Well-being

| | | | |
|---|--|--|-----------------------------------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.10.1, 11.7.1, 11.11.1, 11.13.1 |
| GRI 401: Employment 2016 | 401-1 New employee hires and employee turnover | Human Rights p.96 | 11.10.2 |
| | 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees | Employee Engagement and Well-being p.106 | 11.10.3 |
| | 401-3 Parental | Employee Engagement and Well-being p.106 | 11.10.4, 11.11.3 |
| GRI 402: Management Employee Relations 2016 | 402-1 Minimum notice periods regarding operational changes | Corporate Governance p.14 | 11.7.2, 11.10.5 |
| GRI 405: Diversity and Equal Opportunities 2016 | 405-1 Diversity of governance bodies and employees | Corporate Governance p.14 | 11.11.5 |
| GRI 406: Prevention of Discrimination 2016 | 406-1 Incidents of discrimination and corrective actions taken | Anti-Bribery and Anti-Corruption p.28 | 11.11.7 |
| GRI 407: Freedom of association and collective bargaining 2016 | 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | Unionization p.110 | 11.13.2 |

Digitalization and technological development

| | | | |
|--|---|-----------------------------|---------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.14.1 |
| | 203-1 Infrastructure investments and services supported | Group Companies p.32 | 11.14.4 |
| GRI 203: Indirect Economic Impacts 2016 | 203-2 Significant indirect economic impacts | Economic Value Created p.30 | 11.14.5 |

Circular Economy and Waste

| | | | |
|------------------------------------|--|---------------------------|----------------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.5.1, 11.8.1 |
| GRI 306: Waste 2020 | 306-1 Waste generation and significant waste-related impacts | Waste p.88 | 11.5.2 |
| | 306-2 Management of significant waste-related impacts | Waste p.88 | 11.5.3 |
| | 306-3 Waste generation | Waste p.88 | 11.5.4, 11.8.2 |
| | 306-4 Waste diverted from disposal | Waste p.88 | 11.5.5 |
| | 306-5 Waste directed to disposal | Waste p.88 | 11.5.6 |



Climate Risks

| | | | |
|------------------------------------|---|--|--------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.4.1 |
| GRI 304: Biodiversity 2016 | 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | Biodiversity p.88 | 11.4.2 |
| | 304-2 Significant impacts of activities, products and services on biodiversity | Biodiversity p.88 | 11.4.3 |
| | 304-3 Habitats protected or restored | Biodiversity p.88 | 11.4.4 |
| | 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations | Our main refining operations take place in Aliağa, İzmir. There is no protected area at the Aliağa location. | 11.4.5 |

Compliance with Human Rights Principles

| | | | |
|---|--|----------------------------------|---|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.15.1, 11.16.1, 11.17.1, 11.18.1, 11.22.1 |
| GRI 409: Forced or Compulsory Labor 2016 | 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor | Human Rights p.96 | 11.12.2 |
| GRI 410: Safety Applications 2016 | 410-1 Security personnel trained in human rights policies or procedures | Operational Risks p.20 | 11.18.2 |
| GRI 413: Local Communities 2016 | 413-1 Operations with local community engagement, impact assessments, and development programs | Stakeholder Impact Analysis p.70 | 11.15.2 |
| | 413-2 Operations with significant actual and potential negative impacts on local communities | Biodiversity p.88 | 11.15.3 |

Energy Efficiency

| | | | |
|------------------------------------|--|---------------------------------------|--------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.1.1 |
| GRI 302: Energy 2016 | 302-1 Energy consumption within the organization | Energy Management and Efficiency p.82 | 11.1.2 |
| | 302-2 Energy consumption outside of the organization | Energy Management and Efficiency p.82 | 11.1.3 |
| | 302-3 Energy intensity | Energy Management and Efficiency p.82 | 11.1.4 |
| | 302-4 Reduction of energy consumption | Energy Management and Efficiency p.82 | - |
| | 302-5 Reductions in the energy requirements of products and services | Energy Management and Efficiency p.82 | - |

Transition to a Low-Carbon Economy and Carbon Technologies

| | | | |
|------------------------------------|-----------------------------------|---------------------------|--------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.1.1 |
|------------------------------------|-----------------------------------|---------------------------|--------|

Air Quality

| | | | |
|------------------------------------|--|--|----------------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.1.1, 11.3.1 |
| GRI 305: Emissions 2016 | 305-1 Direct (Scope 1) GHG emissions | Tackling Climate Change and Decarbonization p.76 | 11.1.5 |
| | 305-2 Energy indirect (Scope 2) GHG emissions | Tackling Climate Change and Decarbonization p.76 | 11.1.6 |
| | 305-3 Other indirect (Scope 3) GHG emissions | Scope 3 emissions have not been calculated at this stage. Necessary work is being carried out. | 11.1.7 |
| | 305-4 GHG emissions intensity | Tackling Climate Change and Decarbonization p.76 | 11.1.8 |
| | 305-5 Reduction of GHG emissions | Tackling Climate Change and Decarbonization p.76 | 11.2.3 |
| | 305-6 Emissions of ozone-depleting substances (ODS) | Tackling Climate Change and Decarbonization p.76 | - |
| | 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions | Air p.86 | 11.3.2 |

Business Ethics and Integrity

| | | | |
|--|---|---------------------------------------|---------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.19.1 |
| GRI 206: Anti-Competitive Behavior 2016 | 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices | Anti-Bribery and Anti-Corruption p.28 | 11.19.2 |

Employee Training and Talent Development

| | | | |
|---|---|----------------------------|------------------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.11.1 |
| GRI 404: Education and Training 2016 | 404-1 Average hours of training per year per employee | Employee Development p.108 | 11.10.6, 11.11.4 |
| | 404-2 Programs for upgrading employee skills and transition assistance programs | Employee Development p.108 | 11.7.3, 11.10.7 |

Risk and Crisis Management

| | | | |
|--|--|-------------------------------|------------------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.12.1 |
| GRI 308: Environmental Assessment of Suppliers 2016 | 308-1 New suppliers that were screened using environmental criteria | Responsible Supply Chain p.92 | - |
| | 308-2 Negative environmental impacts in the supply chain and actions taken | Responsible Supply Chain p.92 | - |
| GRI 414: Social Assessment of Suppliers 2016 | 414-1 New suppliers were screened using social criteria | Responsible Supply Chain p.92 | 11.10.8, 11.12.3 |
| | 414-2 Negative social impacts in the supply chain and actions taken | Responsible Supply Chain p.92 | 11.10.9 |



Sustainable Economic Value

| | | | |
|---|--|--|--------------------------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.2.1, 11.14.1, 11.2.11 |
| GRI 201: Economic Performance 2016 | 201-1 Direct economic value | Economic Value Created p.30 | 11.14.2, 11.2.2 |
| | 201-2 Financial implications and other risks and opportunities due to climate change | Financial Risks p.20 | 11.2.2 |
| | 201-3 Defined benefit plan obligations and other retirement plans | Employee Engagement and Well-being p.106 | - |
| GRI 207: Tax 2019 | 207-1 Approach to tax | Tax Policy p.30 | 11.2.1.4 |
| | 207-2 Tax governance, control and risk management | Tax Policy p.30 | 11.2.1.5 |
| | 207-3 Stakeholder engagement and management of tax concerns | Tax Policy p.30 | 11.2.1.6 |
| | 207-4 Country-by-country reporting | Tax Policy p.30 | 11.2.1.7 |

Water Quality and Wastewater Management

| | | | |
|---|---|---------------------------|--------|
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Materiality Analysis p.64 | 11.6.1 |
| GRI 303: Water and Discharges 2018 | 303-1 Interaction with water as a shared resource | Water p.87 | 11.6.2 |
| | 303-2 Management of water discharge-related impacts | Waste Water p.91 | 11.6.3 |
| | 303-3 Water withdrawal | Water p.87 | 11.6.4 |
| | 303-4 Water discharge | Waste Water p.91 | 11.6.5 |
| | 303-5 Water consumption | Water p.87 | 11.6.6 |

Topics in the applicable GRI Sector Standards determined as not material

| | | Oil and Gas Sector Standards – Ref. No.: | Reason | Explanation |
|--|--|---|----------------|---|
| GRI 202: Market Presence 2016 | 202-2 Proportion of senior management hired from the local community | 11.11.2, 11.14.3 | Confidential | It cannot be shared due to confidentiality. |
| GRI 405: Diversity and Equal Opportunity 2016 | 405-2 Ratio of basic salary and remuneration of women to men | 11.11.6 | Confidential | It cannot be shared due to confidentiality. |
| GRI 204: Procurement Practices 2016 | 204-1 Proportion of spending on local suppliers | 11.14.6 | Confidential | It cannot be shared due to confidentiality. |
| GRI 411: Rights of Indigenous Peoples 2016 | 411-1 Incidents of violations involving rights of indigenous peoples | 11.17.2 | Confidential | It cannot be shared due to confidentiality. |
| GRI 205: Anti-corruption 2016 | 205-3 Confirmed incidents of corruption and actions taken | 11.20.4 | Confidential | It cannot be shared due to confidentiality. |
| GRI 201: Economic Performance 2016 | 201-4 Financial assistance received from government | 11.2.1.3 | Confidential | It cannot be shared due to confidentiality. |
| GRI 415: Public Policy 2016 | 415-1 Political contributions | 11.22.2 | Not Applicable | There is no such practice in Türkiye. |



As the first verification body authorized by the Ministry of Environment and Urbanization and TÜRKAK (Turkish Accreditation Agency) within the scope of the Regulation on Monitoring, Reporting and Verification of Greenhouse Gases prepared by the Ministry of Environment and Urbanization and entered into force on 17/5/2014, QSI Belgelendirme Muayene ve Test Hizmetleri Ltd. ŞY.; has been providing verification services for the greenhouse gas emissions of Petkim Petrokimya Holding A.Ş. within the scope of the Refinery and Petrochemical Business Unit of the parent company SOCAR Turkey Enerji A.Ş. (Corporate Headquarters) since 2015, and STAR Rafineri A.Ş. since 2018. QSI Certification company that serves with an impartial perspective has verified the greenhouse gas emission reports of Petkim Petrokimya Holding A.Ş. and STAR Rafineri A.Ş. with reasonable confidence by experts in their fields.

Scope of our Verification Service

The extent of our verification service is limited to reviewing the environmental Selected Insights listed below and included in the report within the scope of the Company's SOCAR Turkey Enerji A.Ş. Headquarters, Petkim Petrokimya Holding A.Ş. and STAR Rafineri A.Ş. locations in 2022.

Environmental Indicators:

Scope 1 - Direct greenhouse gas (GHG) emissions (tCO₂e) (GRI 305-1)

Processes Followed-Up

The processes followed in relation to the above-mentioned Selected Insights include the following:

1. Key senior personnel of the Company were interviewed about the process for obtaining Selected Insights for the reporting period;
2. In order to attain the Selected Insights, the personnel at SOCAR Turkey Enerji A.Ş.'s SOCAR Turkey Enerji A.Ş. Headquarters, Petkim Petrokimya Holding A.Ş. and STAR Rafineri A.Ş. locations were interviewed online and on-site and evidence was reviewed;
3. Sample-based accuracy tests were performed on the Selected Insights;
4. The Company's internal documentation was used to evaluate and review the Selected Insights;
5. The design and implementation of key processes and controls over Selected Insights were evaluated;
6. On a sample basis, the calculations used to prepare the Selected Insights for the reporting period were re-performed; the accuracy of the data was supported by analytical procedures;
7. Selected Insights reporting is complete.

Sincerely,

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Legal warning: Disclaimer

SOCAR Türkiye Sustainability Report (Report) has been prepared within the scope of the United Nations Global Compact signed by SOCAR Türkiye on 16.03.2020. The guidance of the United Nations Sustainable Development Goals (SDGs) was also used. All items in the report that do not qualify as completeness, information and opinions were conveyed by the contributors to the report. All data and information within the scope of this Report have not been independently verified and have been prepared for informational purposes only and do not serve as a basis for any investment decision. No such legal relationship is deemed to have been established by the publication of this Report. It is believed that all the information and documents given as of the preparation date of the report are correct and the information is disclosed in good faith and is based on reliable sources.

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- Sustainability Reporting and Graphic Design
- Deloitte Türkiye Sustainability Services
- Sustainability Services ([deloitte.com](https://www.deloitte.com))

