



AZERBAIJAN STATE OIL COMPANY

Energy Transition and Green Energy: SOCAR Türkiye Experience

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SOCAR Türkiye



THE BIGGEST FOREIGN
INVESTOR IN TÜRKİYE

More than **18** Billion \$



TOTAL INVESTMENT PLAN

19,5 Billion \$

FROM
PAST TO
PRESENT



SIGNIFICANT CONTRIBUTION TO
TÜRKİYE'S CURRENT DEFICIT
CLOSURE



DIRECT OR INDIRECT
NUMBER OF PEOPLE
EMPLOYED

10.000+ People

SOCAR Türkiye and Group Companies

HEADQUARTERS OF PETROCHEMICAL, REFINING AND NATURAL GAS OPERATIONS

WITH AN ANNUAL GROSS PRODUCTION CAPACITY OF 3.6 MILLION TONS, TÜRKİYE'S FIRST AND SINGLE INTEGRATED PETROCHEMICAL MANUFACTURER

WITH AN ANNUAL 12 MILLION TONS OF CRUDE OIL PROCESSING VOLUME, PRODUCER OF DIESEL, NAPHTHA, JET FUEL, LPG AND REFORMAT

THE LARGEST RING OF THE SOUTH GAS CORRIDOR WITH A TOTAL OF 16 BILLION CUBIC METERS CARRYING CAPACITY

WHOLESALE AND RETAIL FUEL, AIR AND MARINE FUELS SALES

THE LARGEST STORAGE TERMINAL OF THE AEGEAN REGION WITH A STORAGE CAPACITY OF 575 THOUSAND CUBIC METERS

51 MW CAPACITY WIND POWER PLANT

THE LARGEST CONTAINER PORT IN THE AEGEAN REGION WITH 1.5 MILLION TEU CAPACITY



SOCAR

PETKİM

STAR
RAFINERİ

TANAP

SOCAR
TİCARET

SOCAR
DEPOLAMA

PETKİM
RES

SOCAR
TERMINAL

SCR

SOCAR
FİBER

BURSAGAZ

KAYSERİGAZ

SOCAR

millenicom

SOCAR
BROKER

SOCAR
AR-GE

REAL ESTATE CONSTRUCTION AND CONSULTANCY

1811 KM FIBER OPTIC LINE INVESTMENT FOR ELECTRONIC COMMUNICATION

NATURAL GAS DISTRIBUTION FOR MORE THAN 1.2 MILLION SUBSCRIBERS IN BURSA

NATURAL GAS DISTRIBUTION FOR MORE THAN 667 THOUSAND SUBSCRIBERS IN KAYSERİ

TRADING AND WHOLE SELLING OF NATURAL GAS AND POWER

TELECOMMUNICATION SERVICE SUPPLIER

INSURANCE AND REINSURANCE BROKERING SERVICE TO OUR GROUP COMPANIES AND OTHER STAKEHOLDERS

IN 1.200 SQUARE METERS OF INSTALLED AREA; 6 LABORATORIES SERVING IN THE AREAS OF RHEOLOGY, CATALYST, POLYMER CHARACTERIZATION, ENVIRONMENT AND BIOTECHNOLOGY, CHEMICAL ANALYSIS AND CHROMATOGRAPHY

Milestones

SOCAR started its activities in Türkiye by acquiring the main shares (51%) of Petkim in 2008

TANAP agreement signed in Istanbul

The first phase of SOCAR Terminal was completed and started operations. The second phase started operations in 2018

TANAP was completed in July 2019 and became capable of transporting gas to Europe. Bursagaz, Kayserigaz, Enervis and Millenicom were acquired. Refinery- Petrochemical Integration completed. STAR Refinery started production at full capacity. SOCAR R&D and Innovation Center was established

Natural Gas Business Unit Integration completed. STAR Refinery was the first refinery to be selected for the (WEF) "Global Lighthouse Network" STAR Refinery's capacity utilization rate was 100.8%. With 6,241,644 thousand TL, Petkim broke the EBITDA record. Petkim ranked 8th among 206 companies in the "ESG Rating"

25.20 billion cubic meters of natural gas was transported to Türkiye and 31.00 billion cubic meters of natural gas to Europe via TANAP. Capacity utilization rate of STAR Refinery become 117.1%.

2008

2012

2016

2019

2021

2023

STAR RAFINERİ

TANAP

SOCAR

SOCAR TERMINAL

STAR RAFINERİ

SOCAR

STAR RAFINERİ

PETKİM

PETKİM

STAR RAFINERİ

PETKİM

2011

2015

2018

SOCAR AR-GE

2020

2022

TANAP

Construction of STAR Refinery started. The capacity of the LDPE-T Factory was increased by 20%. Ethylene plant capacity increase agreement signed

Goldman Sachs has acquired 13% of the shares of SOCAR Türkiye.

Construction of TANAP started.

The section of TANAP starting from the Turkish-Georgian border to Eskişehir was inaugurated SOCAR Türkiye's land in Aliğa was declared a Special Industrial Zone.

STAR Refinery was inaugurated with an international ceremony and became operations.

Petkim was the only company from Türkiye selected for the World Economic Forum's (WEF) "Global Lighthouse Network".

SOCAR Sigorta Ve Reasürans Brokerliği Anonim Şirketi was established. Within the scope of the "Değer Benim" Transformation Program, an additional value of US\$ 97 million was created at Petkim and US\$ 660 million at STAR Refinery.

19.59 billion cubic meters of natural gas was transported to Türkiye and 19.49 billion cubic meters of natural gas to Europe via TANAP.

Capacity utilization rate of STAR Refinery become 113.1%.



Oil and natural gas

- Required Emission Reduction
- 2030 55-60%
- 2050 90-95%



Chemicals

- Required Emission Reduction
- 2030 40-45%
- 2050 85-90%



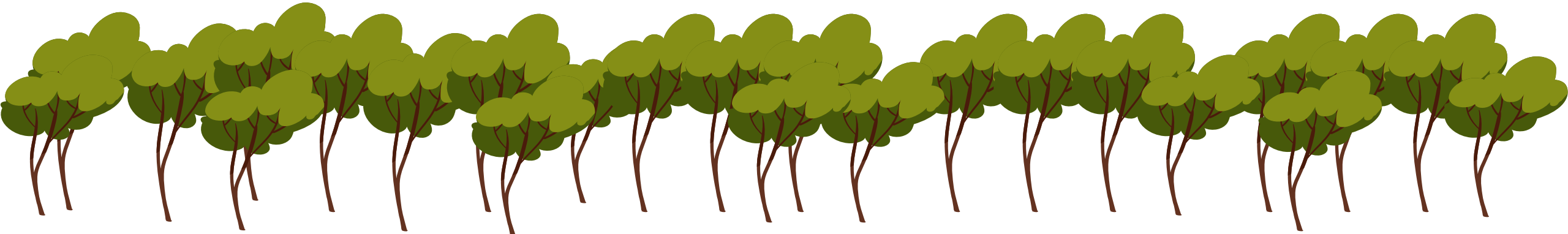
Highway transports

- Required Emission Reduction
- 2030 30-35%
- 2050 70-75%



Aviation

- Required Emission Reduction
- 2030 30-35%
- 2050 80-85%



Plastics still have lower greenhouse gas emissions than alternatives in many sectors



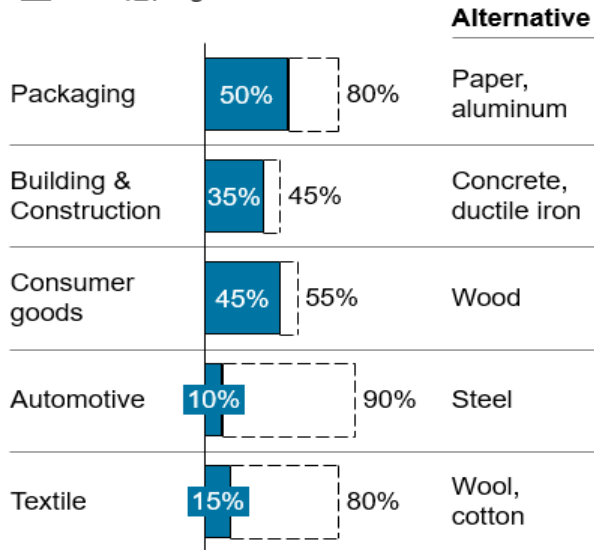
The plastic industry must decarbonise to maintain its competitive advantage



The Petrochemical Industry has started to decarbonise

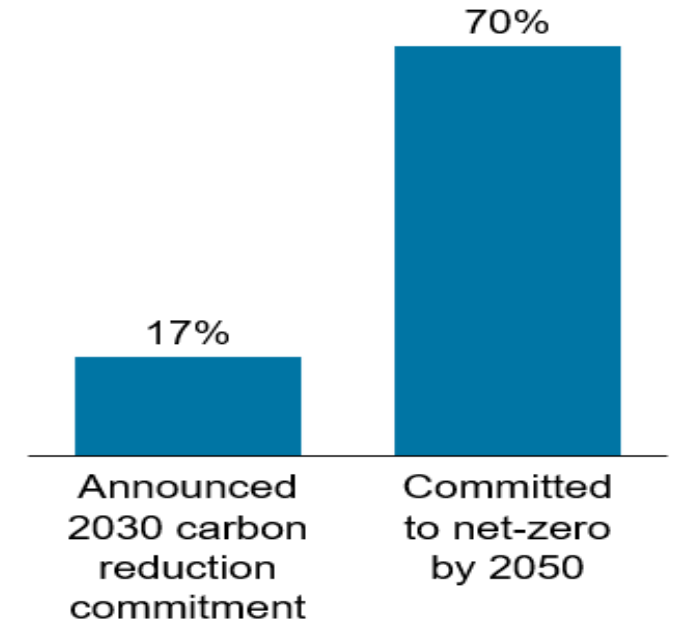
GHG emissions (above plastic), %

■ Low □ High



It will continue to be used in many sectors due to its low greenhouse gas emissions. It is difficult to replace it with substitute goods due to its advantages in HSE-HSE issues (food spoilage, hygiene, medical use). Low recycling rate is the biggest obstacle. Petrochemical companies should prioritize the use of waste as raw materials.

% of top 100 petrochemicals companies who have:





Overview

In response to the evolving regulatory landscape and growing stakeholder expectation, our company is proactively embracing decarbonization to meet regulatory requirements, satisfy stakeholder expectations, and capitalize on emerging opportunities in sustainable markets. In the short term, we're prioritizing energy efficiency initiatives and exploring new technologies through pilot projects. Looking ahead, our focus shifts to scaling up our decarbonization efforts, ensuring compliance, and forming strategic partnerships for transformative moves like Sustainable Aviation Fuels (SAF). Additionally, we're expanding carbon offset initiatives to reinforce our commitment to environmental sustainability.



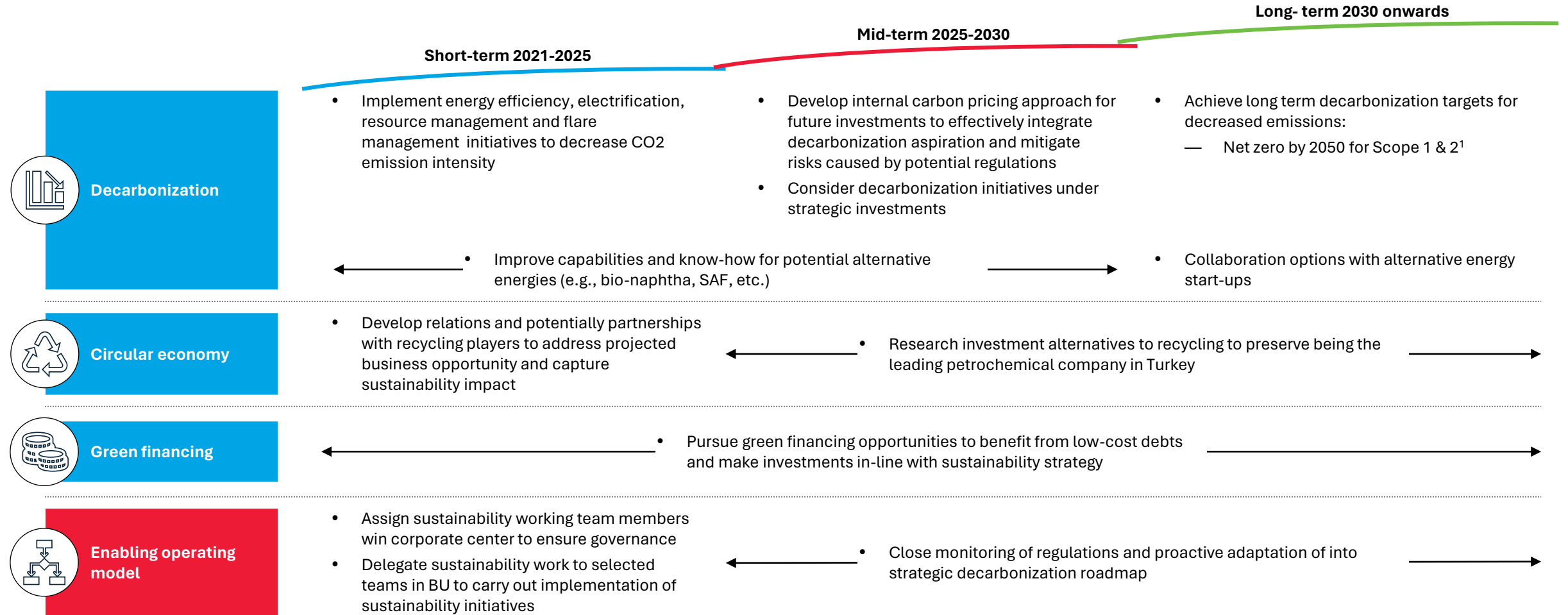
Key Benefits

- Transitioning towards decarbonization can lead to cost savings in the long term through increased energy efficiency, reduced operational expenses, and potential tax incentives for sustainable practices.
- Embracing decarbonization demonstrates a commitment to sustainability, which can enhance corporate reputation, attract environmentally conscious customers/employees, and strengthen stakeholder relationships.
- Early adoption of alternative products in a rapidly evolving market, potentially provide a competitive advantage over peers.
- By diversifying energy sources and product portfolio and reducing reliance on fossil fuels, can mitigate risks associated with volatile prices, supply chain disruptions, and regulatory changes.
- Investing in sustainable fuels and technologies fosters innovation, stimulates economic growth, and opens up new markets and revenue streams, positioning the company for future success.



Potential Challenges and Risks

- Unclear or evolving regulations, including carbon taxes and emissions trading schemes, can pose challenges in compliance and strategic planning.
- Balancing the short-term interests of shareholders with long-term sustainability goals may create tensions and require effective communication and alignment.
- Securing adequate funding for decarbonization initiatives, especially in the initial phases, may be challenging, particularly for those in high-emission industries.
- Integrating new decarbonization technologies into existing infrastructure may require significant investment, technical expertise, and organizational changes, presenting implementation hurdles.
- Shifting towards sustainable fuels and processes may involve transition risks such as operational disruptions, workforce retraining, and potential stranded assets in traditional energy assets.



1. Scope 1: Direct emissions (e.g., production processes), Scope 2: Indirect emissions (e.g. electricity and heat), Scope 3: Indirect emissions in the value chain (e.g. emissions from combustion of products in an internal combustion engine)

Strategic objectives



Continuously improve Sustainability Governance implementation in SOCAR Türkiye



Development of comprehensive Sustainability Roadmap

Details

- Renamed Strategy Department as **Strategy and Sustainability Department**, a testament to the company's commitment to sustainability.
- **14 working groups actively commenced their activities**, each with clear responsibilities, thereby fostering stronger ownership among teams.
- **Project-based inclusion of various departments and business units** to enhance performance and foster collaboration across the organization.
- Sustainability working groups convene **at least once a month in cross-functional meetings**.
- **Sustainability Committee**, responsible for reviewing all sustainability initiatives, convenes three times a year.
- **Development of an actionable and realistic sustainability roadmap for SOCAR Türkiye** encompassing critical value creation pillars covering strategy, execution and governance.
- **Sustainability Roadmap** to be developed, aligned with the corporate strategy, will be monitored using predefined sustainability KPIs and implemented following approval by the Sustainability Board.

Alternative Fuels

- Exploring **alternative fuel production**
- Continuing to maintain **strong relationships with commercial partners**. Meanwhile, **conducting technical studies**.

Bionaphtha

- Following our market research, we **anticipate a significant increase in demand for bionaphtha post 2035**.
- Obtained **ISCC+ certification** to be ready to facilitate production.
- **Actively seeking to expand our customer portfolio**.

Decarbonization

- Focusing on energy efficiency to accelerate the decarbonization of operations.
- Identified **15+ projects for carbon savings potential**.

Green Finance

- For the first time, **Petkim has tapped into Green Finance**, securing an amounting 10 MUSD from Asian Infrastructure and Investment Bank through TSKB for its wastewater treatment unit.

ESG Ratings

- With a score of 76.65 and a grade of A-, **Petkim has secured its place in the BIST Sustainability 25 Index**.
- The Fortune and CRIF ranking process has been finalized for six companies ranked within the Fortune 500, **including Petkim, STAR, Kayserigaz, Bursagaz, and SOCAR Turkey Petrol Ticaret A.Ş.**, all of which achieved an **ESG Score of A (Excellent Sustainability)**. **SETAŞ received a B (Good Sustainability)**.

Integrated Report

- **First integrated report of SOCAR Türkiye and Petkim** publication dates are set for May 13th and June 24th respectively, involving taskforce 150 members from all business units.



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