aramco

Investing in growth
Innovating for sustainability

Aramco | Sustainability Report 2024

We are Aramco, one of the world's largest integrated energy and chemicals companies.

Our approach to sustainability reporting

In our fourth Sustainability Report, we present how we integrate sustainability practically and responsibly within our corporate strategy and operations; the material sustainability issues that impact our business and stakeholders; a summary of key initiatives; and our sustainability performance during 2024.

Sustainability for Aramco is about being a responsible corporate citizen environmentally, socially, and economically. This is underpinned by our four focus areas (Climate change and the energy transition, Safe operations and people development, Minimizing environmental impact, and Growing societal value), where we elaborate on what sustainability means for Aramco and set our relevant ambitions, targets, and metrics. All of this is overseen by robust corporate governance (detailed on page 112).

Reporting standards

This Report has been prepared with reference to and/or guidance from the following:

- International Petroleum Industry Environmental Conservation Association (Ipieca) sustainability reporting guidelines;
- Greenhouse gas (GHG) emissions measurement and reporting: Greenhouse Gas Protocol, and;
- Health and safety performance metrics reporting: Occupational Safety and Health Administration (OSHA) Standards and the American Petroleum Institute's (API) Recommended Practices.

Reporting boundaries, scope, and basis of preparation

This Report contains data for the full year 2024 (January 1 – December 31). Where available, the 2024 sustainability performance has been compared with 2023 and 2022 data.

For clarity and transparency, the specific reporting boundaries of each sustainability metric for 2024, 2023, and 2022 data have been noted in detail on page 120 in the Data section of this Report. All financial (including operational) metrics (unless stated otherwise) are at the same boundary as applied in our Annual Report and Accounts. For more information on reporting boundaries of our financial metrics, please refer to Aramco's Annual Report 2024.

Aramco continued its business growth (including new assets) in 2024. The sustainability information for these acquisitions will be reported after the first full year of operations (once effective data controls and systems are in place), which is aligned with Aramco's sustainability reporting approach.

Sadara, SABIC, S-Oil, and Luberef's sustainability data are not in the scope of this Report. These subsidiaries are publicly listed and issue separate annual sustainability reports.

The basis of preparation on how we measure and report on the sustainability performance metrics that undergo external independent assurance is available **online** on Aramco's website in the Sustainability section.

Internal controls and data validation

All figures in this Report represent the latest available, internally validated data, unless specifically referenced. Some of the totals presented may reflect the rounding-down or rounding-up of subtotals.

External limited assurance

External limited assurance has been sought against various key performance metrics, including GHG emissions, in accordance with the revised International Standard on Assurance Engagements 3000 (ISAE 3000 (revised)). Data that has undergone assurance has been referenced throughout the Report.

More information on assured data and the assurance statements can be found **online** on our website.

Cover

Above (Investing in growth): Yanbu Refinery is an integral part of Aramco's refining, chemicals, and marketing portfolio, and is responsible for providing critical feedstock and essential fuels to meet the Kingdom's energy needs. Recently, the facility became the world's second refinery to be awarded with World Economic Forum (WEF) Lighthouse status, after undertaking a strategic Fourth Industrial Revolution (4IR) transformation, by implementing technologies such as artificial intelligence (AI), advanced analytics, and robotics.

Below (Innovating for sustainability): LAB7 is Aramco's innovation and product development center, designed to enable the creation of groundbreaking technology including sustainability solutions, and to be an incubator for transforming disruptive ideas into valuable, impactful and sustainable solutions that help address real-world problems. For more information on LAB7, please refer to page 102 of this Report.

Our vision

Aramco's vision is to be the world's preeminent integrated energy and chemicals company, operating in a safe, sustainable, and reliable manner.

Our mission

Aramco strives to provide reliable, affordable, and more sustainable energy to communities around the world, and to deliver value to its shareholders through business cycles by maintaining its preeminence in oil and gas production and its leading position in chemicals, aiming to capture value across the energy value chain and profitably growing its portfolio.

Our values

By living our values and prioritizing sound business practices, we consistently achieve high levels of performance and efficiency – delivering value not only for our Company, but for our customers, partners, and the communities in which we operate.

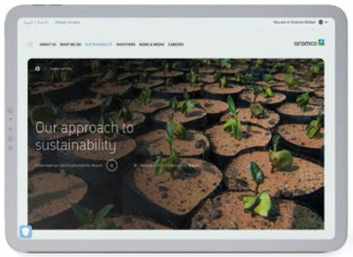
Safety | Citizenship | Integrity | Accountability | Excellence

For more information on our values, visit: **www.aramco.com/en/about-us/our-governance/our-values**

Assured data

℗ **External limited assurance symbol**
The figures within this Report have undergone external limited assurance in accordance with the ISAE 3000 (revised). The relevant information is marked with this symbol ℗.

› The assurance reports can be found **online** in the Sustainability section of Aramco's website.



Online report

See our **online** report: **www.aramco.com/en/sustainability/sustainability-report**

This Sustainability Report is issued in both Arabic and English.

The print version is identical to its PDF counterpart, which is available at aramco.com. The Arabic version prevails in the event of any discrepancy. The images in this document are representative of the services provided by Aramco.

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Investing in growth

"Sustainability also means being a good corporate citizen, focusing on the safety of our people, their long-term development, and the value we add to society more widely."

Chairman's message

Throughout 2024, Aramco delivered in the short-term while continuing to invest for the long-term. As global demand for energy continues to rise, so does our determination to reliably serve our customers, as we have done for more than 90 years now. An increasingly important part of this delivery is incorporating lower-carbon energy, a challenge requiring cutting-edge innovation, Company-wide ingenuity, and significant levels of investment.

What is clear is that the energy transition will not be a singular event, but a process. As a company, we pride ourselves on doing what is hard and achieving our goals no matter the obstacles. Climate change being defined as the challenge of our time, we are playing our part to change the world for the better, just like we have done before.

In support of the Kingdom's efforts to move to lower-carbon solutions and reduce emissions, Aramco is increasingly displacing oil with gas for power generation. Aramco aims to increase sales gas production capacity by more than 60% by 2030 compared to 2021 production levels subject to domestic demand and inclusive of pre-FID projects not yet announced.

A significant part of the transition will be reducing emissions from existing sources of energy, critical for reliability and affordability. We continue to find new ways to minimize flaring and methane emissions while improving energy efficiency across our operations. As Aramco is a founding member of the Oil and Gas Climate Initiative (OGCI), and has already surpassed the OGCI's methane intensity target. We are taking actions to further reduce our methane intensity through various initiatives, such as the deployment of a new satellite network to monitor emissions across our facilities.

Important initiatives, such as carbon capture and storage, are contributing towards building a circular carbon economy by enabling our blue hydrogen programs, as well as playing their part in reducing emissions from our operations. In 2024, we advanced negotiations for offtake agreements in key markets such as East Asia and Europe as part of our long-term alternative fuels' plans.

Other new energies like renewables will also play a role. Saudi Arabia's geography and climate have the potential to generate power from solar and wind. Our investments will not only help support our environmental ambitions, but also contribute in driving long-term value creation for the Company in an evolving energy landscape. To this end, Aramco recently signed agreements together with our partners to develop three new solar PV projects that are anticipated to contribute to the Kingdom's power grid.

That landscape will not just be shaped by multi-national companies, but by a thriving eco-system of startups too. We know the value they can bring to our industry which is why Aramco Ventures has been recognized as a top corporate climate venture capital investor and the number two investor globally on the Climate 50 list.

Sustainability also means being a good corporate citizen, focusing on the safety of our people, their long-term development, and the value we add to society more widely. I am proud of the progress we achieved in these areas, especially our localization efforts, where our iktva program achieved a score of 67.0% local content across our procurement, up from 35.0% nearly a decade ago.

We believe AI has a significant role to play in the energy industry, especially in the field of sustainability. That is why Aramco is integrating these new technologies into our operations to get more value from our vast amounts of data, improve the efficiency of our operations, and further lower our emissions.

These kinds of achievements are only possible because of the continued support and guidance of The Custodian of the Two Holy Mosques King Salman bin Abdulaziz Al-Saud, and His Royal Highness Prince Mohammed bin Salman bin Abdulaziz Al-Saud, Crown Prince and Prime Minister of the Kingdom of Saudi Arabia.

We are grateful to all who have played a part in a successful year, one which took us another step closer to achieving our long-term sustainability goals.

H.E. Yasir O. Al-Rumayyan
Chairman of the Board of Directors

Innovating for sustainability

"To complement our net-zero ambition, we have set a new interim 2030 target for reducing our upstream carbon intensity."

President and CEO's message

Aramco's vision is to be the world's preeminent integrated energy and chemicals company, operating in a safe, sustainable, and reliable manner. Our operational desire to deliver on this vision is unchanged. That said, we also recognize that there are many challenges facing our industry, including an increasingly multi-polar world as well as the realities of the global energy transition.

Our Company's most valuable asset is our people and their safety remains our highest priority. In 2024, we were deeply saddened that eight of our people (six contractors and two employees) lost their lives while working for Aramco. These tragic incidents were thoroughly investigated and the related learnings have now been implemented in an effort to avoid similar reoccurrences. No loss of life is acceptable, which is why we continue to work to constantly strengthen Aramco's culture of safety excellence.

This is Aramco's fourth Sustainability Report since announcing our ambition to achieve net-zero Scope 1 and Scope 2 greenhouse gas emissions across our wholly-owned operated assets by 2050. To complement our net-zero ambition, we have also set a new 2030 interim target for reducing our upstream carbon intensity.

In 2024, we made further progress on a number of fronts, including signing a shareholder agreement to develop a carbon capture and storage hub, in Jubail, Saudi Arabia. When completed, this facility is expected to be one of the largest such projects in the world. Hydrogen is another area where we see potential growth opportunities, leading to our acquisition of a 50% stake in a blue hydrogen company.

As part of our efforts to positively contribute to the global energy transition, we have also signed a non-binding Heads of Terms agreement with Ma'aden to establish a joint venture for minerals exploration and mining in Saudi Arabia. The joint venture would draw on Aramco's extensive geoscience data and subsurface knowledge, with lithium production potentially commencing by 2027.

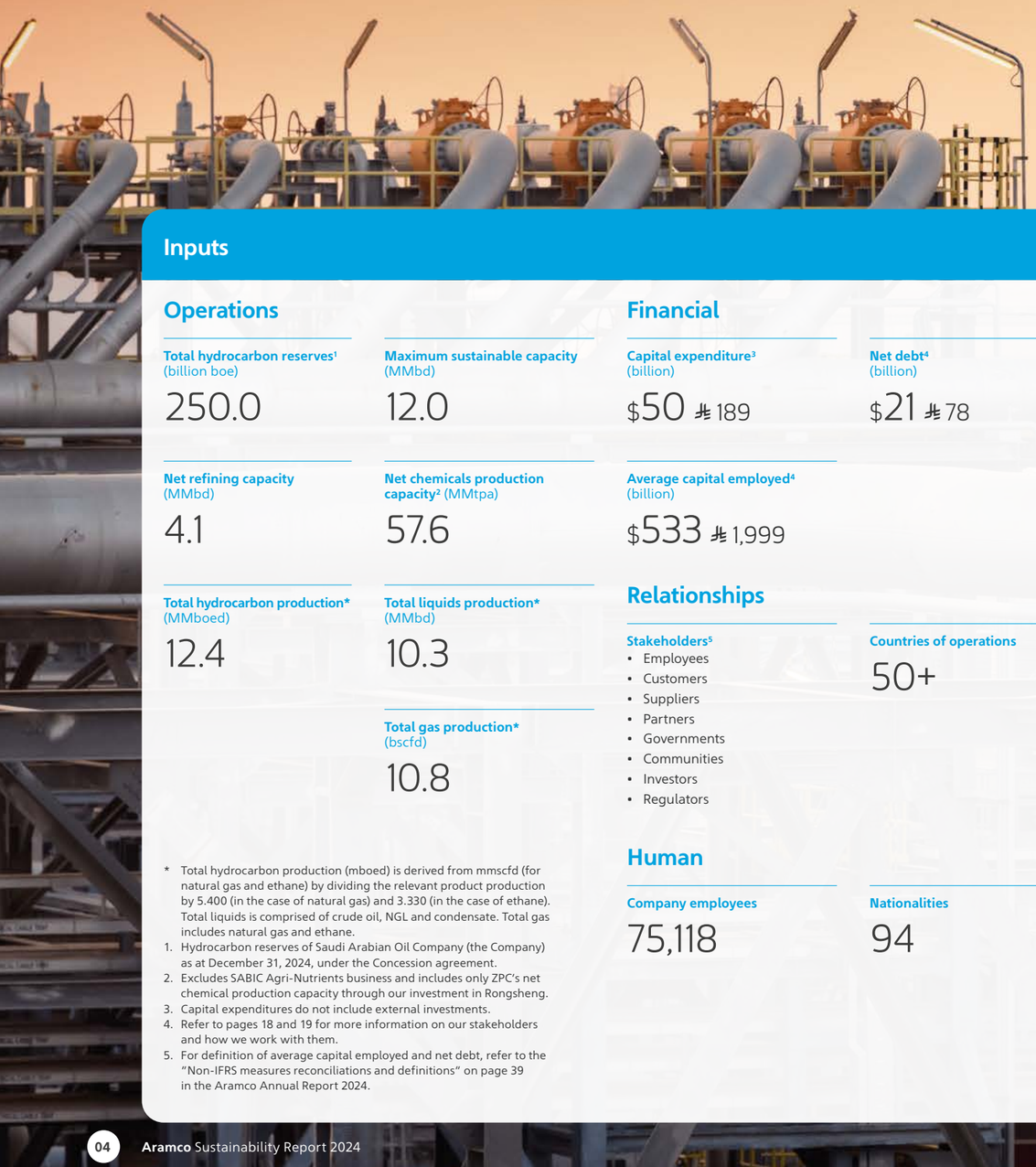
Technology also remains a critical component for Aramco as we seek to develop new sustainability-related solutions for our Upstream and Downstream businesses. In 2024, we further increased the utilization of AI in a number of areas of our operations. We are now using AI-driven analytics to monitor and reduce our greenhouse gas emissions and most of our critical equipment is also AI-monitored, with predictive algorithms helping to improve facility reliability, and therefore overall efficiency.

Looking ahead, we believe a multi-source, multi-speed, and multi-dimensional approach is required for the global energy transition in order to properly address the energy security, affordability and sustainability priorities of individual countries. Against this backdrop, we remain confident in Aramco's ability to adapt to and thrive within an increasingly carbon-conscious world.

Our confidence is based on Aramco having a number of competitive advantages, including one of the lowest upstream carbon intensities among producers along with our unique scale and low lifting costs. That said, our greatest advantage is our people, and through their efforts we help deliver the reliable energy supply that our customers around the world require both now and in the future.

Amin H. Nasser
President and CEO

Our business performance



Inputs

Operations

Total hydrocarbon reserves[1] (billion boe)
250.0

Maximum sustainable capacity (MMbd)
12.0

Net refining capacity (MMbd)
4.1

Net chemicals production capacity[2] (MMtpa)
57.6

Total hydrocarbon production* (MMboed)
12.4

Total liquids production* (MMbd)
10.3

Total gas production* (bscfd)
10.8

Financial

Capital expenditure[3] (billion)
$50 ⅄ 189

Net debt[4] (billion)
$21 ⅄ 78

Average capital employed[4] (billion)
$533 ⅄ 1,999

Relationships

Stakeholders[5]
- Employees
- Customers
- Suppliers
- Partners
- Governments
- Communities
- Investors
- Regulators

Countries of operations
50+

Human

Company employees
75,118

Nationalities
94

* Total hydrocarbon production (mboed) is derived from mmscfd (for natural gas and ethane) by dividing the relevant product production by 5.400 (in the case of natural gas) and 3.330 (in the case of ethane). Total liquids is comprised of crude oil, NGL and condensate. Total gas includes natural gas and ethane.

1. Hydrocarbon reserves of Saudi Arabian Oil Company (the Company) as at December 31, 2024, under the Concession agreement.
2. Excludes SABIC Agri-Nutrients business and includes only ZPC's net chemical production capacity through our investment in Rongsheng.
3. Capital expenditures do not include external investments.
4. Refer to pages 18 and 19 for more information on our stakeholders and how we work with them.
5. For definition of average capital employed and net debt, refer to the "Non-IFRS measures reconciliations and definitions" on page 39 in the Aramco Annual Report 2024.

Outcomes and impacts

Operations

Products produced
- Crude oil
- Gas
- NGL
- Condensate
- Chemicals
- Refined products
- Electricity
- Blue ammonia
- Nonmetallics

Scope 1 emissions ($MMtCO_2e$)
56.1Ⓐ

Power supplied to the national grid[6] (GW)
0.7

Upstream carbon intensity[7] ($kg\ CO_2e$/boe)
9.7Ⓐ

Scope 2 emissions[7] ($MMtCO_2e$)
12.4Ⓐ

Reliability[8] (%)
99.7

Technology realized value (TRV) captured[9] (billion)
$4 ⅄ 15

Financial

Net income (billion)
$106 ⅄ 398

Dividends paid[10] (billion)
$127 ⅄ 478

Free cash flow[11] (billion)
$85 ⅄ 320

Return on average capital employed (ROACE)[11] (%)
20.2

Relationships

in-Kingdom Total Value Add (iktva)[12] (%)
67.0

Payments to the Saudi and foreign governments[13] (billion)
$204 ⅄ 765

Human

Fatalities
8Ⓐ

Tier 1 process safety events
9

Total recordable case rate (per 200,000 work hours)
0.046

Female employees in leadership positions (%)
5.8

6. Excess power supplied to the national grid through Aramco's captive power plants.
7. Market-based.
8. Applies to the Company.
9. Figure has been independently validated.
10. Dividends paid includes dividends to shareholders and non-controlling interests in subsidiaries.
11. Non-IFRS measure: Refer to the "Non-IFRS measures reconciliations and definitions" on page 39 in the Aramco Annual Report 2024.
12. iktva is a program created by Aramco to build local supply chain capacity and capability by measuring total in-Kingdom procurement spend, as a percentage of our total procurement spend.
13. Includes income taxes, royalties, and dividends to the Saudi Government.

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Our sustainability performance

Our focus areas

Aramco has an important role in helping the world navigate the energy transition. What we do as a global community will determine the legacy we leave for future generations.

Our intention is to be a part of the solution that creates a stable energy environment to foster innovation and growth opportunities in developing and developed countries.

We also aim to deliver a healthier, safer, and rewarding environment for our people, our suppliers, and communities where we operate while rehabilitating and mitigating the impact on our natural environment.

We have four focus areas, overseen by robust governance practices (detailed on page 112), that provide an overview of how we manage our sustainability performance:

- Climate change and the energy transition;
- Safe operations and people development;
- Minimizing environmental impact; and
- Growing societal value.

Underpinning these focus areas are metrics. Monitoring our metrics (including key performance indicators (KPIs)) is important for us in order to manage our sustainability performance, responsibly and effectively.

Climate change and the energy transition

We aim to provide affordable, reliable energy as one of the lowest upstream carbon intensity producers of hydrocarbon products, while we continue our ambition to achieve net-zero Scope 1 and Scope 2 GHG emissions across wholly-owned operated assets by 2050.

- Our total Scope 1 and Scope 2 emissions (market-based) rose by 1.8% and our upstream carbon intensity increased by 1.0%, due to higher gas production to support the Kingdom's growing domestic demand.
- Our upstream methane emissions decreased by 11.4% and our upstream methane intensity decreased by 0.01 percentage point (p.p.).
- As a signatory to the Oil & Gas Decarbonization Charter (OGDC), we have a new interim target for 2030 to reduce our upstream carbon intensity to 8.6 kg CO_2e/boe.
- Completed five third-party verified carbon offset crude cargo shipments with an average carbon intensity of 7.48Ⓐ kg CO_2e/boe.
- In 2024, our Sustainability Fund invested $107 million* (in seven* new portfolio companies) for the development of sustainability technologies and initiatives.
- Procured 1.1 million tons of carbon credits from the Regional Voluntary Carbon Market and retired 0.51 $MMtCO_2$e credits to offset our corporate emissions.

Total Scope 1 and Scope 2 emissions (market-based) ($MMtCO_2$e)	Upstream carbon intensity (market-based) (kg CO_2e/boe)	Upstream methane intensity (%)
68.5Ⓐ	9.7Ⓐ	0.04Ⓐ
(2023: 67.3Ⓐ)	(2023: 9.6Ⓐ)	(2023: 0.05Ⓐ)

For more details, see page 20

Safe operations and people development

We strive to provide a safe and respectful working environment for all, on-site and within the community, supported by comprehensive policies and resources. We aim to support, diversify, and empower our workforce.

- The total recordable case rate and the lost time injuries/illnesses rate remain broadly comparable to the 2023 performance, despite the eight fatalities Ⓐ in our workforce suffered regrettably during the year.
- Number of Tier 1 process safety events fell by 40.0% in 2024 reflecting the improvement in Aramco's process safety and asset integrity practices.
- Ranked among the top 100 in the 2024 edition of the World's Best Employers by Statista, published in Forbes, and achieved the highest ranking among industry peers, in addition to being certified as Top Employer in Saudi Arabia in 2025 by the Top Employer Institute.
- 32.2% increase in the number of female employees in leadership positions.
- Our employees spent a total of 13.8 million hours on training and development in 2024, an increase of 53.3% from 2023.
- Recorded an employee experience index rating of 88%, representing the highest score since the introduction of employee experience surveys in 2018.

Fatalities (number)	Tier 1 process safety events (number)	Female employees in leadership positions (number)
8Ⓐ	9	308
(2023: 3Ⓐ)	(2023: 15)	(2023: 233)

For more details, see page 56

Minimizing environmental impact

We endeavor to conserve natural resources, apply circular models across our value chain, and to have a legacy of projects that improve both natural habitats and shared resources.

- Rise of 5.4 p.p. in the net positive impact on biodiversity was largely due to the doubling of the number of Biodiversity Protection Areas (BPAs) to 28 (versus 14 in 2023).
- Achieved 95%Ⓐ ISO 14001 certification at 57 Upstream and Downstream asset-based organizations enrolled in Aramco's Environmental Management System (EMS).
- Decrease of 41.7% in the number of spills primarily attributed to the preventive maintenance and repair of our pipelines, along with improved procedures.
- Continued upgrading Sulfur Recovery Units (SRU) with tail gas treatment units.
- Continued pursuing a water neutrality aspiration.
- Received the International Sustainability & Carbon Certifications (ISCC PLUS) for Yanbu NGL and ARLANXEO products for a variety of plants across the globe.

Net positive impact (biodiversity and ecosystems) (%)	Hydrocarbon spills (number)	Freshwater consumption (million m^3)
91.0Ⓐ	7Ⓐ	83.0Ⓐ
(2023: 85.6Ⓐ)	(2023: 12)	(2023: 89.9Ⓐ)

For more details, see page 76

Growing societal value

We seek to grow value wherever we operate. With our headquarters in Saudi Arabia, we have invested in the Kingdom's oil and gas ecosystem to enhance the reliability of our supply chain, providing employment and economic opportunities to thousands of Saudi nationals.

- Total procurement spending is estimated to have contributed $240.0 billion in GDP since iktva's inception in 2015, when considering the direct and indirect supply chain contribution to the Kingdom's economy.
- Social investments made around the world totaling $583[1] million rose by over 20% during the year compared to 2023.
- Continued commitment to building the capacity of local Saudi citizens with a 1.99% increase, totaling 15,400 in 2024, of the number of people in our sponsored community programs, and achieving 90.2% Saudization in our workforce.
- Providing growth acceleration services via the Taleed program to support the sustainability and scale-up of small and medium-sized enterprises (SMEs), including building partnerships and networks, business development, and attracting investments.

iktva procurement spend in-Kingdom (%)	Saudization (%)	Social investment ($ million)
67.0	90.2	583[1]
(2023: 65.0)	(2023: 90.3)	(2023: 475)

For more details, see page 92

* Metric reported for the first time externally.

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

1. In 2024, the boundary for this metric has been expanded to operational control, as it now includes our overseas subsidiaries, like ARLANXEO and Motiva. Under the prior year reporting boundary, the social investment would be $581 million.

Megatrends due to shape our everyday life in the near future

Global megatrends

The global population is projected to rise by over 25%[1] by 2050, and by over 40%[1] by 2100.

As the world seeks to meet its energy needs in a more sustainable manner, oil and gas will continue to play a critical role in enabling this transition.

Aramco is uniquely positioned to respond to these megatrends by adopting sustainable energy production technologies and practices that minimize environmental impact.

Rising global demand for essential resources

~40% Food production is expected to rise by 40% by 2050 to feed 9+ billion people[2]

By 2050, the world will need more food, housing, and medical support than ever before. These industries depend on fertilizers, energy-intensive manufacturing, and petrochemical products, which are largely dependent on oil and gas. Ensuring more sustainable and efficient production, while minimizing environmental impact, is key to meeting this demand.

A materials transition is essential for an effective energy transition towards net-zero

~10x Building solar and wind systems requires roughly a tenfold increase in common materials to deliver the same quantity of energy compared to building traditional energy systems (e.g., a natural gas plant)[3]

In pursuit of net-zero emissions, renewables alone cannot yet meet global energy demand. Additionally, wind turbines, solar panels, and electric vehicles (EVs) all require petrochemicals, lubricants, and advanced materials derived from oil and gas. These materials are essential for manufacturing turbine blades, battery components, insulation for power grids, and carbon fiber.

Energy demand continues to grow

~47% Global energy demand expected to grow by 47% by 2050[4]

Ongoing growth in the global population and improving living standards will see energy demand continue to rise, especially in developing countries, where economic progress will require greater energy and materials demand. Oil and gas remain essential to meet this growing global energy demand, with new sources of energy supplementing, rather than replacing, conventional energy sources.

Hard-to-abate sectors still rely on oil and gas

2x Aviation fuel demand expected to more than double by 2050[5]

While electrification is advancing, industries such as aviation, shipping, and heavy manufacturing cannot yet transition away from hydrocarbons. Oil and gas will continue to support these sectors through lower emission solutions such as lower-carbon aviation fuel (LCAF), advanced materials, and generating energy for heavy industrial processes.

AI and digitalization are creating a new energy demand boom

>3% Data centers will use over 3% of global electricity by 2030, compared to 1% of global energy demand in 2022[6]

The rise of AI, cloud computing, and automation is leading to a surge in electricity consumption. Data centers alone are projected to use over 3% of global electricity by 2030[6]. Gas provides a reliable energy source to support this rapidly growing sector.

Oil and gas: navigating megatrends for a more sustainable future

As global demand for lower-emission energy continues to grow, oil and gas remain critical in supporting sustainability efforts, such as advancing carbon capture technologies and supporting the growth of renewables.

Supporting reliable energy supply, access, and economic growth

Oil and gas remain essential in ensuring access to affordable and reliable energy. This includes:

- Providing energy security and stability for both developed and emerging economies.
- Investing in infrastructure projects that drive industrial growth.

Enabling renewable energy growth

Renewables rely on hydrocarbons for key components and support. Oil and gas help:

- Provide essential materials for solar panels, wind turbines, and EV batteries.
- Stabilize grids by balancing energy supply when renewables fluctuate.

Advancing on carbon capture and circular economy solutions

Reducing emissions and improving efficiency are key to the future of energy. The sector is investing in:

- CCUS technologies to capture and store CO_2 from industrial operations; as well as potentially utilizing the captured carbon for enhanced oil recovery, and value adding products.
- Recycling and advanced petrochemical solutions to reduce waste.

Developing lower-carbon fuels and hydrogen innovation

New fuel technologies are helping reduce emissions across multiple industries. Oil and gas are driving:

- Blue hydrogen production: which provides a lower-emission fuel alternative.
- Synthetic fuels and biofuels: offering opportunities to be part of a lower-carbon fuel blend.
- LCAF: providing a practical, scalable pathway for reducing emissions from aviation.

Building sustainable operations and identifying efficiencies

As AI use grows, data center demand will rise everywhere. The oil and gas industry has a role to play, as an energy provider and an adopter of AI:

- Developing countries are likely to rely on gas for energy for data centers, before switching to alternatives.
- AI monitoring systems that enhance efficiency and identify sustainable opportunities in operations.

1. United Nations, 2024. In June 2024, the world population reached 7.6 billion people and is expected to reach 9.8 billion in 2050, and 11.2 billion in 2100.
2. World Economic Forum, 2022.
3. Issues in Science and Technology, Arizona State University, 2022.
4. S&P Global, 2021.
5. Institute for Energy Economics and Financial Analysis, 2024.
6. World Economic Forum, 2025.

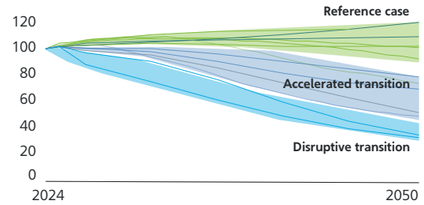
Reliable and affordable energy through oil and gas

Oil and gas are expected to play an essential role in meeting the world's needs for reliable and affordable energy.

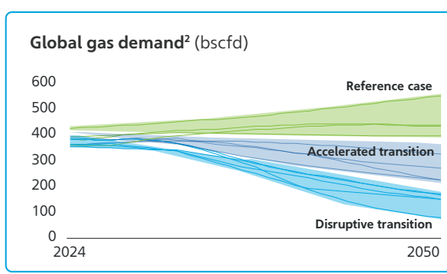
The scenarios

A vast range of projections exist for global energy demand.

Global oil demand[1] (MMboed)



Global gas demand[2] (bscfd)



1. These projected scenarios are based on publicly available scenarios from Energy Information Agency (EIA), S&P Global, and our peer companies.
2. These projected scenarios are based on publicly available scenarios from EIA, WoodMac, Rystad, and our peer companies.

What are these scenarios?

Scenarios are alternative pathways depicting future energy landscapes. These scenarios can broadly be categorized into three groups:

- **Disruptive transition scenarios** assume rapid emergence and deployment of technological breakthroughs and forceful displacement of existing energy systems, but with questions around plausibility, a key criterion for developing scenarios;
- **Accelerated transition scenarios** project a phasing-down of hydrocarbons which contrasts with the historical trend of adding new sources of energy, but never phasing out existing sources of energy; and
- **Reference case scenarios** depict a landscape that assumes slow incremental development in line with past trends, with new developments that have a high probability of occurring in the future and hydrocarbons continuing to play a major role in the energy mix.

How do we use scenarios?

Performing scenarios analysis is not new for Aramco, and it is something we have been doing for decades. Without performing regular and robust scenario analysis, we would not have built a responsible, resilient, and reliable Aramco that we see today. We use independent third-party scenarios and our in-house experts develop scenarios using advanced tools and models. These scenario narratives are founded on the energy trilemma framework developed by the World Energy Council. They not only depict the trade-offs between affordability, security, and sustainability but also find common areas where the trilemma can potentially converge. These scenarios help us benchmark against consensus views and evaluate their plausibility with ongoing policy developments, technological progress, and investment levels.

What do these scenarios tell us?

While the degree to which oil and gas is used will vary depending on the pace of the world's energy and materials transition, under all projected scenarios, oil and gas is expected to continue to play an eminent role in meeting global energy and materials demand. Scenarios tell us the window of uncertainty and possible outcomes in our business landscape. They also assist in assessing the resilience of our current business and future investments. Aramco's hydrocarbon products have one of the lowest upstream carbon intensity among its peers. As Aramco continues its efforts to enhance its reliability and lower upstream carbon intensity, these two factors will potentially make our operations resilient under the evaluated scenarios.

The outcomes

These projections indicate that oil and gas are expected to continue to be an essential part of the mix.

Why is oil and gas expected to be part of the energy mix?

Achieving a lower-carbon future requires an effective materials transition.

For the past six decades, oil has dominated the global energy mix, while natural gas continues to expand as industries move away from higher-emission fuels. Sectors like aviation and shipping, for which emissions are hard to abate, still rely on oil due to its high energy density. Even with the rise of EVs, only a fraction of oil demand is expected to decline, as most transportation systems worldwide still depend heavily on oil.

While EV adoption is growing, it is expected not to drastically reduce oil demand. Beyond transportation, oil and gas will play a key role in supporting lower-carbon solutions by driving the shift to alternative materials.

Lightweight, carbon-based materials can complement or replace more emission-intensive options like steel and iron. Natural gas will also help cut emissions by replacing coal in power generation. Additionally, with food demand projected to grow by 40%[3] by 2050, natural gas will remain essential for fertilizer production, supporting a population expected to rise by over 25%[4] by 2050 and over 40%[4] by 2100.

As hydrocarbons continue to be part of the energy mix, managing emissions will be critical – requiring investment in carbon capture, removal technologies, and verified offsets.

3. World Economic Forum, 2022.
4. United Nations, 2025.

Delivering value through products and beyond

Producing oil and gas with one of the lowest amount of GHG emissions during production and one of the lowest cost per barrel compared to industry peers, we will continue to demonstrate leadership in helping meet the world's growing energy demand in a practical, stable, and orderly manner.

Our competitive advantages

Our ambition is to be the supplier of crude oil with lower upstream carbon intensity compared to industry peers.

Lower upstream carbon intensity

9.7Ⓐ
Upstream carbon intensity (kg CO_2e/boe)

0.04Ⓐ
Upstream methane intensity (%)

Low cost and large scale

250.0
Total hydrocarbon reserves[1] (billion boe)

3.5
Average upstream lifting costs ($/boe)

99.7
Product delivered within 24 hours of the scheduled time (reliability %)

12.0
Maximum sustainable capacity (MMbd)

10.3
Total liquids production[2] (MMbd)

10.8
Total gas production[2] (bscfd)

Beyond products

Beyond our traditional products, Aramco continues to innovate and contribute to society around the world.

Innovation

63%
Of our research and development (R&D) spend is dedicated to sustainability-related R&D

$7 billion
Aramco Ventures

>400 ppm
Lithium concentration in existing areas with potential commercial usage to create energy transition-related minerals

$4 billion
TRV captured[3]

Society

$240.0 billion
Cumulative iktva GDP contribution since 2015

~14 million
Hours spent on educating our people (training and development)

$583 million
Social investment

160
Schools built and maintained

People

+75,000
Employees

$18 billion
Wages per annum

Governments

$204 billion
Payments to the Saudi and foreign governments[4]

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

1. Hydrocarbon reserves of Saudi Arabian Oil Company (the Company) as at December 31, 2024, under the Concession agreement.
2. Total liquids production includes crude, NGL, and condensate. Total gas includes natural gas and ethane.
3. Figure independently validated.
4. Includes income taxes, royalties, and dividends to the Saudi Government.

Sustainability and our strategy

Aramco's strategy is driven by its belief that reliable and affordable energy supplies, including oil and gas, will be required to meet the world's growing energy demand, and that new lower-carbon energy supplies will gradually complement conventional sources. Aramco continues to work to achieve further reductions in GHG emissions from its oil and gas operations. Aramco also invests in technologies and solutions supporting the global energy and materials transition toward a lower-carbon emissions future. The world's demand for affordable, reliable, and more sustainable energy will continue to grow, and Aramco believes it can best be met by a broad mix of energy solutions.

Within this context, Aramco's vision is to be the world's preeminent integrated energy and chemicals company, operating in a safe, sustainable, and reliable manner.

Aramco strives to provide reliable, affordable, and more sustainable energy to communities around the world, and to deliver value to its shareholders through business cycles by maintaining its preeminence in oil and gas production and its leading position in chemicals, aiming to capture value across the energy value chain and profitably growing its portfolio.

Aramco seeks to deliver value across four dimensions: profitability, resilience, growth, and sustainability. Sustainability is the value lens through which Aramco measures its impact on climate change and the energy transition, the safety of its operations and development of its people, the environmental impact of its operations, and the economic and social impact it has in the communities where it operates.

Our strategic themes

To achieve its vision, Aramco focuses on four strategic themes across its businesses:

Upstream preeminence

As the principal engine of value generation, Aramco intends to maintain its position as the world's largest crude oil company by production volume and one of the lowest-cost producers. The Company's vast reserves base, spare capacity, and unique operational flexibility allow it to effectively respond to changes in demand.

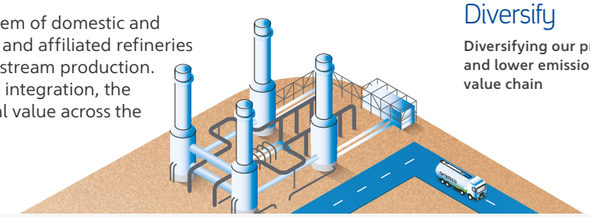
Link to sustainability

Differentiate

A leader in lower upstream carbon intensity operations

Downstream integration

Aramco has a dedicated system of domestic and international wholly-owned and affiliated refineries that serve to monetize its upstream production. Through continued strategic integration, the Company captures additional value across the hydrocarbon value chain.



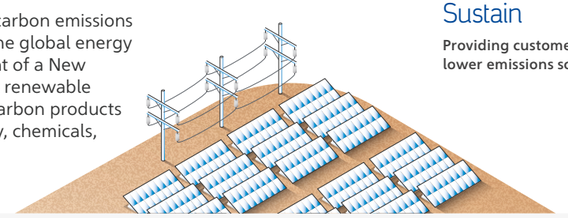
Link to sustainability

Diversify

Diversifying our products and lower emissions value chain

Lower-carbon initiatives

Aramco aims to lower the net carbon emissions of its operations and support the global energy transition through development of a New Energies business that includes renewable power generation and lower-carbon products and solutions across the energy, chemicals, and materials sectors.



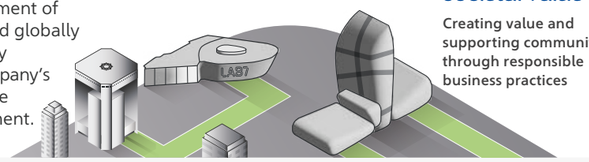
Link to sustainability

Sustain

Providing customers with lower emissions solutions

Localization and promotion of National Champions

Aramco facilitates the development of a diverse, more sustainable, and globally competitive in-Kingdom energy ecosystem to underpin the Company's competitivity and support the Kingdom's economic development.



Link to sustainability

Growing societal value

Creating value and supporting communities through responsible business practices

Our key enablers

Aramco's strategy requires a number of enablers to be successful, including:

People

Aramco recognizes the need to prepare its workforce of the future to ensure its capabilities match its strategic requirements. This includes advancing technical and professional skills, developing commercial and leadership competencies, supporting the progress of localization, and focusing on equity and inclusion.

Technology

Aramco's technology program aims to develop new solutions for its Upstream and Downstream businesses, help diversify its product portfolio, grow its business sustainably, and achieve its net-zero ambition.

The program also aims to enable Aramco to grow its business competitively and sustainably in new areas such as new energies, advanced materials, and digital solutions.

Portfolio optimization

Aramco seeks to unlock value, enhance its capital structure, and reallocate capital to higher growth and return investments. It follows a comprehensive and disciplined internal approval process for capital expenditures, new projects, and debt issuances.

Our sustainability focus areas

Our sustainability framework

Our sustainability framework presents the key areas that hold the greatest potential for our business to have long-term positive impacts, connecting the Saudi Vision 2030 and UN SDGs to our four focus areas, which incorporate the material sustainability topics stakeholders expect from us, and we feel a responsibility to address. Our sustainability focus areas and sustainability performance is overseen by governance provided by our Board of Directors.

Our material sustainability topics

During 2024, we conducted our annual materiality[1] refresh exercise to evaluate whether our sustainability focus areas, fourteen material topics, prioritized UN SDGs, and metrics remain appropriate and relevant.

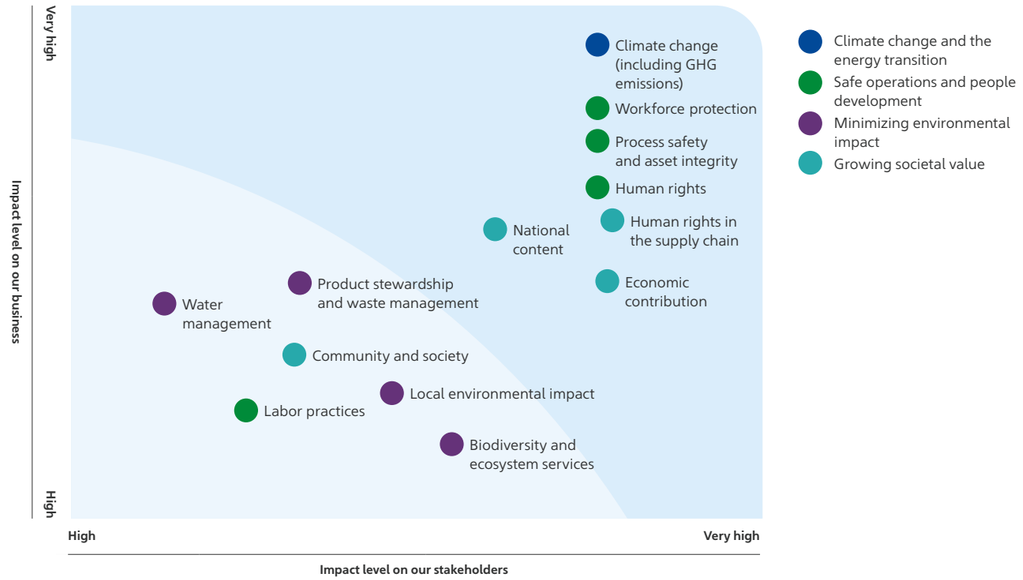
We held more than 30 interviews with senior executives across the Company, and external stakeholders (including those outside our industry), benchmarked ourselves against over 10 international and state-owned energy and chemical companies, as well as the requirements of sustainability standards.

Our materiality assessment is a detailed analysis of the risks and opportunities that impact our stakeholders, environment, and areas that we feel we have an influence over, and serves as an important process for selecting key sustainability topics for Aramco.

The following are learnings and subsequent actions from our materiality refresh exercise and extensive stakeholder engagement:

- Our four sustainability focus areas (plus our focus on corporate governance[2]) are still appropriate and relevant;
- 13 material sustainability topics, plus a focus on corporate governance, as our overarching material topic, have been identified as being the issues stakeholders expect from us, and we feel, as a business, a responsibility to address;
- Updated our sustainability framework to align further with the Saudi Vision 2030 and ensure our support remains appropriate via our four focus areas;
- Confirmation that our roadmap to establish additional metrics to better monitor, manage, and report on our performance under each focus area and material topic remains appropriate. Due to the increasing maturity of existing metrics and the introduction of new metrics as part of our ongoing improvement in line with international sustainability standards, we have increased the number of metrics in this Report to 80 (an 8.1% increase in metrics from the 74 metrics in our 2023 Sustainability Report); and
- Increasing the number of our metrics in our Sustainability Report undergoing external limited assurance; from 18 metrics in 2023 to 24 metrics in 2024. This means that since our inaugural 2021 Sustainability Report, 64 metrics have undergone external limited assurance.

Our material topics



1. The concept of "materiality" refers to the guidance on external reporting from the Global Reporting Initiative, and does not necessarily correspond to the concept of materiality used in connection with Aramco's financial reports.
2. For more information on our governance, relevant material topics, and our governance metrics, please refer to page 112 in this Report, and page 86 in the Aramco Annual Report 2024.

Mapping our material sustainability topics

Climate change and the energy transition

For SDG contribution see page 23

Material topic and impact	Relevant metric to monitor performance against material issue		SDGs
Climate change (including GHG emissions)	• Scope 1 emissions (million metric tons of CO_2e)Ⓐ • Scope 2 emissions (location-based) (million metric tons of CO_2e)Ⓐ • Scope 2 emissions (market-based) (million metric tons of CO_2e)Ⓐ • Upstream carbon intensity (location-based) (kg CO_2e/boe)Ⓐ • Upstream carbon intensity (market-based) (kg CO_2e/boe)Ⓐ • Upstream methane emissions (metric tons of CH_4)Ⓐ • Upstream methane intensity (%)Ⓐ • Flaring intensity (scf/boe)Ⓐ • Flared gas (MMscf)Ⓐ	• Energy intensity (thousand Btu per boe) • Energy consumption (MMBtu/hr) • % of sustainability-related R&D out of total R&D spend • % of patents filed relating to sustainability technologies (sustainability patents filed/total patents filed, %) • Number of patents granted relating to sustainability technologies* • Sustainability Fund: number of new portfolio companies* • Sustainability Fund: $ invested (million)*	

Safe operations and people development

For SDG contribution see page 59

Material topic and impact	Relevant metric to monitor performance against material issue		SDGs
Workforce protection	• Number of fatalitiesⒶ • Fatal accident rate (per 100,000,000 work hours)Ⓐ • Lost time injuries/illnesses rate (per 200,000 work hours)Ⓐ	• Total recordable case rate (per 200,000 work hours) • Health performance (%)Ⓐ	
Process safety and asset integrity	• Number of Tier 1 process safety events		
Human rights	• Number of grievances raised	• Sites with a grievance mechanism in place (%)	
Labor practices	• Number of Company employees • Number of contractor employees • Number of nationalities in workforce • Breakdown of Company employees by age • Breakdown of Company employees by age (%)* • Number of female employees • Female (%) of total employees • Number of female employees in leadership positions • Females (%) in leadership positions • Female (%) of total number of new hires • Total hours of training and development (million hours)	• Average hours of training and development per employee • Number of hired graduates • Number of apprentices (new intakes) • Number of interns • Employee experience index rating[1] (%) • Attrition rate (%) • Employees receiving regular performance reviews (%) • Employee turnover by gender (%)*	

* Metric reported for the first time externally.
Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.
1. Previously employee engagement score (%).

Minimizing environmental impact

For SDG contribution see page 79

Material topic and impact	Relevant metric to monitor performance against material issue		SDGs
Local environmental impact	• Number of hydrocarbon spillsⒶ • Volume of hydrocarbon spills (bbl)Ⓐ • Recovered hydrocarbons (%)Ⓐ	• Hydrocarbon discharge to water (barrels)Ⓐ • SOx emissions (metric kilotons)Ⓐ • Sites with ISO 14001 certification (%)Ⓐ	
Biodiversity and ecosystem services	• Net positive impact (biodiversity and ecosystems) (%)Ⓐ		
Water management	• Freshwater consumption (million m^3)Ⓐ	• Freshwater withdrawal (million m^3) • Freshwater intensity (%)Ⓐ	
Product stewardship and waste management	• Industrial waste disposed (metric tons)Ⓐ	• Industrial waste recycled (%)Ⓐ	

Growing societal value

For SDG contribution see page 95

Material topic and impact	Relevant metric to monitor performance against material issue		SDGs
National content	• Saudization (%) • Saudization of construction contracts (%) • Saudization of service contracts (%)	• iktva procurement spend within the Kingdom (%) • Cumulative iktva GDP contribution ($ billion)	
Human rights in the supply chain	• % of active suppliers signed up to Aramco's Supplier Code of Conduct	• Number of active suppliers	
Community and society	• Social investment ($ million) • Number of volunteers • Number of volunteer hours • Number of employee volunteers • Number of employee volunteering hours	• Number of Aramco facilitated community volunteers • Number of Aramco facilitated community volunteering hours • Number of people on Aramco sponsored programs	
Economic contribution	• Direct economic value generated and distributed • Total R&D expenses ($ million)		

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Stakeholder engagement

Aramco values the relationship it has with the society within which we operate. Aramco interacts with a range of stakeholders to ensure that their perspectives are considered in our business plans, sustainability plans, and general operations. On this page and the next page, we share the type of stakeholders we engage with, our key discussion topics, and some examples of outcomes.

Our people

Communication channels and examples of engagement

- Town halls
- Employee experience surveys
- Employee networks
- Young Leaders Advisory Board (YLAB)
- Training
- Intranet
- Human resources
- Recognition events
- Senior leadership meetings
- Safety meetings
- Quarterly engagement talks on current events
- Management letters and emails

Discussion topics

- Our vision and mission
- Corporate ethics and values
- Professional development
- Our strategy
- Sustainability
- Remuneration
- Health, safety, and environment (HSE) performance
- Industry trends, current events
- Community support

Our customers

Communication channels and examples of engagement

- Customer feedback forms
- Face-to-face meetings
- Regular engagement between sales teams and our business customers
- Customer service centers
- Trade shows and conferences
- Emails/newsletters

Discussion topics

- Sustainability
- HSE performance
- Quality control

Our suppliers, partners, and contractors

Communication channels and examples of engagement

- Business performance reviews
- On-boarding program
- Visit to suppliers' facilities
- Workshops
- Training programs

Discussion topics

- Engagement on supply chain disruption and mitigation plans
- HSE requirements
- Agreeing sustainability initiatives with suppliers to improve their capabilities
- Performance on quality, delivery, and price
- Supplier Code of Conduct
- iktva
- Conformance to Aramco sustainability policies

Investors, financial institutions, rating agencies, and insurers

Communication channels and examples of engagement

- Quarterly earnings calls
- External disclosures
- Direct investor communication
- Annual General Meeting
- Annual insurance renewals
- Revolving credit facility meetings
- Conferences and non-deal roadshows
- Focused investor groups

Discussion topics

- Climate change and the energy transition
- Financial and operational performance and outlook
- Environmental performance
- Human capital management
- Sustainability-related ambitions, targets, and performance
- Risk management

Sustainability in action

Collaborating with peers to embrace the challenges and opportunities of climate change

Aramco is a co-founder of the OGCI, a CEO-led initiative consisting of 12 of the world's major energy companies, responsible for producing about one-third of global oil and gas. As an OGCI member, Aramco Ventures contribute to the $1 billion Climate Investment Fund, the investment arm of the OGCI. Its mission is to achieve reductions in GHG emissions by investing in and promoting the market adoption of innovations from our portfolio companies through a network of investors and global partnerships.

Link to strategic theme:

Lower-carbon initiatives

Sustainability in action

Cultivating young talent around the world

Given our global footprint, we are keen to engage with youth around the world to build local capacity and capability. As well as supporting youth in Saudi Arabia, as detailed on page 75, we engage internationally with local communities wherever we operate.

In the US, Motiva (our wholly-owned subsidiary) ran an Aspire Mentoring Program, where each high-school student, from three partnering schools, was matched with a Motiva employee mentor for two years. The program focused on life after graduation by exploring career options, career readiness, and goals. In March 2024, Motiva hosted two career fairs at One Allen Center and the Port Arthur Manufacturing Complex to give students first-hand insight into the many career opportunities available in the energy industry.

In the UK, Aramco Overseas Company B.V. (AOC) (our wholly-owned subsidiary headquartered in Netherlands) partnered with Silverstone Museum to launch a Future Tech exhibit during the British Grand Prix weekend. The permanent exhibit created a new area in the museum for visitors to explore Aramco's latest technologies in an immersive setting and its support of science, technology, engineering, and mathematics (STEM) education, engaging young visitors and inspiring them to pursue STEM careers. Visitor numbers since the opening of the exhibition totaled over 87,000 at the end of 2024.

Link to strategic enabler:

People

Governments, regulators and industry associations

Communication channels and examples of engagement

- Saudi ministries and regulators
- Ipieca
- US Environmental Protection Agency (EPA)
- API
- International Emissions Trading Association (IETA)
- American Fuel and Petrochemical Manufacturers
- American Society for Testing and Materials
- World Economic Forum
- OSHA
- International Sustainability Standards Board (ISSB)
- Saudi Organization for Chartered and Professional Accountants (SOCPA)
- OGCI
- OGDC
- Saudi Exchange, Capital Market Authority, London Stock Exchange

Discussion topics

- Standards setting
- Compliance with regulatory standards
- Workplace safety and incidents
- Project specific discussions
- Supply disruptions
- The energy transition
- Permits
- Knowledge sharing on best practices
- Collaboration on industry standards

Local charities and non-profit organizations

Communication channels and examples of engagement

- Volunteer events
- Student mentoring
- Community events
- Citizen Advisory Panel meetings
- Employee service on community boards

Discussion topics

- Corporate donations
- Matching contributions
- Community needs

Our local communities

Communication channels and examples of engagement

- Volunteer events
- Student mentoring
- Community events
- Citizen Advisory Panel meetings
- City Council meetings
- School board meetings
- Economic development associations
- Local industry group meetings
- Quarterly community newsletters
- Plant tours
- Direct mailings
- Conferences

Discussion topics

- Social impacts of operations and expansion plans
- Pipeline awareness
- Workforce development
- Local content
- Community development and outreach
- Economic and social investments
- Charitable giving
- Emergency response and preparedness
- Environmental stewardship (e.g., establishment of mangrove eco-parks, beach rehabilitation campaigns etc.)
- Health and wellness programs
- Mentoring programs and scholarships
- Small business support

Sustainability in action

Supporting our customers and other industries

In October 2024, we participated in a Joint Industry Project (JIP) with 11 global companies (including Shell and TotalEnergies) to develop industry guidelines[1] that support end-users in capturing and sequestering CO_2 in the value chain. The guidelines cover the full carbon capture and storage (CCS) chain, considering the capture of CO_2 from various industrial sources and transportation via different options through to permanent sequestration in geological storage. The JIP is collaborating with research and industry experts to provide a holistic understanding of the impact of impurities across the entire chain.

Link to strategic theme:

Lower-carbon initiatives

Link to strategic enabler:

Technology

1. Industry Guidelines for Setting the CO_2 Specification in CCUS Chains | Wood.

Climate change and the energy transition

Differentiate 27
Sustain 44
Diversify 48
Enable 52

Cogeneration units, Wasit gas plant, Saudi Arabia. Cogeneration plants, an important component of the energy efficiency lever toward achieving Aramco's ambition, generate electricity at many of Aramco's operating sites.

Our view

We believe that an inclusive energy transition requires a careful balance between energy security, affordability, and environmental sustainability to support societal growth and prosperity.

Our ambition

We have an ambition to reach net-zero Scope 1 and Scope 2 GHG emissions by 2050 across all our wholly-owned operated assets.

To support this ambition, we have set a new interim target for 2030 to reduce our upstream carbon intensity to 8.6 kg CO_2e/boe or lower, and to achieve a 15% reduction by 2035 compared to our 2018 baseline. We also have an ambition to mitigate 52 MMtCO_2e annually by 2035 from our business-as-usual forecast emissions.

Our approach

We established our climate change and energy transition framework, underpinned by four pillars, to achieve our net-zero Scope 1 and Scope 2 ambition across our wholly-owned operated assets:

- Build on our competitive advantage as a leader in lower upstream carbon intensity operations by reducing our emissions and improving our energy efficiency;
- Develop lower-carbon solutions, including mobility transition technologies and fuels, to achieve our GHG emissions mitigation ambition;
- Support the materials transition and nonmetallic deployment by diversifying our products into lower-emissions value chains; and
- Enable the above pillars through technology investment, R&D centers, and Aramco Ventures' $1.5 billion Sustainability Fund.

To achieve our net-zero ambition across our wholly-owned operated assets and our interim targets, we have developed a GHG reduction roadmap articulated around five key levers: improving our energy efficiency across our Upstream and Downstream facilities, reducing methane emissions and flaring, advancing carbon capture, expanding renewable energy production capacity, and implementing nature-based solutions as well as purchasing carbon offset credits.

To support global climate change efforts, we have a circular economy program to guide our operations in efficiently managing resources and reducing GHG emissions on a lifecycle basis.

Performance of our key metrics

Climate change and the energy transition

Material issue	Relevant metrics	2024	2023	Status
Climate change	**Scope 1 emissions (million metric tons of CO_2e)**	56.1Ⓐ	54.4Ⓐ	Scope 1 emissions increased by 3.1% compared to 2023, mainly due to the increase in gas production and operations.
	Scope 2 market-based emissions (million metric tons of CO_2e)	12.4Ⓐ	13.0Ⓐ	Scope 2 emissions decreased by 4.6% compared to 2023, primarily due to a reduction in the emission factor of imported power and steam.
	Upstream carbon intensity – market-based (kg CO_2e/boe)	9.7Ⓐ	9.6Ⓐ	Upstream carbon intensity increased by 1.0% due to higher gas production, processing and storage to meet the Kingdom's growing domestic demand, and lower overall marketed production.
	Upstream methane emissions (metric tons of CH_4)	24,548Ⓐ	27,708	Upstream methane emissions reduced by 11.4%, primarily due to the increased implementation of flare gas recovery systems to reduce venting and flaring, and increased leak detection and repair initiatives to reduce fugitive emissions.
	Upstream methane intensity (%)	0.04Ⓐ	0.05	Upstream methane intensity decreased by 0.01 p.p., primarily due to the reduction in upstream methane emissions.
	Flaring intensity[1] (scf/boe)	6.07Ⓐ	5.64Ⓐ	Flaring intensity increased by 7.6% compared to 2023 mainly due to increased gas operations and lower oil production.
	Flared gas[1] (MMscf)	28,846Ⓐ	27,506	Flared gas increased by 4.9% compared to 2023 mainly due to gas operations expansion during the year.
	Energy intensity[1] (thousands Btu/boe)	162.9	153.8	Energy intensity increased by 5.9% compared to 2023, primarily due to higher energy consumption, driven by downstream operations, and the expansion of our gas operations and compression activities, which are more energy-intensive.
	Energy consumption (MMBtu/hr)	88,091	85,649	Energy consumption increased by 2.9% compared to 2023 mainly due to increased energy demand for gas compression, and downstream operations.

Full metrics table on pages 122-123

Our contribution to the UN SDGs

To promote lower-carbon initiatives, Aramco is investing in renewable energies, expanding CO_2 storage capacity (e.g., carbon sequestration) as well as expanding gas production to displace the burning of liquids for power generation in the Kingdom.

Aramco has set the ambition to plant 300 million mangroves by 2035 in Saudi Arabia. This initiative is part of the Company's broader environmental efforts to restore natural ecosystems, enhance wildlife habitats, and contribute to carbon dioxide capture and storage.

Aramco Ventures has been recognized as a top corporate climate venture capital investor and the number two investor globally on the Climate 50 list[2]. Aramco is expanding its investments beyond traditional oil and gas sectors to stimulate economic growth and create employment opportunities. Aramco is venturing into lithium production, essential for EV batteries, through a partnership with Ma'aden. This initiative aims for commercial production by 2027, aligning with global energy transition trends and fostering job creation in new industries.

Aramco is collaborating with research centers and industries, aiming to find solutions for climate challenges, and partnering with organizations with a climate focus, such as the OGDC, OGCI, Ipieca, and WEF, as part of a wide range of government and private sector collaborations across numerous industries.

As a major producer of crude with lower upstream production carbon and methane intensities than crude produced by many of our industry peers, Aramco continues to work on its ambition of mitigating and reducing GHG emissions across its wholly-owned operated assets through a range of initiatives, which include investments in innovative technologies. These efforts also contribute to our alignment with the Kingdom's sustainability ambitions.

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

1. This metric is not applicable to our office-based entities: ATC, ASC, AOC, and SAAC.
2. For more information please visit: www.climate50.com.

Aramco's climate change approach

At Aramco, we believe that reliable and affordable energy supplies, including oil and gas, will be required to meet the world's growing energy demand, and that lower-carbon energy supplies will complement conventional sources.

The Company is striving to achieve further reductions in GHG emissions from its oil and gas operations, and invests in technologies and solutions supporting the global energy and materials transition needed for a lower-carbon emissions future.

Climate change and energy transition framework

Our climate change and energy transition framework is aligned with our corporate strategic themes, reflecting our commitment to maintaining upstream preeminence, enhancing downstream integration, and supporting lower-carbon initiatives, thereby reinforcing our dedication to reliable and responsible energy production.

With decades of experience in providing affordable and reliable energy, we strive to maintain our industry leadership. In our climate change and energy transition framework below, we outline our approach to progress towards our net-zero ambition across our wholly-owned operated assets and lower our value chain emissions.

Differentiate

1. A leader in lower upstream carbon intensity operations

- GHG emissions management
- Upstream carbon intensity
- Energy efficiency
- Methane emissions and flaring reduction
- Renewables[1]

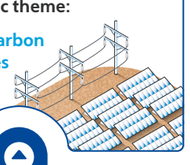
Link to strategic theme: Upstream preeminence

Sustain

2. Providing customers with lower-emissions solutions

- Transport technologies and fuels
- Natural gas
- Hydrogen and ammonia
- Renewables[2]

Link to strategic theme: Lower-carbon initiatives

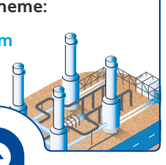


Diversify

3. Diversifying our products and lower-emissions value chain

- Advanced materials
- Liquids-to-chemicals

Link to strategic theme: Downstream integration



Enable

4. Investing in lower-carbon emissions technologies and solutions

- Leveraging technology
- Carbon capture and storage
- Natural climate solutions and carbon markets
- Aramco Ventures
- Renewables

Link to strategic enabler: Technology

1. Renewable Energy Certificates (RECs) from the renewables will help offset our upstream emissions, to help differentiate us as a leader in lower upstream carbon intensity.
2. Aramco invests in solar and wind energy in support of the Kingdom's National Renewable Energy Program.

Our first energy transition pillar, "Differentiate", builds on our competitive advantage as a leader with lower upstream carbon intensity relative to other oil and gas producers, underlining our commitment to maintaining upstream preeminence. It strengthens our position while expanding operations to meet future oil, gas, and petrochemical demand. The Differentiate pillar focuses on implementing innovative solutions to reduce emissions, optimize energy use across our facilities, and is further supported by our five key levers to meet our interim aspirations and net-zero ambition across our wholly-owned operated assets. This includes the use of renewable energy certificates (RECs) from our renewable electricity developments to offset our emissions.

The second energy transition framework pillar, "Sustain", is supported by Aramco's New Energies organization, which was established in 2023. Through this strategic investment, we are advancing our ability to provide lower-carbon solutions.

With the third pillar of our energy transition framework, "Diversify", Aramco is investing in diversifying its downstream products portfolio and developing lower-emissions value chains emphasizing our commitment to enhancing downstream integration. The growing demand for petrochemicals is widely recognized as one of the key drivers of global oil demand growth, as these products are essential for industries ranging from plastics and pharmaceuticals to consumer goods and advanced materials.

Aramco's long-term objective is to grow its integrated refining and petrochemicals capacity, and expand its product portfolio across the entire hydrocarbon value chain. Aramco intends to continue to grow its liquids-to-chemicals business, with a goal to increase its capacity in petrochemical producing complexes to up to four million barrels per day. By the end of 2024, Aramco achieved approximately 45% of its objective, with further capacity additions under development. Our involvement in advanced materials, such as nonmetallics and minerals, as well as liquids-to-chemicals, reflects our investments in lower-carbon products.

Our fourth pillar, "Enable", is the focus of our R&D centers and Aramco's Sustainability Fund. Aramco believes that technologies are an essential enabler for the future of both the Company and the energy industry. Technology optimizes operations, enhances sustainability, and strengthens our competitive advantage.

Strategic technologies are being developed to mitigate or reduce GHG emissions and support investments in lower-carbon products, including renewables and energy storage, hydrogen production technologies including advanced hydrogen extraction technologies, nonmetallic applications development, thermal crude-to-chemicals (TC2C) deployment at our subsidiary S-Oil, and stationary carbon capture and direct air capture (DAC) technologies.

Aramco's ambition to achieve net-zero Scope 1 and Scope 2 greenhouse gas emissions across our wholly-owned operated assets by 2050 is supported by a clear emissions reduction roadmap built around five key levers. Our five key levers are continuously monitored and reviewed to track progress and ensure they remain appropriate and relevant, in response to technological and digital innovations, evolving regulatory standards, and to optimize cost and capitalize on synergies.

Key risks and mitigations

At Aramco, climate change concerns and impacts inform our business strategy. Climate change risk is monitored through Aramco's enterprise risk management (ERM) framework. It provides a structured and comprehensive approach to identify, prioritize, and manage our corporate risks, and is assessed on a medium- to long-term horizon.

The Board of Directors and its Sustainability, Risk and HSE Committee perform the risk oversight role and monitor the Company's overall risk management, including climate risk and its mitigations. More information on our risk management framework and the risks we manage and consider can be found in the Risk chapter of our Annual Report 2024.

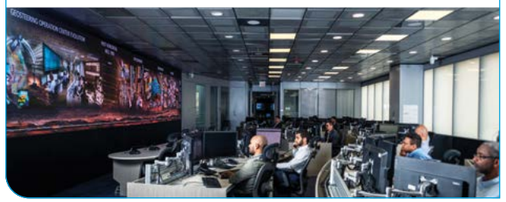
Risk[1]	Mitigation
Policy: Policies restricting or banning use of fossil fuels, or applying a cost on carbon	• Informing our business decision-making by accounting for climate-related demand scenarios and implementing GHG mitigation initiatives, building upon our competitive advantage of having one of the lowest upstream carbon intensities among our peers
Technology: Adoption of disruptive technologies and/or slow development of GHG mitigation technologies	• Accelerated development of our technology portfolios, including synthetic fuels, lower-carbon hydrogen production, liquids-to-chemicals, and CCUS technologies
Market: Loss of demand for hydrocarbons as customers move to achieve their GHG targets	• Diversification into lower carbon products with longer lifecycles, e.g., chemicals and materials supporting the energy transition
Legal: Potential exposure to climate-related litigation	• Accurate and transparent reporting and disclosures with independent assurance
Reputation: Impact on corporate reputation	• Stakeholder engagement, including independent external consultants and subject matter experts to advise on reporting and disclosures, and explain the Company's energy transition pathway

1. For more details, view the Managing Risk Exposure section of the Aramco Annual Report 2024.

A leader in lower upstream carbon intensity

Maximizing recovery with advanced drilling technologies

Aramco's advanced drilling technology uses geo-steered multilateral wells and smart completions to maximize recovery, reduce water production, and optimize reservoir sweep capitalizing on existing assets. This technology reduces costs by optimizing recovery, and asset utilization.



AI flowmeter for real-time water monitoring

Continuing to innovate, Aramco, in collaboration with King Abdullah University of Science and Technology (KAUST) has developed a microwave resonance flow meter using a digital-twin AI model to accurately measure and monitor water content in real-time during oil and gas extraction, enhancing reservoir management capabilities. This technology reduces energy consumption, water consumption, and lowers operational costs.

KAUST

Modified gas treatment plant shutdown procedure with flaring minimization patent

The Wasit gas plant has developed a patent-pending batch process to reduce flaring by halting the sour gas feed during shutdowns, while sweet and acid gas processing continues until pressure equalizes with the downstream header. This technology reduces the need for flaring by managing gas pressures more efficiently.

Managing our water production during oil extraction

Aramco's Nanosilica fluid blocks porous reservoir rocks, reducing unwanted water production in depleted reservoirs. This cost-effective, sustainable solution minimizes corrosion and energy use for fluid separation, treatment, and disposal, improving efficiency in oil production, even in high-salinity environments.

Slim electric submersible pumps

We deploy multilateral observation wells and slim electric submersible pumps in our field operations to reduce environmental impact. Additionally, our fully instrumented fields equipped with real-time data capabilities enable remote monitoring and optimization across our facilities, resulting in reduced carbon emissions and enhanced protection of marine ecosystems. This technology improves performance, and reduces energy consumption.

Aramco geomechanics expert reservoir management software

Aramco's in-house geomechanics software predicts optimal mud weights, cutting non-productive time by 45%. In 2024, new modules – breakdown pressure, AI caliper, and liner deformation – further enhanced fracking operations in gas developments. This technology reduces costs in gas developments.

Achieving our net-zero ambition

Our roadmap towards net-zero

2030

8.6

Reduce our Scope 1 and Scope 2 upstream carbon intensity (market-based) to 8.6 kg CO_2e/boe or below

2035

7.7

Reduce our upstream carbon intensity (Scope 1 and Scope 2) to 7.7 kg CO_2e/boe or below using market-based methodology, and achieve a 15% reduction in upstream carbon intensity from our 2018 baseline by 2035

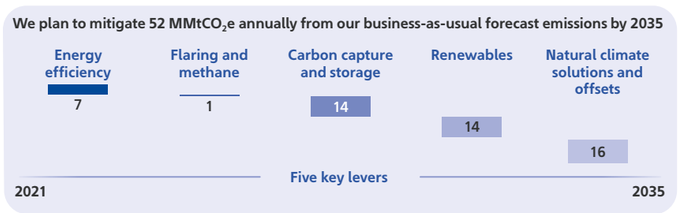
2050

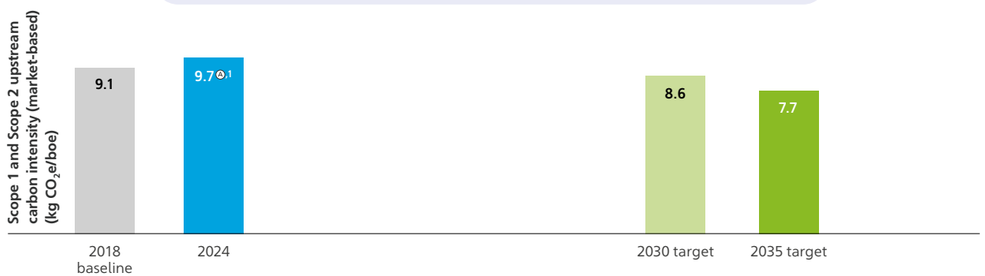
Net-zero

Achieve our net-zero Scope 1 and Scope 2 GHG emissions ambition across our wholly-owned operated assets

Our levers to lower our emissions

To achieve our net-zero Scope 1 and Scope 2 GHG emissions ambition, and our interim targets, we have identified five key levers.





A This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

1. Our upstream carbon intensity (market-based) has risen during the year and is expected to rise over the next few years as we support the Kingdom lowering its GHG emissions by providing more gas for energy production. However, as our levers continue to advance (e.g., Jubail CCS hub starts sequestering Aramco's emissions from 2028 onwards), our upstream carbon intensity performance is expected to improve to enable us to meet our interim targets and longer-term net-zero ambition.

GHG emissions

Aramco focuses on what it can directly control – operational emissions (i.e. Scope 1 and Scope 2 emissions across our wholly-owned operated assets). Additionally, the Company is investing heavily in technologies, fuels, and partnerships that enable emissions reductions across the energy value chain.

In 2024, our total Scope 1 and Scope 2 (market-based) GHG emissions across our wholly-owned operated assets increased by 1.8%, equivalent to 1.2 $MMtCO_2$e, compared to the previous year. Scope 1 emissions increased by 3.1% compared to 2023, mainly due to an increase in gas production and operations. Scope 2 emissions (market-based) decreased by 4.6% compared to the previous year, primarily due to the decrease in grid emission factors for power and steam generation.

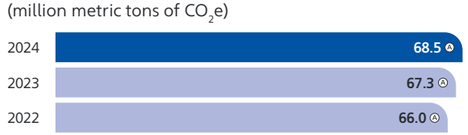
In 2024, we completed bottom-up assessments of our assets to better identify and prioritize opportunities to meet our 2050 and interim climate targets. These assessments are supported by ongoing efforts, including energy optimization and energy efficiency.

Upstream carbon intensity

A key metric is the carbon intensity of our upstream operations, which stands among the lowest when compared to major crude oil producers. This lower-carbon intensity is achieved through the use of advanced technologies and innovative practices.

Our upstream carbon intensity rose by 1.0% due to higher gas production as Aramco aims to increase sales gas production capacity by more than 60% by 2030 compared to 2021 production levels (subject to domestic demand and inclusive of pre-FID (Final Investment Decision) projects not yet announced) to meet the Kingdom's growing domestic demand. Producing gas is more energy and carbon-intensive; however, it serves as a lower-emission fuel alternative for the power sector when replacing liquid fuels. Gas storage, which began in 2023 and continues in 2024, affects our upstream carbon intensity. The gas that is produced and stored is excluded from the marketed hydrocarbon volume, increasing our upstream carbon intensity.

Total Scope 1 and Scope 2 emissions (market-based)
(million metric tons of CO_2e)



Upstream carbon intensity (market-based)
(kg CO_2e/boe)

A This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Levers to meet our interim targets and net-zero ambition

To mitigate 52 $MMtCO_2e$ from our business-as-usual forecast emissions by 2035, we are focusing on five key levers: energy efficiency across Upstream and Downstream assets; further reductions in methane emissions and flaring; increased renewable energy production capacity; carbon capture and storage; and natural climate solutions and offsets.

Our GHG emissions reduction roadmap is articulated around our five key levers. The levers are continuously monitored and reviewed to track progress and update the mix of abatement opportunities. This ensures they remain appropriate and relevant in response to technological advancements, evolving regulatory standards, and to optimize cost and capitalize on synergies.

Energy efficiency

Improving the energy efficiency of our Upstream and Downstream assets.

GHG emissions mitigation by 2035

7 $MMtCO_2e$

For more details, see pages 32-33

2024 progress towards our planned initiatives

1,243 MMBtu/hr

Permanent energy savings – that equals 0.57 $MMtCO_2e$ avoided

101

Implemented energy efficiency initiatives

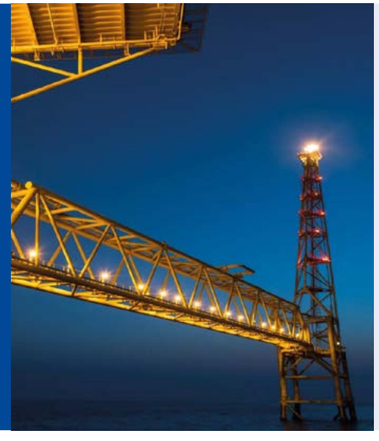
Flaring and methane

Reducing our upstream flaring and methane intensities even further.

GHG emissions mitigation by 2035

1 $MMtCO_2e$

For more details, see pages 34 and 36



2024 progress towards our planned initiatives

7,319 MMscf

Total avoided flaring through flare gas recovery systems

0.04%

Upstream methane intensity

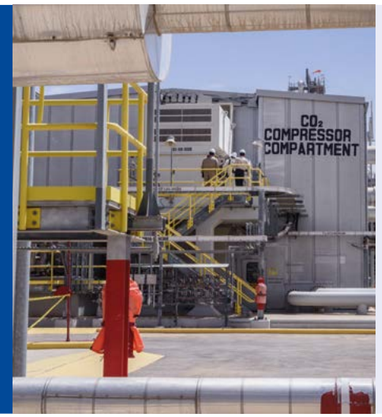
Carbon capture and storage

Developing a competitive, market leading CCS business.

GHG emissions mitigation by 2035

14 $MMtCO_2e$

For more details, see page 39



2024 progress towards our planned initiatives

- Signed shareholders' agreement with Linde and SLB for the development of phase one of Jubail CCS hub – with a capacity to capture and store nine million metric tons of CO_2 per year with six million metric tons allocated for Aramco and three million metric tons for non-Aramco facilities, by 2028.
- The site preparation and early works have been completed and major engineering, procurement, and construction contracts have been awarded.

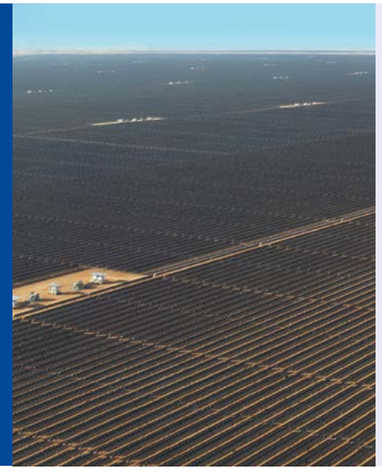
Renewables

Capitalizing on advantaged solar and wind resources in-Kingdom.

GHG emissions mitigation by 2035

14 $MMtCO_2e$

For more details, see page 40



2024 progress towards our planned initiatives

4.2 GW_{ac}

Of installed operational renewable power

- Reached full capacity production of 1,500 MW_{ac} at Sudair solar plant, 600 MW_{ac} at Al Shuaibah 1 project, and 2,060 MW_{ac} at Al Shuaibah 2[1] project.
- Achieved financial close for Haden, Muwayh, and Al-Khushaybi solar projects with a combined capacity of 5.5 GW_{ac}.

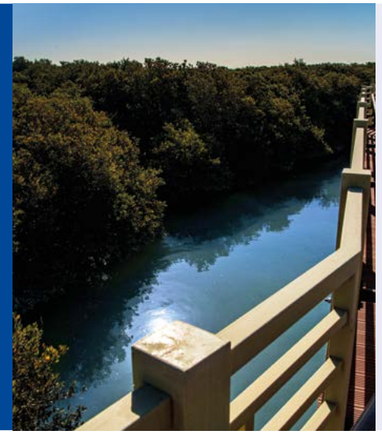
Natural climate solutions and offsets

Planting mangroves, and finding ways to offset hard-to-abate emissions.

GHG emissions mitigation by 2035

16 $MMtCO_2e$

For more details, see page 41



2024 progress towards our planned initiatives

513,103

Carbon credits retired against corporate emissions, and 1.1 million carbon credits purchased

12.5 million

Mangroves planted

1. The Al Shuaibah 2 project has been granted the Commercial Operation Certificate in February 2025.

Energy efficiency

Energy efficiency is essential to maintain our cost- competitive position and support the reduction of emissions in our operations. We focus on energy efficiency from procurement and design to operations, including the electrification of oil and gas operations, and leveraging automation, digital technologies, and innovation. Aramco continues to allocate resources to improve its energy performance and efficiency across its facilities.

The Energy Management Steering Committee provides guidance and oversight, and is supported by a robust energy management and performance improvement policy.

During 2024, energy efficiency considerations remained prominent in Aramco's procurement and design, as well as the Company's operations. Aramco's 2024 energy consumption was 88,091 MMBtu/hr, representing a slight increase of 2.9% compared to 2023 (85,649 MMBtu/hr). Increments to our gas and downstream operations contributed to the increase in energy consumption which were needed to meet increasing gas demands.

43
Aramco organizations have received the ISO 50001 certification for their energy management systems

0.57 $MMtCO_2e$
Avoided emissions in 2024 from energy efficiency implemented initiatives

101
Energy efficiency initiatives implemented in 2024

Aramco's energy intensity in 2024 was 162.9[1] thousand Btu/boe, representing an increase of 5.9% compared to 2023 (153.81 thousand Btu/boe), attributable to increased gas operations that are more energy-intensive. In 2024, our total oil production decreased, however, our gas production and operations increased. Aramco plans to continue to increase its gas production to meet the Kingdom's growing domestic demand. Aramco aims to increase sales gas production capacity by more than 60% by 2030 (subject to domestic demand and inclusive of pre-FID projects not yet announced) compared to 2021 production levels, subject to domestic demand. The growth in domestic gas demand is primarily driven by power generation, water desalination, petrochemical production, and other industrial consumption in the Kingdom.

During 2024, we implemented 101 energy-saving initiatives, resulting in energy savings of 1,243 MMBtu/hr, and the avoidance of 0.57 $MMtCO_2e$. Since its inception in 2000, our Energy Management Program has achieved 32 $MMtCO_2e$ of cumulative emission reductions.

	2024	2023	2022
Energy intensity (thousand Btu/boe)[1]	**162.9**	153.8	146.2
Energy consumption (MMBtu/hr)	**88,091**	85,649	Metric not disclosed previously

Sustainability in action

Advanced process control in our Abqaiq plant

The Control Systems team at Abqaiq plant has developed an innovative soft sensor hybrid model that combines a neural network statistical model with the process model to predict the real-time measurement of ethane content (C2). This hybrid model offers accurate and reliable real-time measurements of C2 without the need for maintenance. The real-time values from the C2 prediction models are integrated into advanced process control (APC) models to achieve real-time optimization (RTO), reduce process variability, and operate processes closer to setpoints and constraints. This energy optimization initiative has contributed to Abqaiq plant's energy savings, resulting in a 1% reduction in energy intensity and a 0.5% reduction in CO_2 emissions for the facility.

Link to strategic enabler:

Technology

1. This metric is not applicable to our office-based entities: ATC, ASC, AOC, and SAAC.

Energy efficiency actions in 2024

Process control and operational improvement

- **Advanced process control:** We use digital twins and AI for smart daily operational monitoring of electrical submersible pumps to improve overall artificial lift energy efficiency. Implemented across 330 electrical submersible pump wells, the initiative achieved a total of 70.8 GWh in power savings, equivalent to an 18% improvement, resulting in 48.5 $MtCO_2e$ emission reduction.
- **Boiler operation optimization:** The Abqaiq plant, one of the world's largest crude oil stabilization facilities, improved its steam generation efficiency and decreased the number of boilers in operation. This led to lower fuel gas consumption and fewer boiler start/stop cycles, resulting in a reduction of 202 MMBtu/hour.
- **Converting excess steam to power:** At the Shedgum gas plant, a steam turbine generator was commissioned to convert previously wasted excess steam, which was vented or condensed, into useful electrical power. In 2024, this steam conversion by the turbine generated 68 GWh, reducing power generation needs from combustion.
- **Optimizing gas turbine operations:** Aramco's Jeddah terminal on the Red Sea stopped running one of its two combustion gas turbine generators (CGTG) by introducing an emergency backup supply with Luberef, which reduced an equivalent of 75.2 MMBtu/hr in diesel fuel consumption.
- **Automation improving cooling:** The Shaybah natural gas plant automated its fin-fan system by using outlet temperature to control operations, saving 90 MMBtu/hr.
- **Utilizing tail gas as fuel:** At the Jazan Refinery, tail gas was redirected from venting to the fuel gas supply, reducing the need for fuel imports. This initiative decreased energy consumption by 318 MMBtu/hr and reduced tail gas flaring.
- **ISO 50001 certifications:** In 2024, we increased the number of ISO 50001 certified organizations for energy management systems to 43, up from 40 organizations in 2023.
- **Using electricity to produce blue hydrogen:** The Shaybah Electrified Steam Methane Reformer demonstration project seeks to lower CO_2 emissions from gas turbine power generation by using electricity to heat natural gas and steam, producing hydrogen and CO_2. The hydrogen is blended with the gas turbine feed, while the captured CO_2 is injected underground. The project's front-end engineering design is complete, and detailed design is in progress for a hydrogen production capacity of six metric tons per day (tpd).

The cumulative implementation of energy efficiency measures has moderated the increase in our energy intensity, preventing an additional 1.4% rise in energy consumption. Without these measures, our energy consumption would have increased by 4.3% instead of the actual 2.9%.

Sustainability in action

Advanced digital solution to improve CHP performance

Aramco has developed and deployed a digital solution that supports its operating assets in optimizing combined heat and power (CHP) systems.

The solution identifies the optimized combination of running boilers and cogeneration units to determine the optimum loading of these units, reducing fuel consumption and excess steam.

In 2024, facilities improved their energy performance, resulting in energy savings of 548 MMBtu/hr across 14 steam and power facilities.

Link to strategic enabler:

Technology

Flaring

Flaring can be classified into three categories: planned flaring, routine flaring, and nonroutine flaring, each with distinct purposes. Planned flaring is scheduled in advance for shutdowns/startups and turnarounds, and system testing, to safely dispose of hydrocarbons. Efforts are being undertaken to minimize planned emissions. Routine flaring is the continuous or regular flaring due to operational design. Aramco aims to reduce routine flaring through improved flared gas recovery and capture.

Nonroutine flaring, on the other hand, occurs due to unexpected operational issues. We aim to reduce this flaring through improved operational reliability and predictive maintenance.

Flaring is a necessary process to ensure the safety of oil and gas processing facilities. The challenge is to develop solutions that maintain safety and asset integrity while reducing flaring.

Aramco is a signatory to the World Bank's "Zero Routine Flaring by 2030" initiative. Ahead of 2030, we continue to achieve one of the lowest flaring levels compared to industry peers, despite our increase in gas operations. Behind these low numbers is the Company's decades of investments in operational, engineering, and digital solutions.

Aramco's flare minimization program has asset-level short-, medium-, and long-term mitigation measures which have the potential to further reduce gas flaring. These include:

- Flare gas recovery systems;
- Flare purge optimization;
- Annual control valves leakage survey/leak rectification;
- Synchronization of maintenance and annual turnaround activities; and
- Optimization of cooling requirements in operating distillation facilities to avoid flaring.

Sustainability in action

Digital innovation at North Ghawar Oil Producing Complex

The North Ghawar Oil Producing Complex has leveraged advanced digital solutions, including AI and machine learning, to reduce Scope 1 and Scope 2 emissions by over 8% per barrel and increase oil production by the same percentage. These technologies have been used to predict and prevent flaring events, optimize energy use, and reduce processing resources and costs. These achievements have earned the facility the Advanced 4IR Global Lighthouse designation by the World Economic Forum, marking Aramco's fifth such recognition.

Link to strategic theme:
Upstream preeminence

Link to strategic enabler:
Technology

In 2024, Aramco's flaring intensity was 6.07Ⓐ scf/boe, which represents a 7.6% increase compared to 2023. The increase is mainly due to increased gas operations and lower oil production.

Flaring intensity[1]
(scf/boe)

Volume of hydrocarbon gas flared per barrel of oil equivalent produced

Flared gas[1]
(MMscf)

Volume of hydrocarbon gas flared

Flaring reduction initiatives in 2024

- Continued installation of flared gas recovery systems (FGRS), a total of 13 FGRS have been installed up to this date. The total recovered gas from our Upstream facilities is 7,319 MMscf in 2024.
- The Khursaniyah gas plant developed an innovative operational strategy to optimize plant feed during scheduled outages, preventing flaring and emissions. This approach avoided 76 MMscf of flaring by mitigating potential plant feed bottlenecks during natural gas liquids train outages.
- The Berri gas plant reduced planned flaring by 65% in 2024, cutting 16 MMscf, through innovative procedures like gas recovery and refrigerant management, leading to a 3.6 $MtCO_2e$ reduction.
- The Haradh gas plant maintained its flaring below 7%, which resulted in saving 68 MMscf of fuel gas. This was achieved by optimizing its flare gas recovery system and reducing leaks.
- The Wasit gas plant achieved zero flaring during five gas treatment unit shutdowns by implementing an innovative measure and maximizing flare gas recovery, thereby avoiding approximately 10 MMscf of flaring per train's shutdown and a total of 50 MMscf.
- Aramco facilities achieved progress in reducing flaring through the implementation of the pipeline flaring minimization protocol and new sectional isolation technologies. These initiatives enhanced operational efficiency and reduced environmental impact by improving control and isolation within pipelines.

Sustainability in action

Using nitrogen to reduce flaring

Mixing hydrocarbons with nitrogen for purge gas reduces the need to flare combustible gases after purging.

A "flare gas optimization by utilizing nitrogen" project undertaken by Aramco's North Ghawar Producing sites, saw an annual reduction of continuous gas flaring in 2024 by around 70% (115 MMscf) compared to the prior year.

Link to strategic theme:
Upstream preeminence

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.
1. This metric is not applicable to our office-based entities: ATC, ASC, AOC, and SAAC.

Methane

In 2024, Aramco strengthened its methane emissions management through the development of the Methane Detection and Minimization Program (MDMP). This initiative aims to reduce Aramco's upstream methane intensity in alignment with the OGCI near-zero methane emissions target.

The MDMP framework is built upon four main pillars

Detection	Governance	Digitalization	Minimization
Enhanced methane emissions monitoring accuracy through deployment of advanced detection technologies and industry-leading practice	Advancing from emission factors-based reporting to direct measurement methodologies, supported by newly established methane performance KPIs and standardized quantification protocols	Deployed digital platforms to optimize operational access to methane data and enhance emissions reporting transparency	Conducted detailed methane emissions source analysis, identifying key reduction opportunities while implementing systematic leak detection, repair protocols, and corrective measures

Upstream methane intensity
(%)

Upstream methane emissions
(metric tons of CH_4)

Aramco achieved an upstream methane intensity of 0.04%® in 2024, despite the expansion of gas operations and increased requirements for gas compression. Aramco successfully reduced upstream methane emissions by 11.4%, and achieved a 0.01 p.p. reduction in upstream methane intensity. The following highlights Aramco's progress in methane emissions minimization:

- **Enhanced annual Leak Detection and Repair** surveys with quarterly Optical Gas Imaging (OGI) campaigns to enable early leak detection and timely repairs, targeting fugitive emissions reduction.
- **Expanded partnership with GHGSat** to enhance satellite monitoring coverage across upstream facilities, enabling more frequent observations and providing operators with real-time data for effective methane leak detection and prevention.
- **Enhanced methane reporting accuracy and transparency** through revised methodologies, particularly for pipeline operations emissions estimation. Implemented a corporate-level upstream methane intensity KPI, with 2024 upstream methane emissions and intensity data independently verified by external parties.
- **Launched two digital platforms:** The Methane Monitoring Solution for equipment-level emissions tracking and reporting across facilities, and the Methane Satellite Solution, which integrates satellite data within the 4IRC framework to alert facilities of detected methane emissions.

Aramco continues to advance its GHG emissions monitoring and mitigation capabilities through innovative technological solutions. In 2024, the Company initiated assessment studies for two emerging technologies to evaluate their effectiveness and potential for enterprise-wide implementation.

Infrared spectroscopy

Hawiyah Unayzah NGL plant implemented continuous methane monitoring utilizing Fourier Transform Infrared (FTIR) spectroscopy technology. This advanced imaging system has demonstrated a superior capability in leak detection and localization across complex industrial infrastructure and processing units.

Laser absorption spectroscopy

At Riyadh Refinery, we deployed drone-mounted Tunable Diode Laser Absorption Spectroscopy technology for comprehensive methane emissions management. This system demonstrated capabilities in mapping elevated methane concentration zones, identifying specific emission sources, quantifying emissions at facility and equipment cluster levels, and evaluating flare combustion efficiency parameters.

® This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

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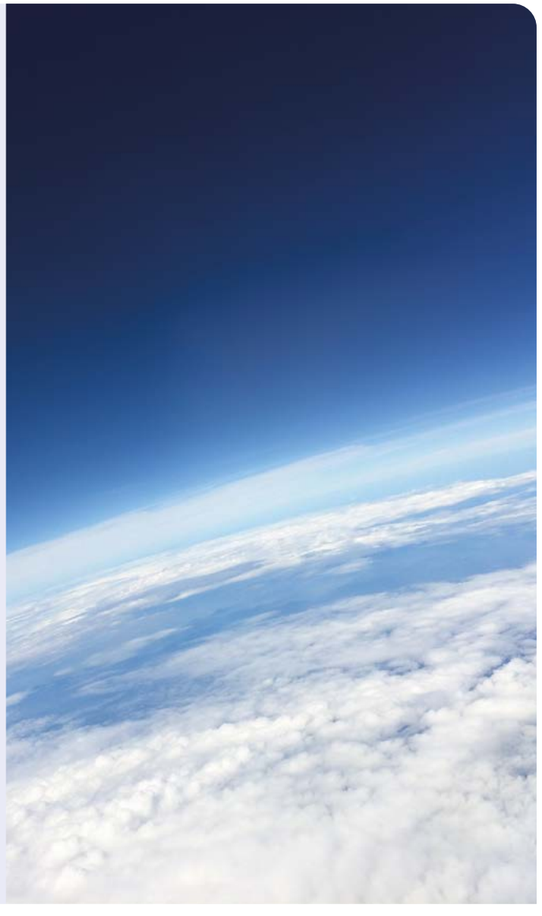
Aramco is transitioning from industry-standard emission factors to direct measurement-based methane emissions reporting for upstream operations. Following a comprehensive 2024 emissions review, the Company has developed an implementation plan utilizing proven technologies, including flow meters, predictive emissions monitoring systems, and multispectral infrared cameras, to enhance measurement accuracy and reduce emissions uncertainty.

Sustainability in action

Methane guardian from above: an Aramco corporate satellite methane monitoring campaign

Satellite technology has emerged as a transformative tool in methane emissions management for the oil and gas industry. The GHGSat constellation's advanced sensors can detect methane emissions as low as 100 kg/hour, enabling precise leak identification across remote infrastructure including pipelines, wells, and processing facilities. This technology enhances operational efficiency in emissions reduction and environmental performance monitoring.

In 2024, Aramco expanded its methane monitoring capabilities through an enhanced partnership with GHGSat, deploying satellite monitoring across 30 major upstream facilities. The GHGSat constellation grew from eight to 12 satellites during the year, enabling monthly facility observations. Through implementation of a rapid response protocol, all detected methane releases in 2024 were successfully investigated and mitigated.



Link to strategic theme:

Upstream preeminence

Link to strategic enabler:

Technology

Carbon capture and storage

Assessment of carbon capture and storage potential

In 2024, we continued conducting site screenings and viability assessments for potential CO_2 storage sinks.

- Mineralization project in Jazan: In collaboration with KAUST, CO_2 is dissolved in water and injected into volcanic minerals, converting it into stable carbonate rocks.
- CO_2 Nanobubbles: Trials in 2024 showed increased CO_2 utilization and faster mineralization compared to traditional technologies.
- Mobile CO_2 Mineralization Unit: Working with Caox[1]; to create a unit with a 400-ton annual capacity.
- Collaboration with Hong Kong Polytechnic: Focused on economic leaching, producing higher-value byproducts, and transforming CO_2 into oilfield chemicals.
- Cyclone carbon capture technology: Developing a demonstration with Carbon Clean Solutions at the Hawiyah Unayzah NGL facility.

The Company is investing in CCS capabilities and is developing, drilling, and evaluating sub-surface CO_2 storage assets across the Kingdom.

In 2024, Aramco partnered with Linde and SLB to jointly develop Phase I of the Jubail CCS hub. This hub is expected to be able to capture and store nine million metric tons of CO_2 annually by 2028, with six million metric tons allocated for Aramco and three million metric tons for other non-Aramco facilities. The site preparation and early works has been completed and major engineering, procurement, and construction contracts are being awarded. The CCS hub supports Aramco's blue hydrogen and ammonia program and aligns with the Kingdom's aim to achieve net-zero emissions by 2060.

Aramco plans to meet its CO_2 capture ambitions through several initiatives:

- Collaboration and innovation: Partnering with KAUST for novel CO_2 geological sequestration using in-situ mineralization.
- Partnerships: Collaborating with Siemens Energy to develop a DAC unit in Dhahran.
- Aramco Ventures investments via Aramco's Sustainability Fund.

Sustainability in action

Commissioning of Direct Air Capture pilot plant in Dhahran

In 2024, Aramco commissioned a pilot DAC unit in Dhahran, marking the first of its kind in the region. This unit serves as a testing platform for next-generation CO_2 capture materials. It represents a crucial step in testing and validation before transitioning to larger-scale DAC facilities in the future.

Link to strategic theme:

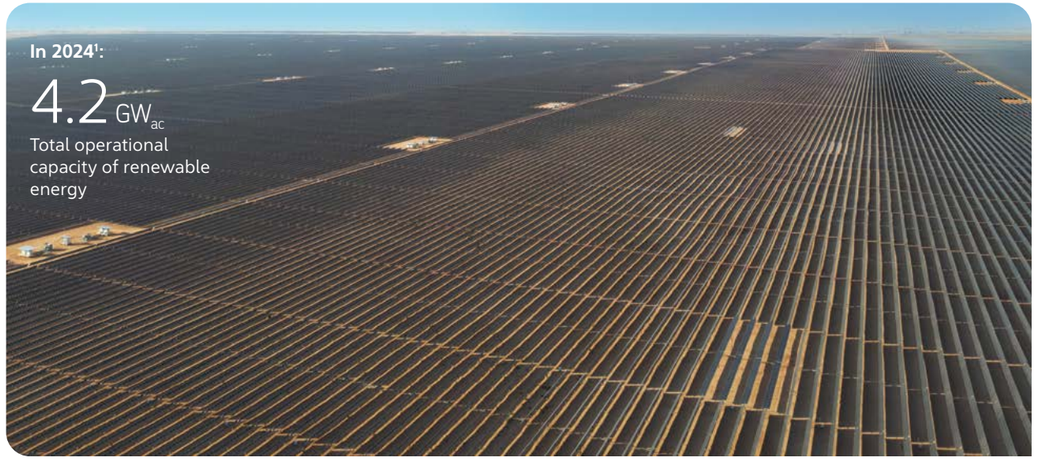
Lower-carbon initiatives

Link to strategic enabler:

Technology

1. For more information: Caox, 2024.

Renewables



Aramco is actively developing a renewables portfolio to reduce GHG emissions from its operations and enhance long-term business value, aligning with its ambition to achieve net-zero Scope 1 and Scope 2 GHG emissions across wholly-owned operated assets by 2050. In 2024, and as part of this effort, financial closure has been achieved on three solar projects: Haden, Muwayh, and Al Khushaybi, with a combined capacity of 5.5 GW_{ac}. These projects are expected to commence commercial operations by 2027.

Sudair One Renewables Company, Aramco's first renewables joint venture (JV) with its partners PIF and ACWA Power, is already supplying its full capacity of 1.5 GW_{ac} to the national grid, while the second JV, Al Shuaibah 1 Solar Photovoltaic project, is delivering its full capacity of 600 MW_{ac}. More recently, Al Shuaibah 2 has reached its full capacity production of 2.06 GW_{ac}. Aramco plans to utilize its allocation of RECs from these investments to offset its Scope 2 emissions related to power supplied to its operations.

The Company is seeking further opportunities to advance its renewable energy initiatives. Aramco's research centers are developing technologies for geothermal applications. Efforts include an integrated subsurface-to-surface digital resource evaluation platform, AI-based temperature predictions, and a geomechanical assessment of potential wellbore failures.

The Company is currently assessing geothermal potential along Saudi Arabia's west coast, and complementing this work by developing geothermal modeling capabilities in our in-house advanced reservoir simulator, GIGAPowers.

Sustainability in action

Advancing renewable energy storage for hot climates

Energy storage systems complement the intermittent generation by renewable resources to help maintain continuous and reliable power output. Flow batteries offer long-term energy storage that is both scalable and reliable for continuous energy supply, and Aramco has developed heat-tolerant flow batteries.

The enhanced iron and vanadium mixed acid flow battery withstands temperatures over 55°C and can be utilized in hot climates without the need for cooling costs. The technology behind the Aramco battery has been laboratory validated, piloted at scale, and the unit is currently installed to demonstrate its ability to meet the technical requirements in the field environment.

Link to strategic theme:

Lower-carbon initiatives

Link to strategic enabler:

Technology

1. This includes operational capacity of Al Shuaibah 2 project that has been granted the Commercial Operation Certificate in February 2025.

Natural climate solutions and offsets

Voluntary carbon markets

In 2024:

513,103
Carbon credits retired against corporate emissions

1.1 million
Carbon credits purchased

Aramco supports the use of nature-based climate solutions and market mechanisms that promote sustainable development. These market mechanisms are tools to facilitate emissions removals, reductions, and offsets of its hard-to-abate GHG emissions.

Aramco voluntary carbon market leadership

In 2024, Aramco procured 1.1 million tons of carbon credits from Saudi Arabia's Voluntary Carbon Market (VCM) auction on the exchange platform launched by VCM during COP29 in Baku.

The credits directed vital funding to climate projects requiring finance, supporting the Kingdom's ambition to establish one of the largest global voluntary carbon markets by 2030. The Aramco credits adhered to stringent quality standards and the basket of credits supported 17 climate projects in countries such as Bangladesh, Brazil, Ethiopia, Malaysia, Pakistan, and Vietnam.

Aramco also acquired durable removal credits supporting carbon storage technology in construction materials and biochar production.

Carbon credits retirement

In 2024, Aramco retired 513,103 carbon credits to offset corporate emissions. These credits included a mix of nature-based projects, like mangrove and forest restoration, and technology-based initiatives, such as landfill gas capture and reducing gas leakages.

Beyond offsetting corporate emissions, Aramco used carbon credits to offset emissions from crude oil shipments to deliver certified carbon neutral cargo. In 2023, we launched a strategic initiative for a pilot project to deliver Arabian Light crude oil with a product level carbon intensity and an emissions management plan in line with PAS2060 using a cradle-to-gate partial life-cycle assessment approach; the first of its kind in the Middle East. In 2024, Aramco progressed to calculate the carbon intensity of five additional Arabian Light crude oil shipments, verified by a third-party. After demonstrating progress in asset-level emission reduction initiatives, Aramco retired 92,559Ⓐ tCO_2e carbon credits, with 75% being from removal-based projects, to offset the residual emissions from these shipments from our Ras Tanura and Juaymah terminals with a total volume of 10 million bbl. All credits were rated at least BB by independent agencies, supporting their environmental integrity and alignment with globally accepted standards.

Natural climate solutions

Actions that protect, sustainably manage, and restore natural and modified ecosystems are natural climate solutions.

Aramco has set the ambition to plant 300 million mangroves in Saudi Arabia. This initiative is part of the Company's broader environmental efforts to restore natural ecosystems, enhance wildlife habitats, and contribute to carbon dioxide capture and storage.

In 2024, we planted approximately 12.5 million mangroves in the Kingdom, bringing the Company's cumulative total of planted mangroves to more than 43 million. The third-party assessed total carbon stock of the planted and existing mangroves is equal to approximately 466,697 metric tons of CO_2e.

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Spotlight

Aramco completes five verified carbon offset crude cargo shipments

Building on the success of the 2023 pilot project to deliver the first verified carbon offset crude cargo, in 2024, we have progressed on this strategic capability to deliver Arabian Light with five additional verified carbon offset crude oil cargo shipments from our Ras Tanura and Juaymah terminals.

Using a cradle-to-gate life-cycle assessment, third-party verified product-level carbon emissions, and implementing GHG emissions reduction initiatives with the optional use of offsets for residual emissions, demonstrates the Company's capability to deliver lower-emission products.

The average carbon intensity of the five shipments was 7.48[o] kg CO_2e/boe of which the production and loading stages were 2.95[o] kg CO_2e/boe for the Ras Tanura terminal, and 2.56[o] kg CO_2e/boe for the Juaymah terminal, with the remaining emissions attributed to shipping. The total volume of Arabian Light crude oil shipments is 10 million bbl (five cargos of two million bbl each).

After implementing GHG emissions reduction initiatives in Arabian Light crude production facilities, Aramco retired carbon credits purchased from the VCM[1] to offset residual emissions.

A total of 92,559[o] tCO_2e carbon credits were offset to counter the pilot shipment's residual emissions. Of these offsets, 75% originated from carbon removal projects, while 25% came from carbon avoidance projects, all issued by Verra and Gold Standard. Independent rating agencies rated these projects BB or higher, showcasing our efforts in financing valuable offset projects and reducing GHG emissions. Lloyds Register Quality Assurance (LRQA) conducted third-party verification, and the Qualifying Explanatory Statement is available **online**. The carbon credits were sourced from the Saudi Voluntary Carbon Market with projects spanning various scopes and types across regions ranging from North America to Asia.

The next entity in the value chain of this pilot, Motiva's Port Arthur Manufacturing Complex, made progress in their measurement of the product-level emissions of their base oils production by undergoing third-party verification against ISO 14067. This pilot project reaffirms Aramco's efforts to deliver third-party verified lower-carbon products.

[o] This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

1. For more information: VCM, 2024.

Link to strategic theme:

Lower-carbon initiatives

Link to strategic enabler:

Technology

7.48[o] kg CO_2e/boe
Average carbon intensity of the five shipments

2.95[o] kg CO_2e/boe
Average carbon intensity for production and loading stage for the Ras Tanura terminal

2.56[o] kg CO_2e/boe
Average carbon intensity for production and loading stage for the Juaymah terminal

Third-party verified offsetting projects

Country	Project name and description	Project type	Quantity (metric ton of CO_2e)
China	**Guoluo Grassland Restoration** In China, the Guoluo Grassland Sustainable Management project spans six counties in the Guoluo Tibetan Autonomous Prefecture. It aims to restore 160,549 hectares of "black soil beach" grassland and promote local development through sustainable grazing and management practices.	Nature Removal	27,646
India	**Luohe Geothermal Based Space Heating System** In India, the Luohe Geothermal Based Space Heating System project introduces a geothermal energy-based heating system for new residential buildings in Luohe city during the winter. This system replaces the traditional heat supply from isolated coal-fired boilers, promoting a more sustainable approach.	Technology Avoidance	12,660
Panama	**CO_2OL Tropical Mix** In Panama, the CO_2OL Tropical Mix project reforests former fallow and degraded pasture land with mostly native tree species, creating mixed forests. Some areas are used for the fair production of organic cocoa. The project combines sustainable timber and cocoa production with biodiversity protection and ecosystem restoration.	Nature Removal	36,901
USA	**CarbonCure carbon negative concrete** In the United States, the CarbonCure project captures and mineralizes waste CO_2 into ready-mix concrete, embedding CO_2 directly within the material. This approach contributes to climate-positive infrastructure and supports sustainable development.	Durable Removal	4,872
Vietnam	**Vietstar wastewater treatment** In Vietnam, the Vietstar waste treatment facility aims to reduce methane emissions from wastewater and organic matter. By pre-sorting and classifying 432,000 tons of waste annually, recycling plastic, and using advanced composting technologies for residual organic matter, the project is expected to reduce emissions by 1.8 $MMtCO_2e$ over a 10-year period.	Technology Avoidance	10,480
			92,559[o] tCO_2e Total carbon credits retired for the Aramco Pilot project

[o] This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Providing customers with lower-emissions solutions

A vibrant, affordable, and reliable transport sector is essential for the growth of any economy, particularly in emerging economies facing increasing populations and urbanization. The transportation sector accounts for approximately 30%[1] of global energy demand and close to a quarter of global energy-related CO_2 emissions. Consequently, the energy transition necessitates a mobility transition, which focuses on reducing the energy and carbon intensity across all modes of transport, including air, land, and sea.

Addressing the energy trilemma – ensuring affordability, security, and sustainability – will require a multifaceted approach. This includes the development of next-generation internal combustion engines (ICEs), hybrids, and lower-carbon fuels, as well as investment in future technologies such as hydrogen-based mobility.

Our efforts in providing customers with lower-emission solutions begins with our lower upstream carbon intensity crude. We leverage this advantage to produce lower-carbon fuels.

Fuels and transportation technologies

Aramco continues exploring the development of synthetic fuels that generate lower GHG emissions, while maintaining the same levels of performance. Our lower-carbon intensity crude oils, along with our investments in GHG emissions reduction initiatives in our refineries, support the production of lower-carbon fuels and feedstocks.

We are also continuing our efforts to improve the efficiency of the ICE, which can have a direct effect on the transportation sector's GHG emissions.

Improving engine efficiency

We recognize that achieving successful GHG emissions mitigation of the automotive industry calls for a combination of various technologies, and we are exploring ways to improve the efficiency of the ICE, and hybrid electric technologies.

To effectively reduce GHG emissions from transportation, it is relevant to invest in enhancing the efficiency of ICE vehicles, considering they will still constitute a significant portion of the global light-duty vehicle fleet in 2050[2].

Through its global research centers, Aramco, in collaboration with leading powertrain companies, is developing innovative transportation technologies that can contribute towards an energy transition in the transportation sector.

In one such effort, Aramco, along with a European powertrain company, is working on developing a novel optimized hybrid engine that is designed to run on lower-carbon fuel to reduce emissions.

In another project, Aramco is co-developing the Turbulent Jet Ignition (TJI) technology for the next generation of hybrid powertrains. The optimized TJI prechamber, integrated into a light-duty hybrid engine, demonstrated it can achieve a 3% increase in efficiency.

In 2024, Aramco strengthened its collaboration with top car manufacturers to advance lower-emission vehicle technologies by finalizing the acquisition of a 10% equity stake in HORSE Powertrain Limited. This partnership, alongside Renault S.A.S., Zhejiang Geely Holding Group Co. Ltd., and Geely Automobile Holdings Limited, aims to support the global development of affordable, efficient, and lower-emission ICEs.

Hydrogen-based mobility

Aramco is collaborating with global manufacturers to advance the development of hydrogen technologies and their use in mobility. The Company recently kickstarted the testing of a heavy-duty natural gas engine platform using natural gas and hydrogen blends (including up to 100% hydrogen).

This effort brings together the technology of a global engine manufacturer and Aramco's expertise in the transport and fuel technologies.

Leveraging an experimental natural gas and hydrogen blending facility at Aramco's Detroit Research Center, experiments are being designed to identify the combustion system tolerance, and technical requirements for natural gas and hydrogen blends.

In the light duty sector, Aramco is co-developing a hydrogen combustion engine with a leading European powertrain company. Both entities will closely collaborate to enhance the efficiency and performance of a hydrogen ICE, through Computational Fluid Dynamic (CFD) simulations aimed at optimizing the combustion system design, followed by testing in real-world conditions.

Aramco is collaborating with a luxury sports car manufacturer to develop a high-performance hydrogen engine for sports cars. Over the next three years, the focus will be on hydrogen combustion and testing to develop a hydrogen engine with top power density. Aramco will use its expertise to help improve efficiency, reduce tank size, and achieve lower emissions.

Synthetic fuels

Compared to conventional fuels, synthetic fuels have the potential to reduce CO_2 emissions from existing ICE vehicles by at least 70% on a lifecycle basis.

Synthetic fuels are an area of focus for Aramco. In 2024:

- Aramco started construction of two synthetic fuel demonstration plants in Bilbao (Spain) and NEOM (Saudi Arabia), with expected completion in 2027. These facilities will focus on producing synthetic diesel and gasoline, de-risking and paving the way for larger investments.
- Aramco developed a novel technology for the direct production of synthetic fuels, specifically focusing on sustainable aviation fuel (SAF). This new technology will enable the direct production of synthetic fuels from CO_2 and green hydrogen, thereby improving the economic efficiency of the process.
- Aramco is studying the feasibility of integrating CO_2-derived feedstock in existing operating assets to produce synthetic fuels. This sets a new baseline for scalable and efficient production of synthetic fuels, leveraging Aramco's global operations to contribute towards the transition to lower-carbon fuels.

Lower-carbon aviation fuels

Aramco recognizes that an energy transition plan has to consider the needs of all of society, especially developing and emerging economies. LCAF supports transition plans at an acceptable cost, facilitating energy security and affordability in the aviation industry that is integral to the global economy, and to connecting societies and families[1].

Global trends indicate a gradual increase in SAF production, with challenges such as limited feedstock options and high costs affecting scalability[2]. In 2024, SAF accounted for 0.53% of jet fuel usage, with most production still in pilot phases, requiring significant investment and impacting manufacturing margins. SAF costs are currently 120% to 700% higher than conventional jet fuel[3], presenting financial challenges in the competitive aviation industry. There is also uncertainty regarding SAF offtake agreements and policy support for future production.

Aramco's LCAF provides a cost-effective, sustainable solution to help the aviation industry, a hard-to-abate sector, reduce carbon emissions and advance toward its net-zero goals. LCAF is a drop-in fuel that reduces overall emissions and requires no modifications to existing fueling infrastructure. Our in-Kingdom refineries produce CORSIA-compliant fuel, and we are working with independent third-parties for audits and certifications to ensure our products meet ISO standards for lower-carbon emissions.

The demand for air travel is expected to double by 2040, growing at an annual average rate of 3.4%[4]. While SAF is a technically viable option, it remains costly and is produced in limited quantities compared to LCAF. LCAF stands out as a viable solution because it can be produced and implemented more readily. It is positioned to satisfy this growing demand and simultaneously achieve reductions in carbon emissions within the aviation sector.

For instance, converting five billion liters of LCAF at 80 gCO_2/MJ could provide the equivalent GHG emissions reduction of about one billion liters of SAF at 45 gCO_2/MJ[5].

Sustainability in action

Pursuing lower-carbon ISO certification

Aramco is advancing its goal to become a certified producer of LCAF, having achieved ISO certification for lower-carbon intensity at four in-Kingdom facilities. As the aviation industry increases SAF production, LCAF serves as a complementary, fossil-based solution that utilizes existing infrastructure to help the industry meet its carbon neutrality goals.

Link to strategic theme:
Lower-carbon initiatives

Link to strategic enabler:
Technology

1. International Renewable Energy Agency.
2. United States Environmental Protection Agency, 2025.

1. The Current, 2024.
2. Energy Digital, 2024.
3. Science Direct, 2024.
4. For more information: International Air Transport Association (IATA), 2023.
5. For more information: International Civil Aviation Organisation (ICAO), 2023.

Sustainability in action

Aramco's journey in blue ammonia and blue hydrogen production

Aramco has made progress in lower-carbon energy production. A prudent strategy is being adopted in developing the Company's blue hydrogen and blue ammonia business, with a phased development approach that calibrates supply and market demand with optionality for early entry to establish a market leading position. Aramco is also leveraging CCS technologies to advance its blue hydrogen and ammonia production. Strategic partnerships, including the development of the Jubail CCS hub and a JV with Air Products Qudra (APQ), underscore Aramco's efforts to becoming a leader in lower-carbon hydrogen production.

Link to strategic theme:

Lower-carbon initiatives

Link to strategic enabler:

Technology

Blue hydrogen and ammonia

Aramco continues to develop its production capacity for lower-carbon hydrogen as part of its ambition to expand its new energies portfolio. Aramco acquired a 50% equity interest in the Jubail-based Blue Hydrogen Industrial Gases Company (BHIG), a wholly-owned subsidiary of APQ, that is expected to produce lower-carbon hydrogen that would facilitate GHG mitigation efforts of local industries in the Jubail area.

Other investments and development opportunities are being evaluated to position the Company as both a leading exporter of blue ammonia and local provider of lower-carbon hydrogen, with an aim to serve early market demand and future GHG mitigation needs starting in 2028. The development of our lower-carbon ammonia portfolio is being phased in line with market demand. While continuing early engineering work to enable the production of up to 11 MMtpa as the market evolves, the Company currently targets to produce up to 2.5 MMtpa of lower-carbon ammonia by 2030, subject to the availability of commercially viable long-term offtake contracts.

The growth of this portfolio depends on demand for lower-carbon hydrogen and ammonia, and Aramco is continuing its efforts to secure long-term demand in the Kingdom and internationally. These efforts have included bilateral discussions and the signing of several indicative agreements in principle with potential customers in Saudi Arabia, Asia, and the EU. Aramco is also phasing the development opportunities for its lower-carbon hydrogen portfolio in line with market demand.

Natural gas

Natural gas provides more efficient power and is less emissions-intensive than other conventional forms of nonrenewable energy such as coal and oil.

Aramco has large high-quality gas reserves and exclusive access to the Kingdom's growing domestic marketplace. The Company's strategy includes growing its sales gas production capacity by potentially more than 60% by 2030 compared to its 2021 production levels, subject to domestic demand and inclusive of pre-FID projects not yet announced. Increased gas production is expected to come from Aramco's associated, nonassociated, and unconventional tight gas basins.

Using natural gas for power generation

Aramco is playing a pivotal role in Saudi Arabia's efforts to diversify its energy mix and reduce reliance on liquid fuels for power generation. In 2024, Aramco generated 5.3 GW of power through its captive power plants. 4.3 GW were used to meet internal demand, and 0.7 GW of spill power was transferred to the national grid. Aramco's cogeneration systems boost energy efficiency by capturing and using heat that traditional power generation would typically waste, thereby reducing emissions and operational expenses. These systems not only generate electricity for Aramco's operations and the national grid, but also enhance energy self-sufficiency and support broader sustainability ambitions, positioning them as an effective solution for energy production. This initiative supports the Kingdom's Liquid Displacement Program, which aims to replace approximately one million barrels of oil equivalent per day (MMboed) of liquids with sales gas, renewable energy deployment, and efficiency improvements by 2030.

The Master Gas System Phase III Expansion (MGS III) is an essential component of Aramco's strategy to grow its sales gas production capacity. It enhances the gas supply capacity to the central and western regions and extends the network to the southern region. This expansion not only supplies gas to utility plants but also connects to 11 industrial clusters across the Kingdom. This connectivity facilitates fuel switching, promotes industrial growth, and contributes to lowering GHG emissions, aligning with the broader goals of the Saudi Green Initiative.

Key natural gas achievements during 2024 include:

- Jafurah unconventional gas basin, one of the largest liquid-rich shale gas plays in the Middle East, spanning 17,000 km² between the Ghawar oil field and the Arabian Gulf, holds an estimated 229 trillion cubic feet of rich raw gas. Design, procurement, and construction activities continued at the Jafurah gas plant during 2024, with phase one expected to commence production in 2025. Phase two development is currently under way.
- As the world continues on its energy transition journey, Aramco anticipates strong demand-led growth for Liquified Natural Gas (LNG). Aramco announced its entry into the global LNG business in 2023 when it acquired a minority stake in MidOcean Holdings II, L.P. ("MidOcean"), which in turn owns MidOcean Energy, LLC ("MidOcean Energy"). MidOcean Energy is an LNG company, formed and managed by EIG Global Energy Partners with the objective of building a long-term LNG portfolio. In 2024, Aramco increased its stake in MidOcean.
- Aramco's gas strategy aims to support the Kingdom's economic growth and diversification, which includes reducing liquid burning for domestic power generation and water desalination. In 2024, the Company commenced production of gas stored in the Kingdom's first underground natural gas storage project. This stored gas was previously injected into the depleted Unayzah gas reservoir. Aramco's MGS is a gateway toward delivering gas-fired electricity to the Kingdom's utility plants and industrial facilities.

0.7 GW
Power supplied to the national grid

Sustainability in action

Powering Saudi Arabia's summer with gas

In April 2024, Aramco launched the Hawiyah Unayzah Gas Reservoir Storage, Saudi Arabia's first gas storage facility, enhancing the Kingdom's lower-carbon energy capabilities. The facility features several environmental innovations, including the elimination of flaring during gas injection, advanced monitoring technologies such as gas leak detection in valves, and high-integrity pressure protection systems. Capitalizing on circular economy design that provides a circular mode of operation between injection and reproduction facilities in an accelerated response cycle, this operational mode will eliminate the need for flaring during depressurization at the injection facility, where the sales gas is injected into the gas reservoir or recycled back to the reproduction facility, then to the MGS for flexible operation. This supports Aramco's role in providing balance to the local sales gas network.

Link to strategic theme:

Lower-carbon initiatives

Link to strategic enabler:

Technology

Product diversification

The materials transition recognizes the growing importance of advanced, durable, carbon-based materials in enabling the energy transition. These materials are essential for manufacturing technologies that help reduce emissions – such as wind turbines, solar panels, batteries, mobility solutions, and the infrastructure that supports them.

This shift also involves moving away from materials with high energy and carbon intensities toward alternatives with lower environmental impacts across their full lifecycle – from production, operation, use, and disposal.

Advanced materials

The materials transition spans the full value chain of how we produce, use, and dispose of the foundational materials of the modern economy. Increasingly, hydrocarbons will be used less for combustion, and more as feedstock for advanced materials that are vital to the energy transition.

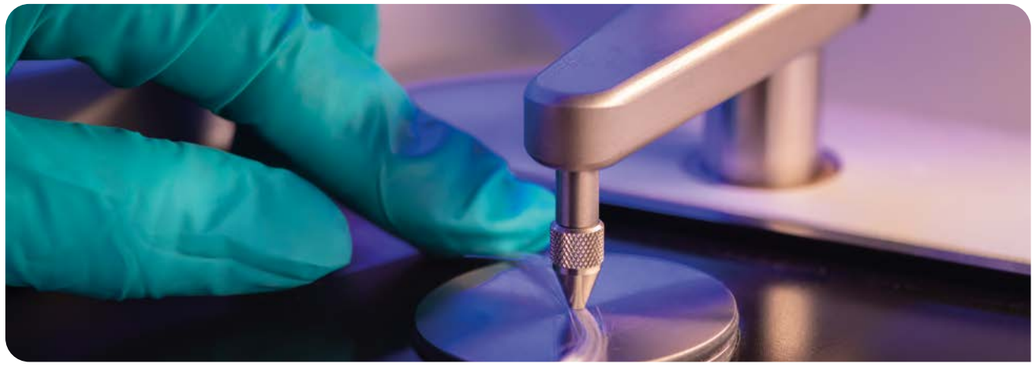
By replacing traditional, emissions-intensive materials like steel and concrete, alternative materials can help reduce GHG emissions across key industries such as construction, housing, transportation, infrastructure, and renewables.

Aramco is advancing a number of initiatives along the value chain, leveraging its strength as one of the world's largest integrated energy and chemicals companies. As petrochemicals are expected to be the main driver of hydrocarbon demand in the years ahead, Aramco is investing in this sector to diversify into lower-emissions value chains.

Analysis[1] shows growing demand for advanced materials, driven by the energy transition, which is already helping to reduce emissions. These materials enable more efficient energy use, support lower-emission production pathways, and promote circular carbon economies.

Aramco is also exploring how to cut the cost of carbon fiber manufacturing by at least 50% to support mass production, while developing polymer-based solutions for hydrogen storage tanks and electric vehicle battery enclosures.
To accelerate the adoption of nonmetallic materials beyond the oil and gas sector, Aramco collaborates with leading industry players including Aachen, GmbH, IBM, 4M, and RPDC.

1. RystdadEnergy, 2024.



Energy transition minerals

Renewable energy technologies require large amounts of critical minerals. Because current supply chains to process and deliver these minerals are underdeveloped and lack sufficient capital, Aramco and Ma'aden are exploring critical minerals, including the extraction of lithium, an important mineral for energy storage. Aramco and Ma'aden have signed non-binding Heads of Terms to establish a JV for minerals exploration and mining in Saudi Arabia, focusing on energy transition minerals. With potential lithium production by 2027, the proposed JV aims to leverage Aramco's expertise, infrastructure, and geological data to advance extraction technologies, maximize mineral potential, and strengthen the Kingdom's position in the global energy transition.

Deployment of advanced materials

Nonmetallic solutions – such as the development of advanced polymer-based composites – can address some of the world's most pressing energy and materials challenges.

Aramco is involved in adopting advanced materials, particularly nonmetallic solutions, to meet future energy needs in a more sustainable way. These solutions leverage Aramco's extensive hydrocarbon resources and technological capabilities.

In the oil and gas industry, nonmetallic solutions are designed to reduce the corrosion, weight, and cost of metals. They include flowlines, downhole production tubing, pumps, and cooling towers manufactured from nonmetallic materials such as glass fiber reinforced polymers, and promote the material transition towards lower-carbon solutions, on a lifecycle basis. Aramco has been at the forefront of introducing nonmetallic solutions, including nonmetallic tubing and extensive installations of nonmetallic pipes such as reinforced thermoplastic pipe (RTP) and reinforced thermosetting resin (RTR) pipes.
The Company has installed more than 10,000 kilometers of nonmetallic pipes over the past five years, encompassing a wide range of applications within both its conventional and unconventional assets. These nonmetallic materials are used in high-pressure oil, gas, and water systems, providing advantages in terms of corrosion resistance, faster installation times, and reduced lifecycle costs.

This strategy not only enhances the efficiency and reliability of operations but also contributes to sustainability by reducing the energy intensity of installations and reducing corrosion-related issues.

The automotive industry is a large consumer of nonmetallic products like carbon fiber reinforced plastic. Carbon fiber-based materials are lighter than steel, which results in less fuel consumption, better vehicle performance, and lower emissions.

Aramco is deploying nonmetallic materials for the oil and gas industry, and we are deploying innovative nonmetallic materials for the automotive, construction, packaging, and renewable energy sectors, as well.

In 2024, Aramco furthered its adoption of advanced materials by:

- Developing and deploying an advanced lower-carbon lifecycle composite pipe designed for high pressure (1500 psi) and high temperature (200°F) operations for hydrocarbon transportation, which reduces corrosion risks, and reduces emissions by 40-50% on a lifecycle basis.
- Advancing a new generation of engineered cementitious composite as a new concrete solution. This technology includes polymer fibers as reinforcements, and leads to lower emissions on a lifecycle basis.
- Developing a novel lightweight composite rebar technology to potentially replace steel rebars for pavement applications, which leads to a lower-carbon emission on a lifecycle basis.
- Developing sensors in collaboration with KAUST, for nonmetallic structural health monitoring and anomalies detection at the Jazan Refinery complex.
- Announcing a strategic five-year Cooperation Framework Agreement (CFA) with China National Building Material (CNBM) Group. The agreement focuses on exploring opportunities in advanced materials and industrial development.

Liquids-to-chemicals

Aramco's petrochemicals business represents an extension of the hydrocarbon value chain. Within its global Downstream segment, the Company has an integrated petrochemicals business producing basic chemicals, such as aromatics, and polyolefins, and more complex products such as polyols, and synthetic rubber.

Aramco intends to expand its integrated refining and petrochemicals capacity and diversify its product offerings along the entire hydrocarbon value chain. Aramco intends to continue to grow its liquids-to-chemicals business, with a goal to increase its capacity in petrochemical producing complexes to up to four million barrels per day by 2030.

By the end of 2024, Aramco had achieved about 45% of this goal, with plans for further capacity expansion ongoing.

Petrochemical basic chemical building blocks are key to the energy transition because they are versatile and essential for sustainable technologies and modern infrastructure. They support the development of renewable energy technologies, advanced materials, and the circular carbon economy. They also help reduce emissions from hard-to-abate industries by replacing more carbon-intensive products. Carbon-intensive products are those that result in high levels of GHG emissions throughout their lifecycle, from production to disposal. The shift towards more sustainable alternatives involves adopting alternative production pathways, enhancing energy efficiency, and utilizing renewable resources to reduce GHG emissions throughout the product lifecycle, as well as identifying and producing alternatives to these carbon-intensive products. Our basic chemicals production capacity allows us to position ourselves strategically as these chemicals provide the foundational materials needed for various energy solutions and products, as well as lower-carbon innovations and technologies, making them essential to the energy transition.

The Company is creating and deploying technologies to produce chemicals in high demand with lower emissions. Through its June 2020 acquisition of a majority interest in SABIC, the Company increased its petrochemicals production, which continues to grow through capacity expansions and new investments. Aramco is working to commercialize innovative C2C technologies, aiming to remove or streamline several conventional industrial processes, lowering production costs and emissions associated with the use of oil.

Aramco continues to grow its petrochemicals sector. Key development areas include the following:

- In 2024, Aramco, in collaboration with China Petroleum and Chemical Corporation (SINOPEC) and Fujian Petrochemical Company Limited (FPCL), broke ground on a new integrated refining and petrochemical complex in Fujian Province, China. This greenfield project is expected to be fully operational by the end of 2030. The facility is planned to have a 16 million tons-per-year oil refining unit (320,000 barrels per day), a 1.5 million tons-per-year ethylene unit, a two million tons paraxylene and downstream derivatives capacity, and a 300,000-ton crude oil terminal. The project aims to maximize chemical output and is expected to supply around five million tons per year of feedstock to the Gulei Petrochemical Base.
- Aramco continues the construction of Shaheen petrochemical project, in partnership with S-Oil. The project is anticipated to transform crude oil into petrochemical feedstock, employing Aramco's TC2C™ technology, which was developed in partnership with CLG and Lummus Technology. Thermal Crude to Chemicals (TC2C™) simplifies the crude conversion process compared to conventional crude oils to chemicals technologies while delivering higher chemical yields. The construction, which began in 2023, is on track to be completed by 2026. The facility is expected to have the capacity to produce up to 3.2 million tons of petrochemicals annually, including high-value polymers.
- In 2024, Aramco and the Ronsheng Petrochemical Company formed a partnership to advance the SASREF project as part of the Liquid to Chemical Program. Aramco intends to establish a 50% partnership with Rongsheng in this project, which includes ethane and mixed feed crackers and their derivatives units.
- Aramco continues construction of the Amiral petrochemical project on partnership with TotalEnergies. Construction started in 2023 with commercial operations planned for 2027. The complex aims to produce 1.65 million tons per annum of ethylene from a mixed-feed cracker.
- Aramco continues the construction of the Huajin Aramco Petrochemical Company (HAPCO) refinery and petrochemicals project. The joint venture between Aramco (30%), NORINCO Group (51%) and Panjin Xincheng Industrial Group (19%) is developing the complex in Panjin, in China's Liaoning Province. Construction started in 2023 with commercial operations planned for 2026. Aramco is expected to supply up to 210,000 barrels per day of crude oil feedstock to the facility.

Sustainability investments and engagement

Climate change external engagement

Aramco is part of the OGCI, a CEO-led initiative consisting of 12 of the world's major energy companies, responsible for producing about one-third of global oil and gas. As an OGCI member, Aramco Ventures contribute to the $1 billion Climate Investment Fund, the investment arm of the OGCI. Its mission is to achieve reductions in GHG emissions by investing in and promoting the market adoption of innovations from our portfolio companies through a network of investors and global partnerships.

The OGCI celebrated its 10-year anniversary in 2024. Established in 2014 during the UN Climate Summit in New York, OGCI has spent the past decade leading the oil and gas industry's approach to climate change. Since 2017, member companies have collectively reduced upstream methane emissions by 55%, cut routine flaring by 53%, and decreased upstream carbon intensity by 21%. Additionally, they have invested collectively about $95.8 billion over the same period in lower-carbon emissions technologies. The OGCI Climate Investments' portfolio with assets under management of approximately $1.3 billion has achieved a cumulative reduction of 95 $MMtCO_2e$ since 2019.

To help mobilize the industry, OGCI is leading and co-funding the OGDC, an initiative through which 56 companies representing approximately 45% of the global oil production, share their experiences and collaborate to accelerate their emissions reductions from their operations.

Research and development

The Company has established a policy to position itself as a leader in R&D, while actively participating in the Kingdom's innovative ecosystems. In 2024, Aramco's sustainability-related R&D spend[2] was $623 million, which equated to 63% of total 2024 R&D spend[2] of $996 million. The R&D spend encompassed sustainability focused solutions to improve our business operations and energy efficiency, enhance carbon circularity, as well as supporting the global energy transition. In 2024, 26% of patents filed were related to sustainability technologies, an increase from the prior year (20% in 2023).

10 years

OGCI celebrated its 10 years anniversary in 2024. Since 2019, it has achieved a cumulative reduction of 95 $MMtCO_2e$ and since 2024, it is co-funding the OGDC to accelerate emissions reductions from 56 companies representing approximately 45% of the global oil production

R&D focus areas	2024 spend ($ million)	2023 spend ($ million)	2022 spend ($ million)
CCUS	**62.6**	40.0	41.5
Renewable energy	**27.8**	7.5	6.4
Energy efficiency	**69.8**	71.0	64.8
Waste management and recycling	**19.8**	16.3	32.3
Water management	**55.7**	50.1	32.2
Gas treatment	**26.4**	42.8	40.5
Lower-carbon hydrogen	**127.4**	57.8	26.4
Sustainable mobility	**190.0**	208.9	136.6
Crude to chemicals	**15.9**	16.4	30.3
Nonmetallic applications	**27.6**	29.6	24.2
Total R&D for sustainability technologies[1,2]	**623**	540	435
Total Aramco R&D[2]	**996**	861	737
Total R&D for sustainability technologies[1]/Total Aramco R&D[2]	**63%**	63%	59%

* Metric reported for the first time externally.
1. Includes direct R&D program costs plus estimated overheads.
2. The reporting boundary for this is Company in-Kingdom (including Global Research Centers). As part of Aramco's innovation ecosystem, our Global Research Centers play an enabling role in advancing long-term goals related to energy innovation, sustainability, and operational efficiency. A research center's scope and activities are functionally aligned with at least one R&D program, with many centers focusing on multiple objectives and programs.

Carbon capture and storage

Extensive laboratory assessments were completed to support the Company's plans for its first sequestration project in saline aquifers. More than 200 laboratory tests were conducted to provide the necessary data for modeling and risk mitigation assessment, and to ensure that the CO_2 is stored safely. These tests include measurements of petrophysical and mechanical rocks properties as well as fluid-fluid and rock-fluid interactions under aquifer conditions.

Our efforts on CCS are not limited to subsurface studies but also extend to various aspects including the monitoring and surveillance of CCS projects.

Fresh water conservation

Our efforts in the advancement of sustainable practices are demonstrated through the continuous research, development, and deployment of new technologies aimed at enhancing fresh water conservation. Examples of such efforts include: pond-water based fracturing fluids, CO_2 foamed fracturing fluids, and fast advanced sulfate removal.

CO_2 mineralization

Besides subsurface sequestration, alternative sequestration routes represent a key focus within our R&D portfolio. In addition to previously highlighted CO_2 mineralization R&D efforts, we are exploring the conversion of CO_2 into various oilfield chemicals and products such as biocides for water treatment and acids for scale inhibition.

Hydrogen production

Our hydrogen R&D program aims to advance the frontiers of sustainable energy production and exploration. The program covers hydrogen production from upstream pond waters, catalytic in-situ hydrogen production from oilfields, bio-based in-situ hydrogen subsurface generation, and various routes for H_2S conversion into H_2.

Innovative solutions to capture CO_2 at the point of emission

Aramco's mobile carbon capture technology aims to capture CO_2 at the point of emission. During the past decade, Aramco's Transport Technologies R&D team has road-tested prototypes for an array of vehicles and trucks, generating more than a dozen granted patents that are part of an active licensing program.

Sustainability in action

Gas innovation to reduce emissions

In 2024, Aramco advanced its gas strategy to support the Company's efforts to reduce emissions with innovative technologies in gas processing:

- Shedgum gas plant: patented a new control system for the Amine Absorber, cutting CO_2 emissions by 170 $MtCO_2e$ through reduced steam and fuel consumption.
- Haradh gas plant: patented the use of 14 wireless flowmeters for improved accuracy and reduced emissions in the acid gas handling area.

Link to strategic theme:

Lower-carbon initiatives

Link to strategic enabler:

Technology

Innovative hydrocarbon extraction solutions

Aramco explores and implements artificial lift solutions to enhance the efficiency of hydrocarbon extraction.

Artificial lift technologies, such as electric submersible pumps (ESPs) and gas lifts, are used to help extract fluids from underground reservoirs to the surface. These technologies are transforming the fields of energy extraction and petroleum production.

In addition, the Company has been investing in technologies like rigless ESP technology, which reduces the need for rig interventions, and dual ESP technology, which offers a redundant system that extends the ESP lifecycle.

These advanced artificial lift technologies help enhance cost-effectiveness, reliability, overall efficiency, and adaptability to varying well conditions.

Aramco Ventures

Aramco Ventures serves as Aramco's dynamic venturing arm, managing multiple venture capital programs with total assets under management (AUM) of $7 billion.

Investing in innovative technologies and solutions

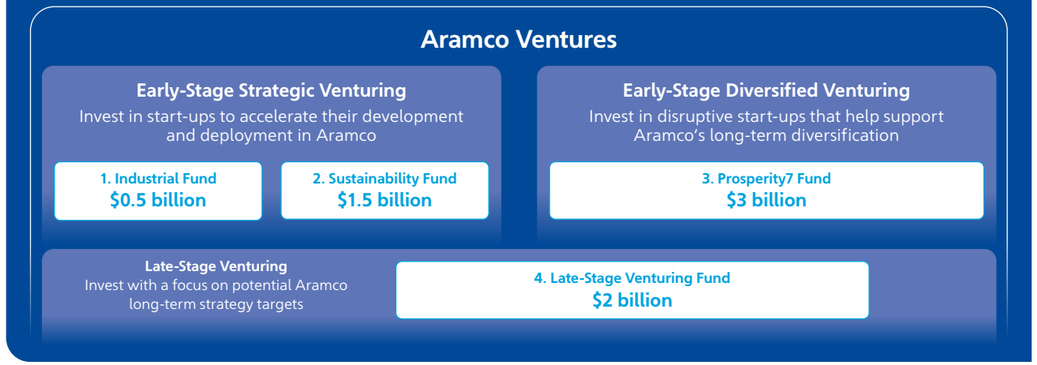
Link to strategic enabler:

Technology

Headquartered in Saudi Arabia, Aramco Ventures maintains offices in the US, Europe, and China. Aramco Ventures includes the $1.5 billion Sustainability Fund and the $0.5 billion Industrial Fund, which are dedicated to global investments in startups that provide strategic value through deployment within Aramco and facilitate the development of new energy and materials businesses. Aramco Ventures also oversees the $3 billion Prosperity7 Fund, focusing on disruptive startups to support Aramco's long-term diversification goals.

Additionally, Aramco Ventures operates a $2 billion Late-Stage Strategic Venturing Fund, specializing in larger-scale minority investments that support partnerships and the development of a high-growth, disruptive business portfolio.

Fund Structure
Four Funds with AUM of $7 billion.



The Sustainability Fund consists of 36 portfolio companies (27 direct investments, and 9 indirect investments), with a total committed amount of $500 million, since inception. In 2024, the Sustainability Fund committed $107 million* (including seven new portfolio companies*) in various sustainability technologies.

In addition, Aramco Ventures aims to support the development and deployment of innovative technologies that can enhance the operations of Aramco while also contributing to the energy sector's sustainability. Since 2014, Aramco Ventures has piloted and deployed 68 technologies at Aramco facilities.

$1.5 billion
Dedicated to sustainability globally

$500 million
Invested across 36 portfolio companies, since inception

$107 million*
In various sustainability technologies in 2024

68
Technologies piloted and deployed at Aramco facilities

Rondo: a VC investment by Aramco Ventures

Rondo has created an electro-thermal energy storage solution that utilizes abundant, low-cost materials to deliver continuous lower-carbon heat for industrial processes. This battery can seamlessly integrate with existing assets, either replacing outdated fossil-fueled equipment or complementing operational systems, and is charged by renewable sources such as wind or solar. It is currently the world's highest-temperature, highest-efficiency commercial energy storage solution. Aramco and Rondo are exploring opportunities to deploy this battery in existing facilities and future applications, including hydrogen production, carbon capture, DAC, and desalination.

* Metric reported for the first time externally.

Recent investments by Aramco Ventures

Amogy

Amogy enables zero-emission transportation through the use of ammonia as a transportation fuel. Their patented ammonia cracking technology is integrated with either fuel cell or hydrogen engine systems to generate electric power from liquid ammonia.

REDEX

REDEX is a leading commodity exchange in Asia and accelerates the shift to renewable energy with scalable solutions, offering a comprehensive ecosystem for RECs. As Asia's leading RECs trading platform, it lists over 480,000 RECs from 1,600 assets. REDEX is developing its footprint in the Middle East, to enable effective trading markets for RECs to develop in those markets.

Xpansiv

Xpansiv facilitates the trading of environmental commodities and is a leader in the energy and environmental commodities market, offering an integrated platform to support the global energy transition. It provides access to a wide range of energy transition markets, including the largest environmental commodities trading platform. In May 2024, Xpansiv secured investment from Aramco Ventures to enhance its market infrastructure and support its growth strategy.

Xpansiv was also chosen to provide the technology for Saudi Arabia's Voluntary Carbon Market Company (VCM), which launched in November 2024, facilitating carbon credit transactions. Additionally, Xpansiv Connect offers open access to its trading and settlement platforms, integrated with global registries, supporting various marketplaces worldwide.

OXCCU

OXCCU is a carbon transformation company that converts CO_2 and hydrogen into SAF and other valuable hydrocarbons using proprietary catalyst technology. OXCCU has developed an innovative multifunctional catalyst system capable of directly converting carbon dioxide and hydrogen into hydrocarbons within the jet fuel range. This process offers cost advantages over alternatives, both in operational and capital expenditures, which will help reduce the cost of synthetic SAF. The Company recently marked the opening of their demonstration plant at Oxford Airport in the UK.

Carbon Clean

Carbon Clean is focused on transforming carbon capture technology with innovative solutions to reduce industrial emissions and promote sustainability. Partnering with Aramco and Samsung E&A, Carbon Clean is deploying its compact CycloneCC technology to capture CO_2 from natural gas turbine exhausts. If successful, this could reduce the installed cost of carbon capture systems by up to 50% compared to conventional methods, while maintaining high performance and efficiency at lower CO_2 concentrations.

Direct air capture portfolio investments

Aramco Ventures has invested in a diverse range of DAC and Direct Ocean Capture (DOC) technologies, each offering unique innovations:

Ucaneo (Germany)
Develops an electrochemical DAC system inspired by the human lung, capturing CO_2 efficiently at room temperature.

Captura (USA)
Focuses on DOC by removing CO_2 from seawater, enabling subsequent absorption from the atmosphere.

CarbonCapture Inc. (USA)
Offers modular and scalable DAC systems for larger-scale carbon removal and storage.

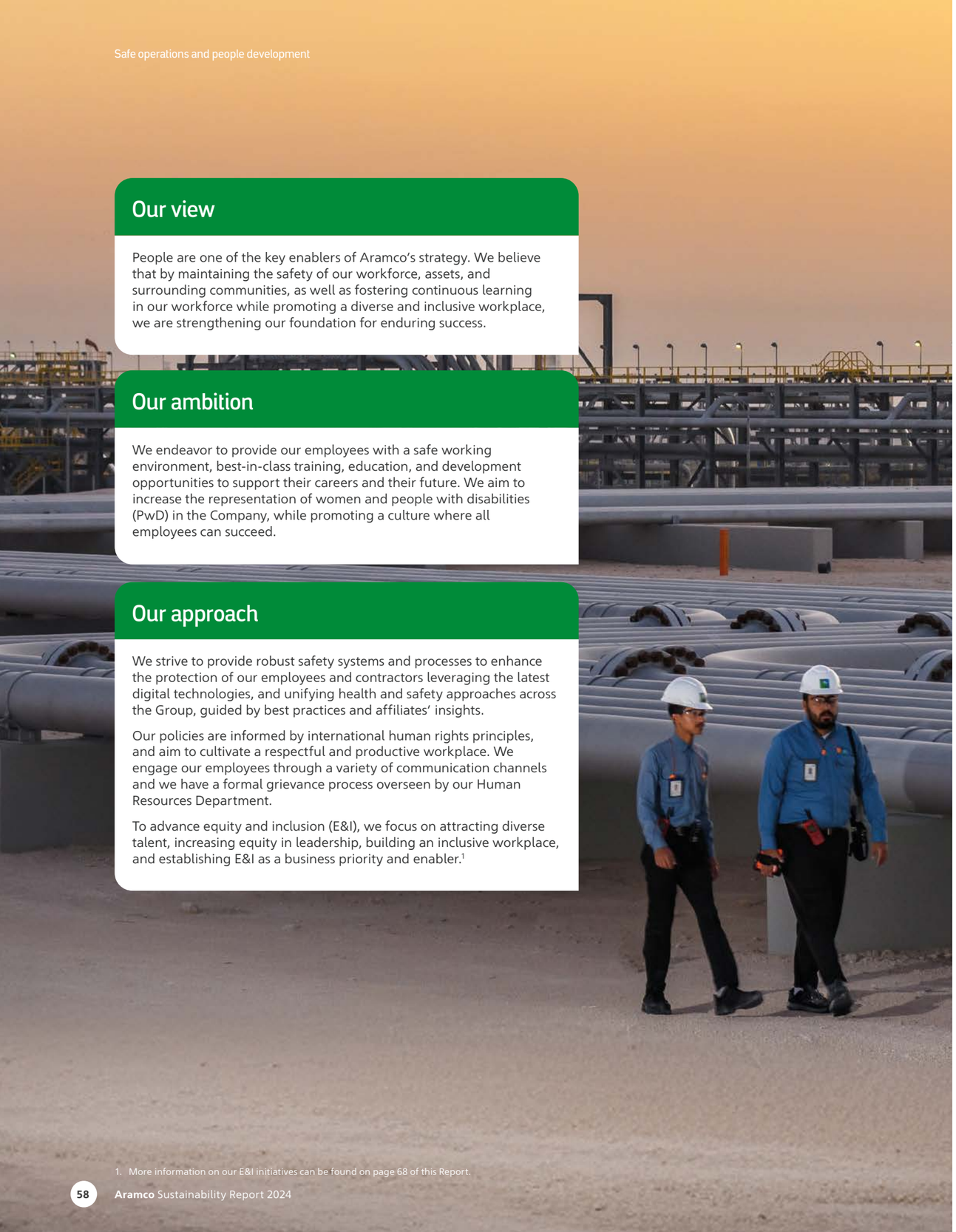
Parallel Carbon (USA)
Combines DAC with water electrolysis to capture CO_2 and produce hydrogen using renewable energy.

Spiritus (USA)
Low-cost passive absorption systems that are able to regenerate via submersion in hot water.

Safe operations and people development

Workforce protection and process safety 60
Human rights in the workplace 66
Labor practices 67

Aramco continues to foster a diverse and inclusive workforce. Diverse talent enhances collaboration, innovation, and respect, reflecting the global perspectives inherent in Aramco's multi-national workforce.



Our view

People are one of the key enablers of Aramco's strategy. We believe that by maintaining the safety of our workforce, assets, and surrounding communities, as well as fostering continuous learning in our workforce while promoting a diverse and inclusive workplace, we are strengthening our foundation for enduring success.

Our ambition

We endeavor to provide our employees with a safe working environment, best-in-class training, education, and development opportunities to support their careers and their future. We aim to increase the representation of women and people with disabilities (PwD) in the Company, while promoting a culture where all employees can succeed.

Our approach

We strive to provide robust safety systems and processes to enhance the protection of our employees and contractors leveraging the latest digital technologies, and unifying health and safety approaches across the Group, guided by best practices and affiliates' insights.

Our policies are informed by international human rights principles, and aim to cultivate a respectful and productive workplace. We engage our employees through a variety of communication channels and we have a formal grievance process overseen by our Human Resources Department.

To advance equity and inclusion (E&I), we focus on attracting diverse talent, increasing equity in leadership, building an inclusive workplace, and establishing E&I as a business priority and enabler.[1]

1. More information on our E&I initiatives can be found on page 68 of this Report.

Performance of our key metrics

Safe operations and people development

Material issue	Relevant metrics	2024	2023	Status
Workforce protection See page 60	**Number of fatalities**	8Ⓐ	3Ⓐ	While the total recordable case rate and the lost time incident rate remain comparable to the 2023 performance, we regrettably suffered eight losses of life. We conducted thorough investigations, with lessons captured and prevention measures implemented to avoid recurrence.
	Lost time injuries/illnesses rate (per 200,000 work hours)	0.021Ⓐ	0.018Ⓐ	
	Total recordable case rate (per 200,000 work hours)	0.046	0.042	
Process safety and asset integrity See page 61	**Number of Tier 1 process safety events**	9	15	The number of Tier 1 process safety events improved in 2024 reflecting the robustness of Aramco's process safety and asset integrity practices.
Human rights See page 66	**Number of grievances raised**	112	230	Aramco continues to provide channels for employees to raise issues and voice concerns without retaliation. Grievance mechanisms are in place at all our sites, accessible through online grievance forms.
	Sites with a grievance mechanism in place (%)	100	100	
Labor practices See page 67	**Average number of training hours per employee (hours)**	140	95	The average number of training hours per employee has increased 47.4% compared to 2023, indicating a stronger focus given on individual development and our dedication to building a more skilled workforce. In 2024, the number of female employees increased by 12.1% and the number of females in leadership positions increased by 32.2% compared to the previous year, supported by our efforts in promoting equitable hiring opportunities and targeted development programs. We continue to nurture future talent and drive educational and economic opportunities for Saudi youth through apprenticeship programs and provision of internship opportunities. The number of hired graduates, new intake of apprentices, and interns varied year-on-year according to the business needs and candidate pools.
	Number of female employees	5,935	5,294	
	Number of female employees in leadership positions	308	233	
	Number of hired graduates	1,124	1,665	
	Number of apprentices (new intake)	1,986	2,200	
	Number of interns	3,222	3,201	

Full metric table on pages 123-125

Our contribution to the UN SDGs

Aramco implements various safety, health, and well-being programs for our employees, contractors, and suppliers, supported by our ongoing digital transformation efforts.

Aramco is improving the gender balance of its workforce and beyond via a range of female empowerment initiatives, including provision of targeted educational and development opportunities.

Aramco believes in lifelong learning and development. We continue to provide world-class learning experiences that drive both personal growth and effective operations at all levels of the Company through innovative platforms.

We have established policies and processes to manage our ethics, bribery, and corruption risks, and ensure a suitable working environment for our workforce.

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Workforce protection and process safety

Safety is integral and paramount to our operations at Aramco. It is ingrained as one of the Company's five core values. Safeguarding people, assets, and the environment is central to our mission and is reflected in our approach to building and sustaining a robust safety culture across our workforce.

We operate under a "total workforce concept", where our safety standards and practices are extended to all employees, contractors, and suppliers. By fostering a unified approach, we aim to create a workplace and environment where safety is a shared responsibility and an integral part of our day-to-day operations.

Aramco's approach to incident prevention reflects our belief that all risks are manageable when addressed systematically, guided by our Safety Policy and Safety Management System (SMS).

Leadership plays a critical role in driving safety excellence across the organization. Through clear accountability and active engagement, management sets the tone to ensure high safety standards and practices are implemented and maintained. Oversight of safety is reinforced through a robust governance structure, where the Board's Sustainability, Risk and Health, Safety and Environment (HSE) Committee and the Group Health, Safety, Security and Environment (GHSSE) Committee provide strategic guidance on safety matters and receive regular updates on the Company's safety and health performance.

Our ongoing digital transformation efforts further support our strategy, enabling the deployment of innovative safety solutions that enhance safety governance, improve real-time risk management, and strengthen emergency preparedness, while maintaining our focus on operational resilience.

Safety Management System

Aramco's SMS sets clear expectations for how safety is managed, providing a structured framework that integrates occupational and process safety to maintain consistent standards across all operations. Developed through comprehensive benchmarking with industry peers, the SMS is aligned with the requirements of the internationally recognized ISO 45001:2018 Occupational Health and Safety Management System, and has been validated through third-party evaluation. By embedding rigorous safety processes into daily operations, the SMS enables business units to meet safety expectations, prevent incidents, and enhance overall process safety, while supporting Aramco's operational goals.

The implementation of the SMS is supported by SafeLife, a one-stop digital safety platform that allows organizations to effectively manage their safety programs and monitor performance, report incidents and safety observations, process recommendations and corrective actions, and manage field safety inspections. All employees and contractors have access to SafeLife via their work systems and mobile phones.

Loss prevention compliance review

Loss prevention compliance reviews (LPCR) play a role in overseeing the Company's safety programs implementation and their alignment with the Safety Policy and SMS. These reviews support safety excellence and continuous improvement throughout the Company by identifying areas of focus and promoting best practices.

The LPCR involves conducting thorough assessments with a multi-disciplinary team and generating detailed reports with recommendations and actionable steps for organizations within the Company with the aim of improving the safety culture. These reports play a role in enabling departments to conduct high quality self-assessments, identify areas for improvement, and drive proactive safety initiatives within the organization.

In 2024, 47 reviews were completed across our in-Kingdom operations as well as international affiliates. These assessments focused primarily on hydrocarbon and industrial organizations, and also included major projects and office-based organizations.

47

LPCRs completed in 2024

Our safety performance

Occupational safety

	2024	2023	2022
Fatal accident rate (per 100,000,000 work hours)	**0.771**Ⓐ	0.305Ⓐ	Metric not disclosed previously
Number of fatalities	**8**Ⓐ	3Ⓐ	5Ⓐ
Total recordable case rate (per 200,000 work hours)	**0.046**	0.042	0.050
Lost time injuries/illnesses (LTI) rate (per 200,000 work hours)	**0.021**Ⓐ	0.018Ⓐ	0.014Ⓐ

In 2024, we experienced the loss of two employees and six contractor colleagues during their work with us. Each of these tragedies has a profound impact on their families, colleagues, and our entire Company. Any loss of life is never acceptable and to this end, we are continuously striving to reduce the occurrence of incidents.

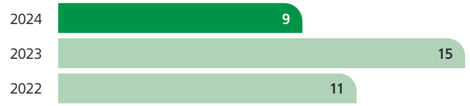
Of these fatalities, three were due to injuries sustained from struck-by incidents and two from chemical exposure, while the remaining were from electrical shock, fall from height, and equipment failure incidents. Evaluations and lessons learned from these incidents have been shared with relevant organizations, and we have implemented remedial actions and enhanced risk management to prevent reoccurrence.

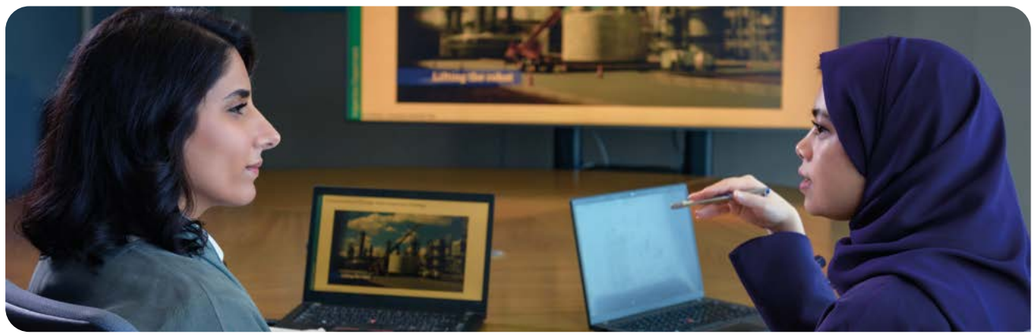
Process safety and asset integrity

Aramco aims to prevent process safety incidents, fostering a proactive safety culture across the workforce, including through safety inspections, ongoing training, and communication.

In 2024, Aramco recorded nine Tier 1 process safety events (PSEs), with seven occurring at wholly-owned in-Kingdom assets and two at operationally-controlled affiliates. Three Tier 1 events were major, resulting in serious injuries, one was moderate, and the remaining were classified as minor. Despite portfolio changes that may impact our operational baseline, our goal remains the elimination of Tier 1 PSEs. We emphasize best practice sharing across sites, with a dedicated incident investigation team addressing improvement opportunities to enhance safety performance Company-wide.

Number of Tier 1 process safety events





Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Safety training programs

Aramco leverages advanced technologies to enhance safety training programs, offering virtual reality (VR), merged reality (MRx), and augmented reality (AR) modules for critical topics such as hazard recognition and control, confined space entry, joint site inspection, fire safety, scaffolding, working at height, and journey management. Employment of these technologies allows for more immersive and engaging learning for thousands of our employees.

Visible safety leadership, where management actively demonstrate their focus on safety through tangible actions and behavior, remains a key aspect of our safety culture. With this in mind, we continued to invest in developing leaders at all levels. Targeted workshops and courses are offered to frontline managers and executives to strengthen their ability to lead with safety as a core value.

Transport safety

We transport large numbers of people, products, and equipment by road, air, and sea, across our operations. This activity poses safety risks and we continuously seek to reduce these risks.

Safety on the road

Our operations are widely spread, and sometimes are in remote places. In Saudi Arabia alone, Aramco used over 11,000 Company road vehicles covering more than 240 million kilometers, and over 420 buses, covering over 22 million kilometers to transport our people for business in 2024.

We closely monitor the safety of our people on the road and mandate a number of traffic training and education programs for our employees, such as the Driver Improvement Program and its refresher, off-road, and specialty driving courses, and employ digital solutions aimed at improving traffic safety.

Safety in air

Mukamalah operates a fleet of 54 aircraft across multiple sectors, including shuttle, executive, and special mission operations. With a focus on safety, efficiency, and reliability, the fleet has successfully transported over 1.2 million passengers, accumulating a total of over 58,000 flight hours in 2024.

Mukamalah is setting benchmarks in aviation safety and sustainability through the effective use of Flight Operations Quality Assurance (FOQA) data. By proactively identifying trends and analyzing flight performance, FOQA enables Mukamalah to mitigate potential hazards, improve operational efficiency, and support adherence to safety protocols and regulations. These insights also feed into continuous training programs for pilots.

To uphold our high safety and operational standards, 180 pilots undergo two training sessions per year at aviation training academies accredited by regulatory authorities, promoting continuous skill enhancement and compliance with the latest manufacturer and industry standards.

In addition, Mukamalah's fleet incorporates advanced aviation technologies such as Ground Proximity Warning Systems, Traffic Collision Avoidance Systems, enhanced weather radar systems, and data-driven Health Usage Monitoring Systems.

Safety at sea

We manage and operate over 330 maritime vessels, with over 7,000 members of our workforce. Aramco's marine operations span the Kingdom's coastlines from the Arabian Gulf to the Red Sea, providing safe, reliable, and cost-effective integrated marine solutions. This supports the Company's offshore operations such as exploration, drilling, production, exportation, crew transfer, oil spill response, subsea repairs, offshore logistics, and offshore security.

In 2024, we introduced the "Back to Basics" safety awareness campaign through eight targeted sessions, focusing on Aramco's Lifesaving Rules related to work permits, energy isolation, confined spaces, working at heights, road safety, excavations, use of personal protective equipment (PPE), and avoiding hazardous work zones. Designed to strengthen marine safety culture, the program aimed to support adherence to these guidelines among all marine employees. Over the course of the campaign, more than 1,800 onboarding sessions were conducted with the engagement of more than 37,500 attendees.

Contractor safety

Aramco aims to ensure the safety and well-being of its contractors. Our strategy is built on a robust field presence, systematic performance evaluations, and the implementation of effective governance practices. We employ specialized tools to track and assess contractor safety performance, promoting adherence to our corporate safety standards. In addition, Aramco is actively participating with the International Association of Oil & Gas Producers (IOGP) to enhance the future industrial outlook on contractor management, with contributions to shape future safety considerations and management of contractors throughout all phases of engagement.

We use the Construction Safety Index (CSI) as a key metric to evaluate our construction contractors' compliance with safety requirements and to assess the overall safety performance. In 2024, we conducted 3,792 CSI inspections across 89 prime contractors.

In 2024, we performed:

3,792
Construction Safety Index inspections

322
Turnaround Safety Index inspections

228
Rig Safety Index inspections

45
Well Safety Index inspections

Additionally, we utilize the Turnaround Safety Index (TSI) to focus specifically on contractor safety performance during major turnarounds and inspections. In 2024, we completed 322 TSI inspections.

For onshore and offshore drilling operations, we rely on the Rig Safety Index (RSI) to monitor safety performance among drilling contractors. In 2024, we conducted 228 RSI inspections, covering 17 prime drilling contractors, assessing contractor safety performance, seeking to ensure compliance with safety procedures across our Drilling and Workover operations.

In 2024, we took a step forward in enhancing well completion site safety performance with the introduction of the Well Safety Index (WSI) framework. This comprehensive framework evaluates safety performance across five critical well completion activities, such as coiled tubing, slickline, well testing, wireline, and fracking, and establishes a benchmarkable baseline for well service contractor companies. During an initial validation process, we conducted 45 WSI assessments with three major well services providers, verifying the framework's accuracy and reliability. Building on this successful validation, we formally launched the WSI, marking a milestone in the Company's Contractor Safety Improvement Program.

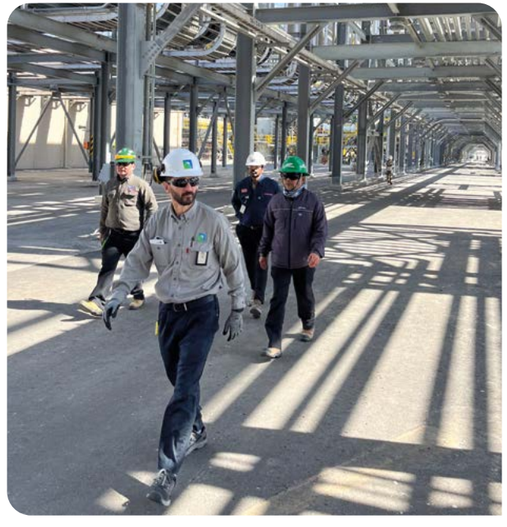
Sustainability in action

Enhancing contractor safety through HSE Intelligence Hub

Aramco launched the HSE Intelligence Hub to transform how we collect, analyze, and utilize HSE data. The hub integrates data from over 20 sources, automating KPIs, allowing for a dynamic and real-time monitoring of HSE metrics. It facilitates informed decision-making and optimizes contractor oversight. The hub strengthens our focus on HSE excellence, helps in minimizing incident risk, and promotes a safer working environment.

Link to strategic enablers:

People **Technology**



Emergency preparedness

In 2024, Aramco enhanced its Corporate Emergency Management Program, focusing on readiness, resilience, and pre-planning. The program was expanded to include key functions such as Personnel, Public Affairs, and Industrial Services organizations.

Quarterly technical exchange forums brought together emergency management staff to share knowledge and best practices. Emergency response plans were tested through site-specific and large-scale exercises based on credible scenarios, including cybersecurity threats, journey management, and operational disruptions. Analysis of exercise critiques recorded in the SafeLife digital safety system identified corporate-level trends and addressed recurring issues.

Additionally, corporate emergency management documents were updated to incorporate safe evacuation procedures for PwD, ensuring inclusivity in emergency preparedness.

Digital transformation in safety

In 2024, Aramco continued to use advanced digital technologies to reinforce operational reliability and workforce protection, with a focus on hazard detection, incident prevention, risk management, and real-time monitoring.

We leveraged predictive analytics in our monitoring systems, using AI and smart cameras to identify unsafe conditions and issue corrective measures at project sites and facilities. We developed in-house machine learning models to forecast pipeline failures, supporting targeted maintenance and reducing the risk of incidents. These tools assist us in identifying and managing risks in our efforts to enhance safety performance.

Sustainability in action

Enhancing monitoring and inspection through technology and AI

Utilizing drones for safety inspection

We use a range of Unmanned Automated Vehicle (UAV) technologies for safety inspections. Fixed wing UAVs provide regular monitoring of cross-country pipelines, while drones inspect high elevated cable trays, eliminating the need for scaffolding.

Salamatic Eagle – safety monitoring through AI

The Salamatic Eagle reduces injuries on drilling rigs and construction sites by combining CCTV feeds with machine learning to detect PPE misuse, safety hazards, and unsafe human behavior.

Raqeeb – smart solution for safety

Raqeeb is an AI-powered tool that helps to identify safety observations and delivers critical insights. Using real-time data analytics to enhance risk detection and regulatory compliance, Raqeeb also expands the safety database to highlight key risks and provide tailored stakeholder support.

Link to strategic enabler:

Technology

Health protection

Aramco considers health protection an integral pillar of its operations, ensuring that its operations and projects comply with the applicable regulations related to health protection, and strives to avoid creating undue health risks to workers and the public, guided by its Global Environment and Health Protection Policy. Aramco continues to engage its stakeholders, deliver health protection programs, promote appropriate industry practices, and leverage technology in improving its health performance.

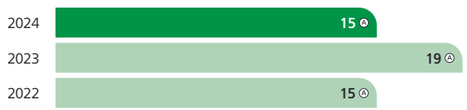
Several compliance programs are in place to manage, with the aim to eliminate, the health impacts of our operations and facilities, covering environmental health, occupational health, industrial hygiene, and radiation protection.

In 2024, health performance improved over the previous year with an increased number of resolved findings from the Company's health assessment programs. In addition, health risks posed by unresolved cases have been minimized and long-term mitigation measures are being put in place.

Managing the well-being of our contractor workforce is an ongoing effort. Assessments, inspections, and initiatives such as the externally benchmarked Contractor Well-being Program ensure that we address their physical and mental health.

More information on our well-being initiatives can be found in the Labor Practices section of this Report.

Health performance
(% overdue health findings)



Sustainability in action

Promoting safety in our community

Promoting safety in local communities forms an element in our SMS. Examples of our effort include:

First Responder Grant

The First Responder Grant is an annual program supporting emergency response organizations in the communities near our operations, offering grant funding for life-saving equipment and training to police, fire, and emergency medical services departments. In 2024, Motiva awarded $75,194 to 15 emergency response organizations in three Texas counties in which it operates, marking the fourth grant award cycle.

Since the program was introduced in 2021, it has provided grant awards across its operating area totaling more than $500,000.

Traffic safety in Eastern Province, KSA

Aramco supports the Eastern Province Traffic Safety Council to achieve one of the Vision 2030 strategic objectives of enhancing traffic safety by encouraging a safe driving culture, improving road infrastructure, and enhancing emergency services. The program encompasses a comprehensive framework with 91 initiatives planned over a 10-year period, including delivery of traffic safety awareness training courses and campaigns, as well as improvement of road infrastructure towards enhanced International Road Assessment Program (iRAP) ratings.

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Human rights in the workplace

At Aramco, we support wider stakeholder engagement and seek to manage human rights impacts across our operations. We adhere to local laws and are informed by internationally recognized human rights standards.

We strive to foster a positive workplace culture that prioritizes dignity, respect, and inclusivity. This ambition includes a strong stance against abusive practices, modern slavery, exploitation, and child labor.

Across our supply chain, we work with suppliers to promote respect of human rights, incorporating health and safety requirements into goods and services procurement practices. Our governance framework emphasizes transparency, adherence to applicable laws, and social and economic development. By embedding these principles into our operations, we continue to make positive contributions, reflecting our values as a global corporate leader.

Further details on our supply chain efforts can be found in the Growing Societal Value chapter of this Report, under Human Rights in the Supply Chain section.

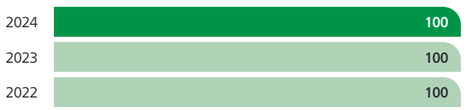
Code of Business Conduct

Aramco's Code of Business Conduct (CoBC) reflects our efforts in maintaining a respectful, safe, and ethical workplace while upholding human rights. These principles guide how employees and Directors are expected to behave and align with our dedication to being a responsible corporate citizen across all areas of operation. These measures empower our colleagues to speak up, act with integrity, and contribute to a safe and ethical workplace.

The CoBC can be accessed on our website.

Number of grievances raised

Sites with a grievance mechanism in place
(%)



Grievances

Aramco strives to maintain a workplace where employees feel confident in raising concerns without fear of retaliation. Alongside the reporting channels provided by the CoBC, the Company offers a formal grievance process overseen by the HR Department to ensure all concerns are reviewed impartially and resolved fairly.

Employees have the right to file grievances at any time without risk of disciplinary action or adverse career impact. Grievances can be submitted through an online reporting form, with personnel advisors available at HR service centers around the Kingdom and through online platforms to provide guidance on the process.

This system underscores our dedication to transparency, accountability, and fostering a respectful workplace where every employee's concerns are addressed with fairness and professionalism.

Employee relations

To promote business ethics and transparency, Aramco operates a Workers Committee managed by a voluntary team of elected employees, established an Employee Grievance Mechanism, and conducts regular employee experience surveys.

Labor practices

We embrace and celebrate our diverse and multi-national workforce and promote mutual values of respect, collaboration, and innovation in the workplace.

We engage with our employees through a variety of channels, from town hall meetings to surveys and recognition events, offering opportunities for their voices to be heard.

We promote E&I, and have policies, training programs, and adjustments in place to foster an inclusive and accepting working environment where everyone feels valued, respected, and empowered to thrive.

Aramco 2024 employee statistics[1]

75,118
Total number of employees

8,517
Total number of contractor employees

94
Nationalities

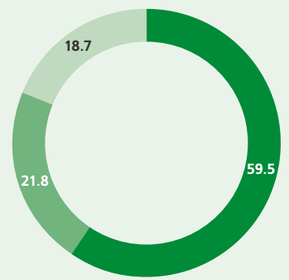
Breakdown of Company employees

By gender

7.9%
Female

92.1%
Male

By age
(%)



44,667
35 years and younger

16,389
36-44 years

14,062
45 years and above

1. Company in-Kingdom only.

Equity and inclusion

Aramco continues to foster a diverse and inclusive workforce, and by embracing differences and providing equitable access to opportunities, we aim to create an environment where everyone feels valued, respected, and empowered to thrive. A diverse workforce enhances collaboration, innovation, and respect, reflecting the global perspectives inherent in Aramco's multi-national workforce.

The People and Organization Committee oversees progress on E&I initiatives, which emphasizes hiring diverse talent, achieving equity in leadership at all levels, building an inclusive workplace, and promoting E&I as a business priority and enabler. A key objective in our people strategy is to increase the representation of women and PwD in the Company through a strategic HR value chain approach of Attract, Develop, and Retain while fostering a culture where all employees can succeed.

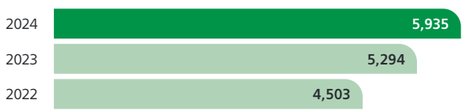
In 2024, we expanded E&I-related training programs for our leaders and HR professionals. For example, the Michigan Ross E&I program is aimed at equipping our leaders with tools and frameworks to lead diverse and inclusive teams and adopt inclusive hiring practices. Learning opportunities are also afforded to all employees through 28 webinars covering various E&I-related topics.

Gender equity

In 2024, Aramco's total female new hires reached 24.0%, comprising both Saudi and expatriate employees. We continued to develop female employees through advanced degree programs, scholarships, and leadership initiatives. Collaborations with national institutions have enhanced female representation in STEM fields, with 61% of Saudi female direct hires coming from STEM majors. Female leadership also expanded, increasing from 233 to 308 leaders, supported by targeted programs at global universities such as Harvard University, INSEAD, and London School of Economics and Political Science (LSE), in addition to rotational job assignments.

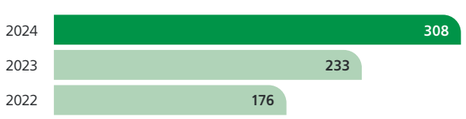
Aramco achieved milestones in promoting women in non-traditional roles, including safety and security, and saw a rise in patents filed by female inventors. Through our efforts, we promote the empowerment of women across the organization and create opportunities for career growth.

Number of female employees



Female employees
(%)

Number of female employees in leadership positions[1]



Female employees in leadership positions
(%)

Female new hires[2]
(%)

1. Leadership positions are defined as chief position holders i.e. group leads, supervisors, managers and above.
2. Consists of direct hires, and excludes contractor employees and graduates from our non-employee programs.

Inclusion of people with disabilities

Aramco values the contributions of PwD and promotes an inclusive workplace. As a member of The Valuable 500, a global initiative to end disability exclusion, Aramco leverages best practices to support employees with disabilities.

Disability inclusion at Aramco focuses on accessibility in physical, digital, and learning environments, helping employees thrive in their work. Efforts include a reduced working hours option, increasing the number of accessible facilities, initiating personal emergency evacuation plans, offering workplace adjustments like office ergonomics and mobility services, and providing assistive technology tools such as screen readers and speech generation devices.

Aramco also offers regular training programs for leaders and employees and disseminates resources, such as our sign language booklet and Be Mindful Cards for promoting inclusive communication with PwD, aimed at raising awareness and building a culture of inclusion. These measures reflect Aramco's dedication to empowering PwD and integrating their talents into the organizational ecosystem.

Aramco is also a member of the International Association of Accessibility Professionals (IAAP) to support our accessibility upskilling initiatives. IAAP is a division of the Global Initiative for Inclusive Information Communication Technologies, and advocacy initiative by the UN Global Alliance for ICT and Development. This membership provides access to training materials and webinars through a global network of accessibility professionals.

Award

Rated Top Employer again

Aramco was officially certified as a Top Employer in Saudi Arabia in 2024 and 2025 by the Top Employers Institute, in recognition of its efforts to promote employee excellence and high standards in HR practices.

Aramco has also been ranked among the top 100 in the 2024 edition of the World's Best Employers by Statista, published in Forbes, and achieved the highest ranking among its industry peers. The Company also remains the highest-ranked employer in Saudi Arabia. This achievement highlights Aramco's efforts to promote a positive workplace environment for its employees and reaffirms its leadership in the energy sector.

In addition to these awards, the Company was also recognized by TIME magazine amongst the "100 Most Influential Companies in the World", and was also ranked in the Top 10 by LinkedIn for the "Best Workplaces to Grow Your Career" in Saudi Arabia for the fourth consecutive year.

Sustainability in action

Promoting diversity in the Kingdom through the Success@Work program

Success@Work is an E&I initiative for National Training Centers (NTCs). NTCs are the product of the strategic partnership between Aramco, the Technical and Vocational Training Cooperation, the Human Resources Development Fund, and business partners, focusing on training and preparing young Saudis for different industries, further equipping the Kingdom with a qualified workforce.

The initiative aims to create a workforce that is ready for an inclusive workplace, through training sessions that promote awareness on how each individual contributes to an inclusive workplace. In 2024, over 70 sessions were delivered involving more than 2,000 participants. This initiative supports the Kingdom's Vision 2030 to provide pathways for individuals to reach their full potential.

Link to strategic theme:
Localization and the promotion of National Champions

Link to strategic enabler:
People

Investing in our workforce

From new recruits to senior leadership, we provide tailored development programs to equip employees with the skills needed to excel in their roles, building the capacity and resilience of our workforce to meet the evolving demands of our business.

In 2024, Aramco strengthened its professional development offerings, introducing five new programs in its Executive Programs catalog in collaboration with institutions such as Oxford, HEC Paris, and ILR School Cornell. These initiatives align with corporate strategic goals and enhance leadership development, with 1,355 seats offered in 2024.

We continue to prioritize academic and job-related training and development through programs like the Executive Speakers Series, Specialized Programs, Advanced Degree Programs, and the Hosted University Programs (HUP), bringing world-class educational opportunities to Saudi Arabia.

More than 1,000 employees have graduated from HUP since its inception in 2011, through 40 different programs, from 20 various universities, in a broad range of disciplines, including business, engineering, and digital fields, partnering with top international universities such as IE University, Imperial College London, and INSEAD. Evolved from modest beginnings, HUP has become one of the flagship learning pathways, creating a cost-effective model to pursue higher education degrees while remaining active on the job.

The total number of hours spent on training and development in 2024 reached 13.8 million hours, an increase from nine million the previous year. This growth reflects the Company's efforts towards enhancing workforce capabilities and investing in employee development. The average number of training hours per employee has also increased, contributed by the introduction of various digital upskilling courses Company-wide as well as new training programs in our corporate academies.

Total hours of training and development
(million hours)

Average number of training hours per employee
(hours)

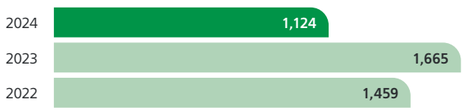
Nurturing young talent

Aramco is dedicated to developing a robust talent pipeline to support the Company's strategic goals and Saudi Arabia's Vision 2030. In 2024, the expansion of our non-employee programs led to 729,091 applications – an increase of 49% from the previous year. This growth reflects the success of targeted outreach campaigns and technical enhancements to streamline the application process, making it more accessible to Saudi youth.

These programs are designed to equip participants with the skills needed for academic and professional success. Key initiatives include the Apprenticeship Program for Non-Employees which provides academic and job skills training, the Vocational College Graduate for Non-Employee program which bridges technical skill gaps for specialized roles, and the College Preparatory Program which prepares students for admission to top universities. The numbers of hired graduates and new intake of apprentices varied year-on-year according to the business needs and candidate pools.

Through these efforts, Aramco continues to nurture future talent and drive educational and economic opportunities for Saudi youth.

Number of hired graduates



Number of apprentices
(new intake)

Sustainability in action

Learning and development innovations through technology and gamification

In 2024, HR made significant advancements in digital upskilling by launching the myLearning platform with AI capabilities. This included personalized course recommendations, simulations, and AI-powered searches, resulting in over 5.9 million platform hits and 1,155,847 course completions. The gamification of learning, including VR/AR content, saw high satisfaction rates and helped enhance engagement in corporate training on crucial topics like information security and safety.

Link to strategic enablers:

People | Technology

Sustainability in action

World Economic Forum Frontline Talent of the Future Initiative

Aramco was nominated by the WEF and was subsequently selected to participate in a pilot program titled Frontline Talent of the Future Initiative. The initiative aims to recognize companies who are leaders in developing and retaining their frontline talent, codifying learnings from these world-class manufacturers about the talent innovations and transformations that enabled them to achieve world-class performance.

The nomination and subsequent selection were a direct result of Yanbu Refinery's 2023 recognition in the Global Lighthouse Network, a community of 189 industry leaders pioneering the use of cutting-edge 4IR technologies in manufacturing. Yanbu Refinery is the fourth Aramco facility to be included, joining the Company's Abqaiq oil processing and stabilization facility, Uthmaniyah gas plant, and Khurais Oil Complex.

Link to strategic enablers:

People | Technology

Internship opportunities

We offer a range of internship programs designed to provide valuable work experience and professional development opportunities, while providing Aramco with the opportunity to establish a pool of qualified and top talents as candidates for future hiring.

The Graduate Internship Program supports a limited number of graduates from Saudi and international universities, with KAUST currently participating. The University Internship Program offers college and university students the chance to gain practical experience while fulfilling their graduation requirements. In 2024, Aramco hosted a total of 3,222 trainee students from various universities and colleges which is marked as a higher intake for the internship program with 47% female representation.

The Vocational College Internship Program reached a milestone in 2024, hosting 787 interns – the highest in its history. Female participation in the program rose to 36%, reflecting Aramco's support for Vision 2030 and its focus on increasing E&I. The program also saw a growing representation of PwD, contributing to a more inclusive and dynamic work environment.

Number of interns

Workforce well-being and engagement

Employee well-being

Aramco's Work-Life Support Program enhances employee well-being with 24/7 access to clinical counsellors, mindfulness, life coaching, and a digital behavioral health platform. We promote financial literacy through courses and on-site advisors while offering childcare, fitness facilities, and personalized nutrition coaching. Services are designed to be inclusive and accessible, supporting employees with disabilities and fostering a balanced, supportive workplace.

Sustainability in action

Creating a vibrant employee community

For more than 40 years, Aramco has supported thousands of expatriate employees and families relocating to Saudi Arabia, offering family-focused housing services to help employees settle through a smooth transition. In 2024, we continued to enhance employee well-being through transformative initiatives.

More than 2,600 accommodation and 153 key facilities have been modernized and 18 new facilities and age-specific recreation zones added, expanding green spaces and maintaining over 1.6 million m² of parks and green areas.

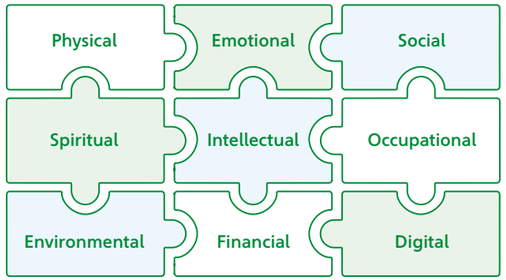
Aramco has introduced new sports facilities and wellness programs including gyms, fitness classes, and major events including the 37-category Aramco Championships. Dining services have 46 new concessions, international restaurants, and more than 300 pop-up food trucks.

Community engagement has included seasonal activities, Saudi heritage programs, and international celebrations, with more than 100 self-directed groups supporting hobbies and skills from chess to public speaking. These initiatives underscore Aramco's efforts in creating vibrant communities and enhancing employees' quality of life.

Link to strategic enabler:

People

Nine dimensions of Aramco's Well-Being Program



In 2024, Aramco launched the Well-Being Program, focusing on nine dimensions, including physical, emotional, and financial health. Highlights included the World Mental Health Day event, which engaged employees globally, underscoring the Company's dedication to well-being.

Aramco's Contractor Well-Being Program

Aramco supports the well-being of its entire workforce, including contractors[1]. The Contractor Well-Being Program includes free well-being training, well-being educational material, and multilingual services such as a 24/7 Well-Being Call Center, video counselling, and online resources.

Our Supplier Performance Evaluation was amended to include requirements for the implementation of the Contractor Well-Being Program and the registration of contractors in the contractor passport solutions system, which allows for the tracking of salary status, and the validity of residence permits. As at the end of 2024, we have enrolled over 100,000 contractors in the contractor passport solutions system.

Aramco is also piloting AI-driven voice recognition technology to identify and support mental health cases early among contractors.

1. The scope of Aramco's Contractor Well-Being Program excludes contractor employees, who are covered under Aramco's Work-Life Support Program and Well-Being Program for employees.

Sustainability in action

Investing in contractor well-being

The contractor workforce is of utmost importance to Aramco. Across the Kingdom, there are more than 400 Aramco contractor camps, housing more than 200,000 contractors supporting Company operations. Contractors' well-being is of paramount relevance to their performance and covers physical, mental, and social health.

The Aramco Contractor Well-Being Program has been designed to enhance contractor well-being within worksites, camps, and communal living facilities, ensuring their health and appropriate living conditions.

Contractors are given access to channels to raise concerns and receive emotional support as necessary. This is delivered through a range of services offered in Arabic, Bengali, Chinese, English, Hindi, Tagalog, and Urdu languages including access to a toll-free call center, video counselling, training, and online resources. These services are backed up by compliance requirements.

The Contractor Well-Being Program has been externally benchmarked, and Aramco was identified as a leader in the field of contractor well-being, based on eight well-being elements:

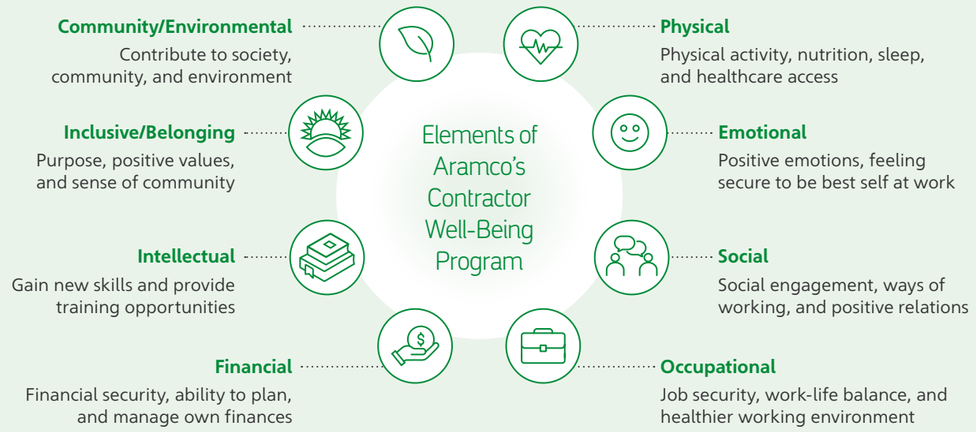
Link to strategic themes:

Localization and the promotion of National Champions

Link to strategic enablers:

People

Technology



Examples of activities and initiatives performed supporting these elements:

1. **Physical well-being:** Implementing health programs covering weight management, health screening, and smoking cessation, as well as promoting healthy eating and exercise.
2. **Emotional well-being:** Conducting mental health awareness events, providing emotional support though various channels including onsite engagements, 24/7 tele-counselling, and virtual sessions with psychiatrists.
3. **Social well-being:** Fostering connections and strengthening relationships through activities, gatherings, competitions, and self-interest clubs.
4. **Occupational well-being:** Organizing well-being related engagements and team building, implementing well-being policies, promoting healthier work conditions, and providing access to on-site medical clinic.
5. **Financial well-being:** Supporting financial security through timely payments of salaries and providing financial advice through 24/7 call center.
6. **Intellectual well-being:** Providing access to resources, workshops, online libraries, training, and skill development.
7. **Inclusive/Belonging:** Conducting engagements and awareness events, offering support and communications in multiple languages, and providing diverse food choices and quiet rooms.
8. **Community/Environmental:** Promoting community connection and volunteering opportunities, and providing access to sound and healthy accommodation.

Employee experience

At Aramco, we value employee engagement. To enhance the workplace experience for our people, we have established multiple communication avenues. These include town hall meetings, engagement surveys, recognition events, the intranet, and periodic performance reviews.

Based on the feedback received through the bi-annual Employee Experience Survey conducted in 2022, we identified four areas with improvement opportunities related to smarter ways of working, employee skills development, employee well-being, and recognition. We have made positive changes through enhanced HR policies, improved processes, and new programs addressing these areas.

Prior to the 2024 Employee Experience Survey, we ran a pre-survey communications campaign called "Your Voice Matters", highlighting 30 Company-wide actions that have been implemented to address pain points identified in the 2022 survey. This initiative demonstrated to employees that their voice matters and encouraged increased participation in the forthcoming survey.

In 2024, our Corporate Employee Experience Survey was held and the survey recorded a rating of 88%, representing the highest rating since we began conducting these surveys in 2018, an increase of three points since 2022. Notably, there was a 7% increase in response rate from 2022.

The improvements in both the rating and response rate are attributed to the actions taken by organizations across the Company in response to the 2022 survey results. This includes the continued support and communication by the executive management, the leadership enablement campaign through which the Leadership Toolkits focus on four areas: Enable, Care, Recognize, and Develop are made available to all leaders, the establishment of the Employee Experience Champion Network comprising 500 champions across the Company, as well as "Your Voice Matters" campaign.

The survey result provided insights into Aramco's global workforce, representing a step forward in elevating employee experience. As the organization interprets and acts on these insights, it aims to cascade results to each business and service line, enabling targeted decisions and actions to boost employee experience and satisfaction.

In 2024, we saw an increase in the overall attrition rate mainly due to the higher rate of involuntary attrition following a workforce optimization exercise carried out during the year, despite a decrease in voluntary separation from resignations and early retirements.

Employees acknowledging performance review meetings
(%)

Employee experience index rating[1]
(%)

Metric	2024	2023	2022
Attrition rate (%)	**2.8**	2.2	2.4
Employee turnover rate by gender* (%)			
Male	**2.8**	2.2	2.4
Female	**2.9**	2.7	4.2

* Metric reported for the first time externally.
1. Previously employee engagement score (%).
2. The Employee Experience Survey is performed every two years. None was conducted in 2023.

Spotlight on Young Leaders Advisory Board

Empowering the young generation to new heights

Established in 2011, the YLAB has set out on a journey to empower, engage, and inspire the youth in Aramco while amplifying their collective voice.

YLAB is empowered to provide input on matters of strategic importance such as E&I, sustainability, well-being, digital transformation, and more. Currently running its ninth cohort, YLAB's 16 members hail from all across the Company and are diverse in background, experience, age, gender, and nationality, allowing young employees from all over the Company to have adequate representation.

In 2024, YLAB continued to promote initiatives to support Aramco's nearly 45,000 young professionals. The team engaged with more than 15,600 young employees, conducted four deep dive studies, and provided over 20 advisory services, delivering actionable recommendations to address youth-related priorities.

The Youth Pulse Survey is conducted to capture insights and understand youth needs. Additionally, YLAB assisted four external organizations in establishing their own youth engagement bodies, further extending its impact beyond the Company.

Engaging with our youth in industrial areas: Focusing on youth in industrial areas is one of YLAB strategic priorities given that more than 67% of all young employees work in these areas. Efforts to engage with young industrial workers are focused on facilitating dialogue between young employees and their management, bridging the gap in both knowledge and experience, and capturing their insights on relevant challenges.

Learning from global leaders: YLAB hosts influential industry leaders, providing a platform for Aramco's young employees to learn from their first-hand advice, experiences, and insights. Notable sessions conducted in the past included the CEOs of companies such as JP Morgan, Accenture, and Lazard to name a few.

Encouraging innovation through Youth Initiated Studies: YLAB supports and guides the youth to innovate and propose solutions to corporate challenges. Since the start of this initiative in 2018, more than 200 youth-initiated ideas were submitted, some of which have led to patents being filed. In 2024, YLAB received 53 submissions, the highest since the launch of Youth Initiated Studies.

Link to strategic enabler:

People

Minimizing environmental impact

Biodiversity and ecosystem services 80
Local environmental impact 84
Water management 86
Product stewardship and waste management 90

The caracal is a medium-sized wild cat that looks rather like a slimmer version of its relative, the lynx. Caracals are very rare in the Arabian Peninsula, being threatened by habitat loss and hunting. A female caracal with two growing kittens was filmed at Aramco's Abha BPA in 2024, indicating that the safe haven of the reserve is making a demonstrable contribution to its conservation in the region.

Our view

We strive to manage the impact of our operations on the natural environment, contributing to the conservation of valuable resources for future generations.

Our ambition

We aspire to have a net positive impact on natural habitats and shared resources.

Our approach

We aim to conserve natural resources and manage the impact of our business activities by harnessing technology and embracing circular economy principles.

We continue to expand our BPAs portfolio to safeguard wildlife and their essential habitats. We are implementing a range of nature-based solutions (NbS) that serve as carbon sinks and investing in companies developing technologies to enhance these efforts.

We are working towards further reducing air emissions by enhancing our systems and assets. Operating in an arid environment, we continue to implement a water conservation program to improve efficiency and utilize groundwater alternatives whenever possible. We deploy technologies to enhance dashboard monitoring of hydrocarbon discharges to water, equipping frontline operators with tools to take corrective actions.

We are implementing circular economy principles by managing industrial waste and converting it into useful products through innovative solutions. This includes diverting spent sulfur recovery catalysts to other industrial facilities for reuse, whenever feasible.

Performance of our key metrics

Minimizing environmental impact

Material issue	Relevant metrics	2024	2023	Status
Biodiversity and ecosystem services See page 80	**Net positive impact (biodiversity and ecosystem services) (%)**	91.0Ⓐ	85.6Ⓐ	The net positive impact rose by 5.4 p.p. compared to 2023, mainly due to the expansion of our BPAs portfolio.
Local environmental impact See page 84	**SOx emissions (metric kilotons)**	145.3Ⓐ	146Ⓐ	In 2024, we achieved a 0.5% reduction in sulfur oxides emissions due to continued improvements in sulfur recovery, operational efficiency, and the availability of SRUs.
	Number of hydrocarbon spills	7Ⓐ	12	In 2024, the number of hydrocarbon spills decreased by 41.7%, and the volume of these spills was significantly reduced by 99.6%. All spills were promptly contained, and thorough cleanup efforts were conducted to mitigate environmental impacts. This substantial decrease is primarily attributed to the preventive maintenance and repair of our pipelines, along with improved procedures.
	Volume of hydrocarbon spills (bbl)	34Ⓐ	8,566Ⓐ	
	Recovered hydrocarbon (%)	49Ⓐ	88Ⓐ	
Water management See page 86	**Freshwater consumption (million m³)**	83.0Ⓐ	89.9Ⓐ	In 2024, freshwater consumption was 83.0Ⓐ million m³, down 7.7% compared to 2023, due to the water conservation efforts and by enhancing freshwater return back to the environment from the ARLANXEO operations globally.
	– Freshwater consumption (water-stressed regions)* (million m³)	30.3Ⓐ	Breakdown not disclosed previously	
	Freshwater withdrawal (million m³)	97.2	135.7	
	Freshwater intensity (m³/boe)	0.02Ⓐ	0.02	
Product stewardship and waste management See page 90	**Industrial waste recycled (%)**	47.8Ⓐ	35.7Ⓐ	Our continued expansion in operations resulted in an increase of the total disposed waste by approximately 6.5%. As a result of applying circular economy principles and initiatives, the percentage of total industrial waste recycled increased by 12.1 p.p.
	Industrial waste disposed (metric tons)	512,980Ⓐ	481,561	

Full metric table on pages 125-126

Our contribution to the UN SDGs

Given water scarcity in Saudi Arabia, Aramco has a large seawater treatment and injection network of facilities. Seawater is used as the primary source of water for oil production and to provide clean water for its workforce and local communities.

Embracing circular economy principles and business models across our operations and activities. This is supported by a circular economy guidebook and circularity maturity assessment to guide organizations across the Company in their circularity journey. Aramco has been implementing circular economy initiatives across various value chains by adopting circular business models that aim to optimize resource utilization and reduce environmental impact. For more information, please refer to Aramco's Circular Economy section on our website.

Aramco has systems in place to manage all discharged water to the sea, meeting government requirements by investing in maintenance and monitoring systems while proactively managing operations to avoid hydrocarbon leaks and spills by maintaining asset integrity throughout the lifecycle.

Aramco aims to deliver biodiversity net gain in support of Vision 2030, SDG15 (e.g., 15.1 (conserve ecosystems) and 15.3 (end desertification and restore degraded land)), and the Saudi Green Initiative.

Partnering with organizations, such as Ipieca and WEF, to help promote good industry practice and better environmental performance. We are also working closely with our suppliers and creating incentives to reward them for improvements in their environmental performance.

* Metric reported for the first time externally.
Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Biodiversity and ecosystem services

Biodiversity

For over nine decades, we have been operating across the diverse landscapes of Saudi Arabia, including vast deserts, mountains, coastal regions, and marine ecosystems. Through our affiliates and JVs, we have industrial facilities across the globe. We strive to promote biodiversity conservation across our operations. Additionally, we endeavor to apply circular economy principles across our business to reduce the impact of our operations.

As countries and businesses develop, our planet's biodiversity has declined, undermining critical ecosystem service benefits, and threatening people's livelihoods and well-being.

In 2022, during the UN Biodiversity Conference (COP 15), 196 countries, including Saudi Arabia, signed the Kunming-Montreal Global Biodiversity Framework (GBF). This framework sets action-oriented global targets to reduce threats to biodiversity by 2030.

Aramco's biodiversity policy is guided by the ambition to become net positive through the application of our biodiversity mitigation hierarchy. Therefore, we aim to protect biodiversity in the areas where we operate and undertake restoration initiatives to revitalize sensitive ecosystems, benefiting the surrounding communities and the planet at large.

Some of our operations are near or partially located in areas with high biodiversity value. While this may impact the natural ecosystem, we have implemented conservation programs to protect and nurture biodiversity, fostering thriving environments.

Net positive impact

We are striving to achieve positive impacts for biodiversity by 2030 in line with the GBF.

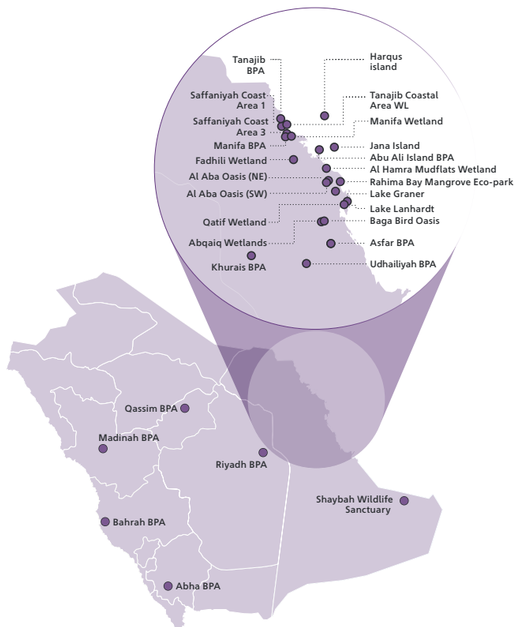
This is realized when the biodiversity gains from our conservation programs exceed the impact of our operations. We calculate net positive impact (NPI) by comparing the surface area of our BPAs against the space occupied by our operational assets.

In 2024, we met our interim NPI target set in 2023, progressing towards our 2025 goal of 95.0%. We also doubled our BPAs from 14 to 28, covering a total area of approximately 1,900 km², achieving an overall NPI score of 91.0%Ⓐ. New BPAs include Jana Island in the Arabian Gulf and Asfar Lake in Al Hasa National Park, along with 12 others that encompass 20 wetlands with multiple lagoons and lakes.

Net positive impact (biodiversity and ecosystem services)
(%)

In 2024, we created maps detailing the botanical species range and desertification risk maps for Saudi Arabia. The Botanical Range Map was developed in collaboration with KAUST. This map highlights the locations of 266 plant species of high conservation priority. The map plots and depicts their known distributions from multiple sources, thus highlighting priority areas for protection, and will be added to our existing Biodiversity Heat Map. The sensitivity index for desertification represents regions by extent of desertification. Having a better understanding of this allows us to more appropriately focus our restoration efforts and better understand which of our high biodiversity regions might be impacted due to the consequences of desertification.

Aramco's Biodiversity Protection Areas



Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Our biodiversity mitigation hierarchy

Governance framework for biodiversity

Avoid

We avoid operating in high-quality habitats

Our policy is to avoid operating in designated UNESCO World Heritage sites and we aim to ensure our operations result in no net loss of biodiversity and ecosystem services in national parks and Key Biodiversity Areas.

Minimize

We minimize our impact

In 2024, we designated additional BPAs, now totaling 28 areas covering approximately 1,900 km². Across all designated BPAs, we identified 844 total species of plants and animals (386 plants, 300 birds, 46 mammals, 32 reptiles, 80 invertebrates).

Restore

We restore degraded habitats

In 2024, Aramco supported restoration projects and planted 185,000 native trees within the Kingdom.

Offset

We offset what we cannot avoid, minimize, or restore

Whenever we intend to offset our impact, we ensure that offsets, such as those from reforestation projects, are assessed and validated by a credible third-party.

We map and monitor to understand the biodiversity around us

We employed a multi-faceted approach to assess and monitor biodiversity, encompassing remote sensing, detailed mapping, and strategic prioritization. This involved rapid biodiversity surveys to identify and characterize natural wetlands, including inland, coastal, and island ecosystems, within the Arabian Gulf and Red Sea regions. These activities are integral to our Natural Wetland Strategy, which is designed to protect and restore these critical habitats, thereby promoting biodiversity recovery and strengthening essential ecosystem services.

We conduct applied research

Aramco engages in collaborative applied research projects with leading local universities in the Arabian Gulf, including King Fahd University of Petroleum and Minerals (KFUPM), and in the Red Sea, in partnership with KAUST. Our main goal is to advance our knowledge of the ecosystems in which we operate. In 2024, we published nine peer-reviewed biodiversity-related articles covering a range of topics such as coral bleaching, reef cryptobiome and benthic biodiversity, phytoplankton, sharks ecology, sea turtles nesting habitats, and the Arabian leopard.

We invest in biodiversity education and awareness

Aramco hosts a Sea Turtle Rescue Center near our Ras Tanura terminal that saves, treats, and releases sea turtles back into the wild, and educates the local community.

Habitat restoration and protection

Aramco is supporting the restoration and protection of the habitat of native animals in the south-western highlands in Saudi Arabia's Asir region, recognized as one of the globally-known biodiversity hotspots, rising above 3,000 meters. The 31 km² Abha BPA safeguarded by Aramco, offers a promising habitat for the reintroduction of the Nubian ibex, native to the region. The Abha BPA is rich in plant diversity, including 138 species (e.g., Acacia species, Desert rose). This year we produced a documentary film about Abha and the species that can be found there. The area provides a habitat for 25 mammal species, including key species such as the Arabian wolf, Striped hyena, Red fox, Blanford's fox, Arabian caracal, Hamadryas baboons, King jird, Honey badger, Cape hare, Indian crested porcupine, and Anderson's Rock Agama.

Field surveys have confirmed the presence of 66 bird species, including regional endemic species like Philby's partridge, Arabian sunbird, and Palestine sunbird.

The Shaybah Wildlife Sanctuary achieved multiple milestones in 2024, particularly in wildlife re-introduction and management. We are contributing to national rewilding efforts of the Arabian oryx, as their population exceeded 340 this year. Additionally, 45 Sand gazelles were successfully released, bringing the wild population to 169.

The breeding program for the Red-necked ostrich allowed for the sanctuary population to reach 50 birds, while the wild population increased to five. Operational efforts in 2024 included extensive animal care, such as chick hatching and veterinary care for ostriches, Houbara bustards, and oryxes. Genetic sampling of ostriches and oryx was conducted in collaboration with the King Salman Royal Reserve, and five GPS collars were deployed on Sand gazelles for tracking. The sanctuary hosted 82 organized delegation visits, highlighting efforts to raise public awareness on biodiversity.

Nature-based solutions

Aramco invests in NbS, which serve as carbon sinks and offer additional benefits. NbS, such as mangroves, provide habitats for diverse wildlife species, nurseries for juvenile marine life, and a crucial natural defense against natural disasters, including shoreline erosion and storms.

Coral reefs

Coral reefs form essential marine ecosystems that support a diverse range of organisms in otherwise nutrient-poor environments. Healthy coral reefs offer enhanced ecosystem service benefits, including habitat provision, coastal protection, source of food and income, and medicinal resources. The designation of BPA with a notable presence of coral along the shores of Jana Island aids in the conservation of coral reef ecosystems. Additionally, the Company's support of the Okinawa Coral Reef Conservation Consortium in Japan has been ongoing since 2011.

In 2024, Aramco Asia Japan (AAJ) engaged with the local community to enhance their understanding of coral biology and ways to mitigate coral bleaching.

The Saudi Aramco-KAUST Marine Environment Observations Center (SAKMEO) is leading marine ecosystem research efforts in the Saudi Arabian Red Sea region. The focus of this initiative is on studying the coastal and offshore areas of the Red Sea, with a particular emphasis on addressing key challenges such as marine protection, coral reef monitoring, and conducting baseline environmental studies. Utilizing advanced modeling and forecasting systems, SAKMEO has successfully developed predictive models to understand the potential impact of oil incidents on the marine environment and take proactive measures to mitigate any adverse effects.

One of the recent accomplishments includes the publication of a comprehensive booklet summarizing a decade of marine research in the Red Sea, along with several scientific publications on coral reef monitoring, including studies on coral bleaching response, reef cryptobiome diversity, and the functional diversity of reef fishes.

Abu Ali Fish Hatchery

The Abu Ali Fish Hatchery reflects Aramco's focus on NbS. Located at Abu Ali Island, this facility aims to promote a positive net gain in biodiversity and enhance ecosystem integrity. It acknowledges the vital interconnection between aquaculture and fisheries as essential components of the integrated coastal area system. The facility will operate using a fully Recirculating Aquaculture System (RAS) capable of simultaneously producing up to four native species until they reach the juvenile stage. These fish juveniles will be released into the Arabian Gulf, guided by ecological studies to contribute to optimal outcomes, such as increased survivability and enhancement of biodiversity. In alignment with national sustainability goals, the facility will be handed over to the Ministry of Environment, Water and Agriculture (MEWA) by Q4 2025.

Wetlands initiatives

Aramco pursues efforts to conserving natural wetlands, including lakes, intertidal mudflats, coastal lagoons, reedbeds, and coral islands, as well as various other ecosystem types[1]. Wetlands are often considered as biodiversity hotspots (regions with high levels of plant endemism that have experienced habitat loss), especially in arid regions, yet they face significant threats, with 64% to 71% lost globally since 1900[2]. They exhibit some of the steepest declines in biodiversity, with freshwater species suffering population reductions of as much as 85%[3]. Wetlands provide a vast array of ecosystem service benefits, including water quality improvement, flood control, coastline protection, fisheries support, and eco-tourism[4].

A comprehensive assessment of numerous wetlands on Aramco land was conducted in 2023. As a result, in 2024, 20 of these wetlands were officially designated as BPAs, covering 130.9 km². These include Lake Lanhardt, located within the Company's Dhahran camp, which has recorded 230 bird species, including globally threatened species, and Asfar Lake, recognized internationally as both an Important Bird and Biodiversity Area (IBA) and a Key Biodiversity Area (KBA), and a potential candidate for government-protected areas, with 180 species of birds and mammals recorded. This designation marks a step towards restoring their ecological integrity, mitigating existing and potential threats to biodiversity, and establishing a program for ongoing ecological monitoring of wetlands' health.

Outcrop preservation initiative

Aramco has identified 408 geological outcrops across the Kingdom that hold scientific, educational, historical, ecological, and touristic value. Aramco supports the protection of 139 of these sites by installing information and warning signs, and placing a protective fence around the most endangered outcrops. Additionally, Aramco has applied to protect another 234 significant outcrops located outside its operational areas and has requested the Saudi Government to include them in the UNESCO Global Geoparks Program.

Sustainability in action

Supporting the Saudi Green Initiative

Aramco supports research in the Kingdom to combat desertification and promote land restoration. In partnership with KAUST's spinoff company Terraxy, Aramco has explored optimal methods for planting native trees as part of the Saudi Green Initiative. Field trials have been conducted at six different Aramco facilities between 2021 and 2024 with the successful planting of over 500 native trees in Khurais and other locations.

The first technology deployed was hydrophobic sand – a water-repellent mulch that reduces water evaporation from wet soil and improves irrigation efficiency. Research found that hydrophobic sand decreases water evaporation from the soil by 50% to 80% compared to bare soil or common sand. The second solution involved an advanced form of biochar made from date palm biomass waste, which enhances fertilizer-use efficiency, improves soil health, and sequesters carbon dioxide. The combination of these two technologies increases soil nutrient content, conserves water, and improves vegetation.

Additionally, Aramco plans to increase the use of treated sewage effluent in its community areas from 25% to 45% and reduce dependence on groundwater from 75% to 30% by 2028.

Aramco is also collaborating with the National Center for Vegetation Cover Development & Combating Desertification (NCVC) in Saudi Arabia. The project aims to plant 500,000 trees and 500 million seeds by 2035, supporting both the Kingdom's and the Company's GHG emissions mitigation ambitions. To date, we have successfully planted over 90 million seeds.

Link to strategic theme:
Localization and the promotion of National Champions

Link to strategic enabler:
Technology

Plant growth comparison at the Khurais tree plantation

1. The Convention on Wetlands, 2025.
2. Marine and Freshwater Research, 2014.
3. WWF, 2024.
4. International Journal of Biodiversity Science, Ecosystem Services & Management, 2015.

Local environmental impact

Since 2012, our operations have been guided by Aramco's EMS, which provides a systematic and structured approach to ensure compliance with local environmental regulations, and promotes the adoption of international best practices. In 2024, 95%Ⓐ of Upstream and Downstream asset-based organizations under Aramco control achieved ISO 14001 certification. To oversee environmental management performance, we conducted 22 EMS assessments on these assets this year.

In 2024, we conducted 134 environmental and health corporate assessments across various Company organizations, including five affiliates. These assessments covered a broad range of environmental protection disciplines including air quality, water management, wastewater, solid industrial/hazardous waste, environmental health, radiation protection, and industrial hygiene.

Air emissions

Aramco monitors its air emissions and, where necessary, implements measures to reduce their impact on our workforce, local communities, and the environment.

Aramco produces five grades of crude oil: Arabian Heavy, Arabian Medium, Arabian Light, Arabian Extra Light, and Arabian Super Light, each with varying sulfur contents. Addressing sulfur content of our crude has been a main focus, both in crude oil pretreatment and during combustion.

Our initiative to upgrade the SRUs with tail gas treatment units continued in 2024 as we examine opportunities to generate revenue from sulfur. We are leveraging tail gas treatment units to support our compliance with applicable SOx regulations, and more companies in the industry are adopting the technology. Our facilities are conducting a gas analysis of sulfur recovery, exploring corrosion challenges in SRU pits, and one of our gas plants has deployed machine learning to optimize temperature and flow of molten sulfur in the pipelines.

Aramco sulfur oxides (SOx) emissions were 145.3Ⓐ metric kilotons – a slight decrease compared to 2023 due to improved sulfur recovery.

SOx emissions
(metric kilotons)

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Nitrogen oxides (NOx) emissions from our operations primarily result from the combustion of hydrocarbon fuels used for generating electric power and heating in our facilities. We plan to reduce these emissions by optimizing our energy consumption and utilizing alternative fuels and renewable electric power.

Our corporate environmental standards, along with national environmental regulatory standards, establish the limits on NOx emissions from our facilities. To ensure compliance with the Kingdom's regulations, we have initiated upgrade projects to install low and ultra-low NOx burners in our facilities. We also utilized partial nitrogen purging in the flare heads to reduce environmental impact at three gas compression plants (GCP), that to date operate with a continuous flaring of 60% N_2 and 30% gas mix instead of the usual 100% gas.

We are working towards deploying volatile organic compounds (VOCs) control systems by installing vapor recovery systems in our bulk loading facilities to reduce VOCs associated emissions, across our Upstream and Downstream assets.

In addition, Aramco researchers have developed the double Gasoline Particulate Filter (dGPF) technology to reduce emissions from the end use of fuels. This technology is currently being demonstrated on a vehicle in collaboration with a European automaker. Following successful laboratory results, road tests on various city roads in Paris have shown the potential to lower particulate number (PN) emissions, a regulated pollutant, to below ambient levels at the tailpipe.

Sustainability in action

Our efforts to manage air emissions

In 2024, we improved the fuel efficiency of fired heater operations by placing interlocking hexagonal blocks after the burners to enhance the mixing of combustion products. This innovative technology was installed in the SRUs' thermal oxidizers at Shedgum gas plant. It resulted in a reduction of ~13.2% in fuel gas consumption, avoiding the use of 80.8 MMscf/year. Shedgum implemented a valve sealing methodology to prevent flaring of acid gas that could have resulted in ~18,020 tons of SOx emissions. Additionally, the electrification of a steam methane recovery unit, transitioning to electric-powered equipment, increased energy efficiency and eliminated air pollutants.

Link to strategic enabler:

Technology

Sustainability in action

Motiva's autonomous drone pilot program

Aramco's wholly-owned subsidiary in the USA, Motiva, has initiated a six-month pilot program of an Unmanned Aerial Vehicle (UAV), or drone, to assist with inspections at height at the Port Arthur Manufacturing Complex (PAMC), Texas. The Percepto drone is an advanced autonomous drone and the only "drone-in-a-box" solution equipped with optical gas imaging (OGI). This technology represents a step forward in digitalization and innovation at Motiva. The drone is expected to demonstrate its capabilities across various use cases, such as monitoring tanks and pipelines for emission detection, detecting potential fence line security intrusions, and emergency responses.

Percepto drones utilize a dual-camera system featuring normal imaging capture and OGI capabilities. These cameras are certified by the EPA to detect VOCs and can capture high-resolution images and videos of gas leaks for emission detection and compliance purposes.

The Percepto drone at PAMC is designed for autonomous, scheduled flights. Beyond these routine, scheduled flights the system allows for on-demand flights as requested by Motiva, providing flexibility to respond to urgent situations, such as emergency incidents.

At the conclusion of the pilot in June 2025, the project team will present their findings to PAMC Site Leadership Team for a final decision on implementation. Embracing technologies like this, which are aimed at enhancing our inspection capabilities, contributes to a safer and more sustainable future. Motiva's autonomous drone pilot program complies with FAA regulations, and PAMC is in constant coordination and communication with nearby Jack Brooks Regional Airport.

Link to strategic enabler:

Technology

Spills to the environment

Aramco operates across a vast expanse with many sites in remote areas. This presents challenges in detecting spills onshore and offshore, as well as in responding promptly to spill incidents.

To progress towards the target of zero spills, we aim to mitigate geographic challenges by implementing rigorous inspection programs to assess asset integrity, establishing fail-proof measures, providing comprehensive employee training, and adopting advanced technologies for detecting potential failures and responding to spills. We enhance our oil spill prevention and mitigation activities by sharing best practices among various teams and regions within the organization and collaborating with universities on oil spill monitoring and mitigation technologies.

Aramco conducts regular oil spill drill procedures for its hydrocarbon handling facilities and, in the event of any spills, we have response plans that enable rapid mitigation. The Oil Spill Committee oversees the approval of appropriate policies, strategies, plans, and actions regarding oil spill prevention, containment, and clean-up for Aramco and its subsidiaries.

In 2024, the number and volume of hydrocarbon spills fell significantly (a 41.7% fall in number of hydrocarbon spills, and a 99.6% decline in volume of hydrocarbon spills compared to 2023).

While we aspire for zero oil spills, we regrettably had seven oil spills, which led to a volume of 34Ⓐ barrels being spilled. Of these spills, 42.8% occurred offshore. All spills were promptly contained by the response team, and the affected sites were rehabilitated to eliminate further environmental impacts. Through our recovery efforts, we were able to recover 49%Ⓐ of hydrocarbons. All accidental spills applicable for recovery were fully recovered. However, the reported recovered hydrocarbon figure also includes hydrocarbon discharges to water from regular operations, which are unrecoverable.

	2024	2023	2022
Number of hydrocarbon spills	**7**Ⓐ	12	15
Volume of hydrocarbon spills (barrels)	**34**Ⓐ	8,566Ⓐ	142,885Ⓐ,1
Recovered hydrocarbon (%)	**49**Ⓐ	88Ⓐ	9Ⓐ,1

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.
1. In 2022, the largest spill was due to an incident concerning a major loss of containment of crude that caught fire. Due to the combustion of the crude, the majority of it was not recoverable, leading to a low hydrocarbon recovery rate for 2022.

Water management

With many of its operations in a hyper-arid environment, Aramco has long recognized the value of water.

Aramco's water conservation efforts involve supplementing water supply with alternative sources, implementing water-efficient practices, increasing wastewater reuse, and decreasing water losses at operating facilities and communities.

For instance, this year, water initiatives at Haradh gas plant led to a 18,000 m^3 reduction in freshwater consumption. We also piloted a water leak detection and repair (WLDAR) digital solution at Khursaniyah gas plant. The solution monitors and analyzes the entire water cycle in the plant to determine the severity and location of leaks as they occur. Additionally, we deployed AquaSight – an inhouse water digital dashboard that offers advanced analytical capabilities to manage and plan water consumption in unconventional gas drilling operations.

We supported water circularity by expansion of treatment and storage of water-based mud and brine for further reutilization of fracking fluids. During 2024, zero liquid discharge (ZLD) technology has been deployed. The ZLD distillate was reused for fracturing operations, further supporting water circularity. Notably, the ZLD technology has continued to receive global recognition, earning the "Special Meritorious Award for Engineering Innovation (MEAs)" in 2024 under the Water Management category.

In 2024, freshwater consumption was 83Ⓐ million m^3, a reduction of 7.7% compared to the previous year's performance, due to Aramco's water conservation efforts. In order to enhance water conservation performance of the Company facilities, Aramco completed 16 water conservation assessments in its upstream, downstream, and community facilities. Moreover, recognizing the value of water, especially given the harsh arid conditions we operate in, the majority of our freshwater consumption is sourced from regions that are not classified as water-stressed.

Freshwater consumption
(million m^3)

0.02Ⓐ m^3/boe
Freshwater intensity

	2024	2023	2022
Freshwater consumption (million m^3)	**83.0**Ⓐ	89.9Ⓐ	93.6Ⓐ
Freshwater consumption – water-stressed regions (million m^3)	**30.3**Ⓐ		Breakdown not disclosed previously
Freshwater withdrawal (million m^3)	**97.2**	135.7	136.6
Freshwater intensity (m^3/boe)	**0.02**Ⓐ	0.02	Metric not previously disclosed

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Wastewater and discharges to water

Aramco generates large volumes of wastewater and acknowledges the importance of responsibly managing and treating it before releasing it back into the environment. To manage the challenges of the Company's ongoing expansion programs and comply with applicable environmental regulations, a comprehensive wastewater effluent treatment and monitoring program has been established. The program aims to protect both the environment and public health, by adhering to Aramco's wastewater compliance and engineering standards, optimizing the design of wastewater facilities to enhance treatment and management of generated wastewater, and maintaining a vigilant monitoring program for wastewater discharge.

The relevant national and international frameworks and standards inform how we deal with wastewater and discharges to water. This includes the Executive Regulations for the Protection of Aqueous Media from Pollution, amongst other Saudi Arabia Government Environmental Standards; and Ipieca's Oil and Gas Industry Guidance on Voluntary Sustainability Reporting – Discharges to Water.

In addition, a collaborative work of our upstream operations and researchers led to the production of hydrogen from wastewater in an evaporation pond through photocatalytic reactions. This was piloted in the laboratory and a demonstration plant has been constructed at Shedgum gas plant. This patented technology marks the first instance of utilizing wastewater to produce hydrogen.

In 2024, the volume of hydrocarbon discharge to water was 11.6Ⓐ barrels, which is 18.9% lower than in 2023. Driven by the Corporate Digitalization Vision, the Company continues to improve its monitoring capability of the volume of hydrocarbon discharge to water (HC_2W) through a dedicated HC_2W dashboard. Aramco has revamped the monitoring capabilities of the HC_2W dashboard through the use of hydrocarbon in water online analyzers that provide enhanced data collection. In addition, regular preventive maintenance has been performed on heat exchangers utilizing cooling mediums, such as sea water. This has improved the integrity of the heat exchangers and prevented hydrocarbon leaks due to corrosion.

Hydrocarbon discharge to water
(barrels)

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Spotlight on water management at Aramco

Water conservation efforts at Upstream operations

We recognize the vital importance of water conservation in our in-Kingdom operations and have established a comprehensive framework built around two focus areas as part of the Company's water neutrality aspiration.

First, we aim to reduce our reliance on groundwater sources by identifying alternative water supplies, optimizing well design, and implementing managed aquifer recharge techniques. Secondly, we strive to optimize our water use by streamlining processes, upgrading equipment, and training personnel to promote a culture of water stewardship.

Focus areas

- **Reduce groundwater use**
- **Optimization and efficiency**

Pillars

To help achieve our goals, we have identified three core pillars that underpin our water conservation framework:

Reduce dependency on groundwater
Utilize treated/desalinated seawater, greywater reuse, and wastewater recycling.

Lower water unit cost
Implement innovative solutions like membrane bioreactors, solar-powered desalination, and smart pumping systems.

Reduce water-related CO_2 emissions
Incorporate renewable energy and efficient practices.

Enablers

We have identified five enabler categories that support our water conservation objectives:

System design modifications
Optimize existing infrastructure and design new systems that reduce water loss and enhance recovery. This includes installing low-flow fixtures, promptly repairing leakages, and using flow-restrictive devices that can reduce non-essential water consumption.

Advanced technologies
Leverage advanced technologies to monitor, manage, and treat water more effectively, reducing water consumption. Tools include real-time monitoring platforms, machine learning algorithms, and precision irrigation control systems.

Nature-based solutions
Embracing nature-based approaches, such as wetland restoration and green roofs, to harness the power of ecosystem services and enhance biodiversity while conserving water. These methods also provide benefits like improved air quality, noise reduction, and habitat creation.

Digitalization solutions
Harness digital innovations like Internet of Things (IoT) sensors, predictive analytics, and smart monitoring systems to detect leaks, predict demand, and make informed decisions about water allocation. Real-time insights enable swift action, preventing unnecessary waste, and enhancing operational responsiveness.

Research and development
Collaborate with experts and invest in R&D initiatives to keep up with emerging trends, identify potential solutions, and continuously improve our water stewardship practices. Partnerships with academia, startups, and industry peers facilitate knowledge sharing, accelerating innovation and adoption of advanced technologies.

Our efforts

From the Arabian Gulf to the depths of a reservoir

Qurayyah seawater plant (QSWP) on the Arabian Gulf is one of the largest operations of its kind in the world with an expansive network of facilities across the Company's fields. It treats seawater and transports it to many fields for pressure maintenance, thereby preserving valuable groundwater and helping protect marine life. Its annual maximum capacity for groundwater savings is equivalent to the entire industrial sector's annual groundwater demand in Saudi Arabia.

1978
QSWP establishment

2.2
Million m^3 per day

650+
Injection wells are supplied by QSWP

Closed loop drilling

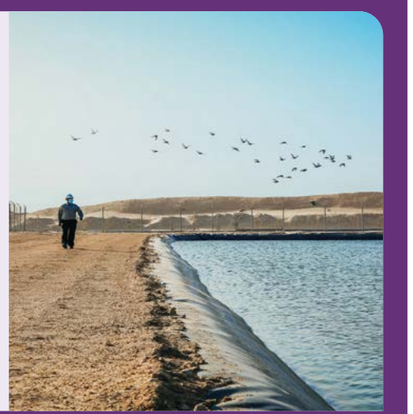
Sustained groundwater supply is the primary focus area for the Drilling & Workover (D&WO) Organization. Among various water conservation initiatives implemented, closed loop drilling has led to reductions in water consumption. The adoption of practices and services such as improved solids control, high-efficiency tank cleaning, completions filtration system, and water storage tanks have reduced the use of groundwater. In 2024, D&WO drilled 449 wells using closed loop practices which reduced groundwater consumption by 4.4 million m^3.

4.4
Million m^3 of water is reduced in 2024

449
Drilling wells using closed loop in 2024

Treated sewage effluent

In concerted efforts to preserve the Kingdom's precious groundwater resources, Unconventional Resources (UR) has developed a two-phase strategy to reduce environmental impact while ensuring operational efficiency. This approach prioritizes the long-term sustainability of our water resources. The short-term solution utilizes treated sewage effluent (TSE), which underwent rigorous trial testing. TSE is now sourced from the Al-Omran processing plant and efficiently transferred to frac sites. A long-term solution using reverse osmosis (RO) technology is considered to be implemented in the future.



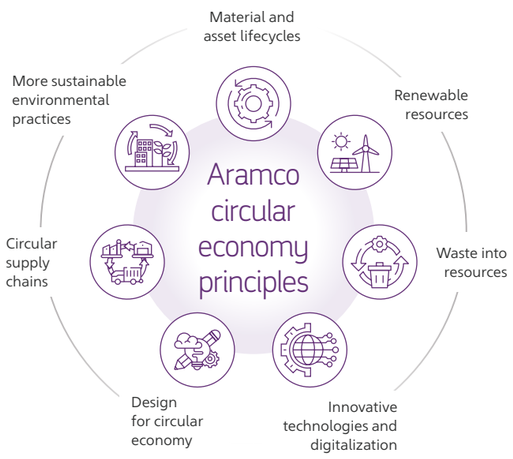
4.1
Million m^3 of groundwater is being conserved in 2024

Product stewardship and waste management

Aramco aims to implement circular economy principles across its operations to lower GHG emissions, reduce pollution and waste, enhance process efficiency, and provide innovative solutions for a more sustainable future.

Circularity in industrial waste management

To support transformative change, we introduced the Circular Economy (CE) Corporate Policy in 2024. This policy emphasizes the Company's dedication to the circular management of resources and defines Aramco's circular economy principles. Moreover, we established circular economy mandates to guide and encourage the adoption of circularity in our operations, in accordance with international standards, such as ISO 59004, ISO 59010, and ISO 59014.



In 2024 we have implemented over 300 circular economy initiatives across various value chains, with the aim to improve circularity, operational efficiency, safety, economic performance, and social impact. The initiatives include:

- **Pipelines circularity program:** Aramco Pipelines Organization launched a circular economy program to enhance operational efficiency, safety, economic performance, and social impact. The program includes circular practices such as material and water recycling, selling unused pipes, 3D printing, and reusing drained oil. As a result, 21,000 tons of pipelines were effectively utilized.
- **Asset lifecycle improvement:** Aramco's Upstream facilities have adopted 3D printing to produce in-house parts that act as seals, preventing foreign materials from entering valve internals and improving valve reliability. The Drilling and Workover circular economy efforts included 16 initiatives, saving an estimated $816 million. The largest initiative involved recycling and transferring 0.5 million m^3 of drilling mud between rigs.
- **Excess material reutilization:** Aramco's Corporate Maintenance Services Department has established the Excess Material Management System, which employs various circular business models to optimize resource use and reduce waste. This system has led to the reutilization of 500,000 tons of materials.

Sustainability in action

Turning waste into roads

Aramco and SABIC have created an advanced functionalized polyolefin using ground tire rubber waste. This new material acts as a bitumen compatibilizer for a new generation of quiet and durable roads, incorporating up to 10-12% ground tire rubber. This recycling technology not only upgrades tire and plastic waste, but also helps reduce microplastic contamination in road dust. The roads built with this material demonstrate long-term stability, resistance to rutting across a wide range of temperatures, and an extended lifespan, making them suitable for harsh conditions. The technology has been validated by the Ministry of Transport laboratories, with plans for heavy truck road demonstrations in 2025.

Link to strategic enabler:

Technology

Sustainability in action

ISCC PLUS certifications

Yanbu NGL has achieved the ISCC PLUS assessment with no major non-conformities. The ISCC is a globally recognized certification system that verifies the sustainability attributes of feedstocks, enhancing the credibility of our facility operations. Conducted over three days by Cotecna, the ISCC PLUS certificate was awarded in 2024. This certification underscores Aramco's efforts towards more sustainable practices and reinforces our contribution to the circular economy.

Aramco's wholly-owned subsidiary, ARLANXEO, has embarked on a journey to have all of its assets certified for producing and selling products based on ISCC PLUS. Meanwhile ARLANXEO has certified products from a variety of plants across the globe, producing ethylene propylene diene monomer (EPDM) rubber, butyl rubber, chloroprene rubber, butadiene rubber, and EVM rubber. Initial sales for these products have been established. In addition, ARLANXEO has set a goal to prepare and maintain product environmental footprint (PEF) calculations for all of its products, which has been performed already for EPDM and nitrile rubber products. The PEF of a product, based on life cycle analyses, takes into account all aspects for making the product from cradle to gate and considers the sources of raw materials and energy. As a result, ARLANXEO can offer EPDM products (Keltan®) with widely varying environmental footprints. Driven by sustainable innovation, ARLANXEO developed Keltan® ECO-B, the world's first commercial EPDM produced in Brazil from bio-based feedstock. The product offering is further completed with Keltan® ECO-BC, produced in The Netherlands, based on ISCC PLUS-certified feedstock.

Link to strategic enabler:

Portfolio optimization

Industrial waste management

In 2024, Aramco made progress in reducing and diverting landfilled waste by following the corporate waste management strategy. This progress is maintained by conducting waste reduction assessments to identify opportunities to reduce industrial waste generation and enhance the implementation of more sustainable practices across our operations.

Our continued expansion in operations resulted in an increase of the total disposed waste by approximately 6.5%. As a result of applying circular economy principles and initiatives, the percentage of total industrial waste recycled increased from 35.7%Ⓐ to 47.8%Ⓐ.

As part of the corporate waste strategy, we introduced improvements in the focus areas of drilling and industrial waste. These efforts led to the development of a Circular Economy and Waste Tracking Solution, the creation of site-specific waste stream management plans, and enhancements to the qualification process for local waste management service providers. The strategy encompasses all Company organizations and establishes action plans for each focus area, including industrial, municipal, drilling, and naturally occurring radioactive material (NORM).

Furthermore, the Drilling and Workover Circularity Program has continued implementing its closed-loop initiative at 449 well sites, resulting in a 27.0% reduction in wastewater, equivalent to 0.6 million m^3, for wells that adopted this initiative. We have also continued utilizing automatic crude oil tank cleaning technologies to recover hydrocarbons from oily sludge tank bottoms at our downstream operating facilities. Additionally, we piloted a hydraulic cavitation and shock technology at Shaybah Producing to recover hydrocarbons from oily waste. Tricanter technology, which separates waste into three phases (oil, water, and inert solids), was piloted at Khurais Producing, achieved 40% oil recovery and 50% water recovery, and is planned to be implemented for industrial waste management across other production sites. In collaboration with the cement industry, we circulated spent Claus (alumina) catalysts from our upstream operating facilities, recycling 1,500 metric tons of the catalyst into feedstock for cement production.

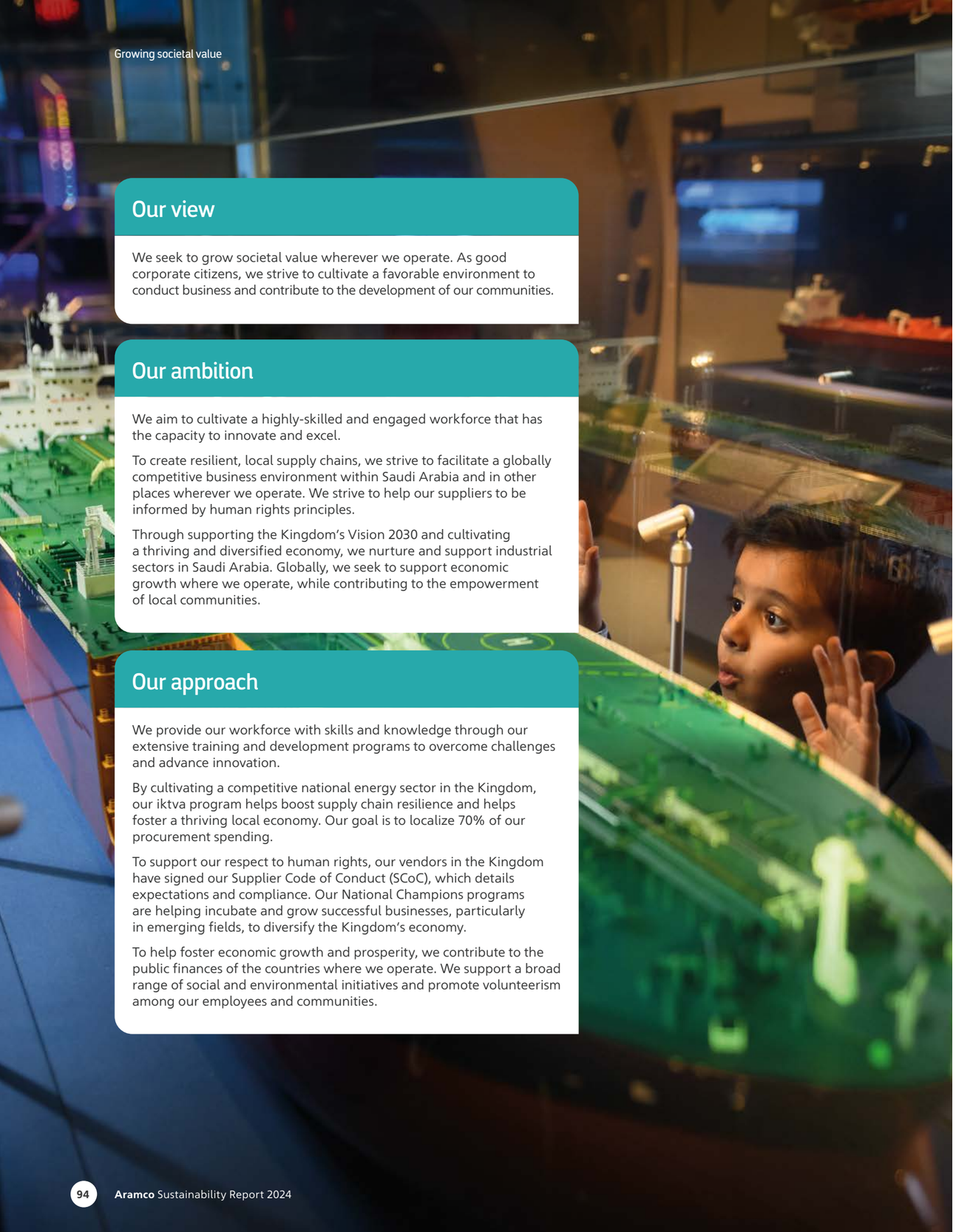
	2024	2023	2022
Industrial waste recycled (%)	**47.8**Ⓐ	35.7Ⓐ	39.9Ⓐ
Industrial waste disposed[1,2] (metric tons)	**512,980**Ⓐ	481,561	318,656
Industrial waste disposed – Upstream (metric tons)	**320,287**	253,044	Breakdown not disclosed previously
Industrial waste disposed – Downstream (metric tons)	**138,855**	174,790	Breakdown not disclosed previously

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found online in the Sustainability section of our website.
1. The name of this metric was changed from industrial waste generated to industrial waste disposed in 2023. The definition of the metric remained the same.
2. Industrial waste disposed number includes operationally controlled affiliates and other waste streams not generated by Upstream and Downstream operations.

Growing societal value

Economic contribution 96
National content 97
Human rights in the supply chain 103
Community and society..... 104

Aramco's iExplore Biodiversity STEM program, running for over a decade, partners with the Houston Museum of Natural Science to offer immersive workshops and field trips for students. Focused on biodiversity, it engages students through exhibits, hands-on learning, and classroom resources, inspiring STEM interest and environmental awareness.



Our view

We seek to grow societal value wherever we operate. As good corporate citizens, we strive to cultivate a favorable environment to conduct business and contribute to the development of our communities.

Our ambition

We aim to cultivate a highly-skilled and engaged workforce that has the capacity to innovate and excel.

To create resilient, local supply chains, we strive to facilitate a globally competitive business environment within Saudi Arabia and in other places wherever we operate. We strive to help our suppliers to be informed by human rights principles.

Through supporting the Kingdom's Vision 2030 and cultivating a thriving and diversified economy, we nurture and support industrial sectors in Saudi Arabia. Globally, we seek to support economic growth where we operate, while contributing to the empowerment of local communities.

Our approach

We provide our workforce with skills and knowledge through our extensive training and development programs to overcome challenges and advance innovation.

By cultivating a competitive national energy sector in the Kingdom, our iktva program helps boost supply chain resilience and helps foster a thriving local economy. Our goal is to localize 70% of our procurement spending.

To support our respect to human rights, our vendors in the Kingdom have signed our Supplier Code of Conduct (SCoC), which details expectations and compliance. Our National Champions programs are helping incubate and grow successful businesses, particularly in emerging fields, to diversify the Kingdom's economy.

To help foster economic growth and prosperity, we contribute to the public finances of the countries where we operate. We support a broad range of social and environmental initiatives and promote volunteerism among our employees and communities.

Performance of our key metrics

Growing societal value

Material issue	Relevant metrics	2024	2023	Status
National content See page 97	**Saudization of Aramco's workforce (%)**	90.2	90.3	Aramco continues to contribute to the Kingdom's Saudization program, whereby 90.2% of our employees are Saudi nationals. The Saudization of construction contracts reached 26.6% (versus 29.7% in 2023), impacted by various ongoing projects within the Kingdom.
	Saudization of construction contracts (%)	26.6	29.7	
	Saudization of service contracts (%)	55.6	56.2	
	Cumulative iktva GDP contribution ($ billion)	240.0	202.9	Aramco's total procurement spending is estimated to have contributed $240.0 billion in GDP since iktva's inception in 2015, when considering the direct and indirect supply chain contribution to the Kingdom's economy. This result was driven by an increase in in-Kingdom spending, growth in local investments, and increased supplier contributions across all other iktva components, such as: Saudi hiring and training, local R&D activities, and supplier development.
	Number of people on Aramco sponsored community education programs	15,400	15,099	The number of people in our sponsored community programs increased by 1.9% compared to 2023, demonstrating our ongoing efforts in building capacity and capabilities of local people in Saudi Arabia.
Community and society See page 104	**Social investment ($ million)**	583[1]	475	In 2024, we made social investments of $583 million[1] in Saudi Arabia and abroad. Aramco 2024 social spending increased by over 20% compared to 2023, representing the Company's efforts to support local communities. This increase aligns with Aramco's expanded global operations and its ambition to drive positive social impact on the local communities of these markets. More details on some of these projects are provided on page 104.
	Total number of volunteers[2]	21,192	7,037	Aramco fosters a volunteering and giving mindset among both employees and community members across a range of programs and initiatives. The total number of volunteers and total number of volunteer hours increased compared to 2023.
	Total number of volunteering hours[2]	223,785	171,633	

Full metric table on pages 127-128

Our contribution to the UN SDGs

Aramco has various social investment programs, which look to improve the health and well-being of our host communities around the world.

Aramco promotes lifelong learning and development by building schools and establishing market-driven training centers for a skilled Saudi workforce. The Company also supports education efforts from science hackathons to biodiversity awareness programs in the countries where we operate.

Aramco is expanding its investments beyond traditional oil and gas sectors to stimulate economic growth and create employment opportunities. Aramco is venturing into lithium production, essential for EV batteries, through a partnership with Ma'aden. This initiative aims for commercial production by 2027, aligning with global energy transition trends and fostering job creation in new industries.

Sustainable Industry: Aramco prioritizes a top-tier local supply chain for more sustainable energy solutions. Diverse Infrastructure: Aramco's Kingdom-wide infrastructure contributions span natural gas, roads, educational facilities, and cultural centers.

Partnering with governments, suppliers, non-profit organizations, and education institutions. During 2024, $583 million[1] was invested in various social initiatives, supporting more than 100 non-profit organizations around the world. More information on Aramco's social investments can be found on page 104.

1. In 2024, the boundary for this metric has been expanded to operational control, as it now includes our overseas subsidiaries, like ARLANXEO and Motiva. Under the prior year reporting boundary, the social investment would be $581 million.
2. In 2024, Aramco's wholly-owned operated assets, SASREF, Motiva, ARLANXEO, and Aramco Trading Company (ATC), were included in the report which contributed to the total number of volunteers and volunteering hours.

Economic contribution

Operating in over 50 countries and engaging across the entire value chain, Aramco strives to create value and foster positive economic impacts in every location we serve. In Saudi Arabia, our cumulative iktva GDP contribution has reached $240.0 billion, reflecting our effort in contributing to local economic growth.

In 2024, Aramco's global social spending increased by over 20%, compared to 2023, to $583 million[1], reinforcing our ambition to support local communities and funding a broad range of social and environmental initiatives worldwide. This growth aligns with the expansion of our global operations and underscores our focus on driving meaningful social impact across the markets we serve.

Aramco contributes to the local economy in the countries where we operate, transferring $204 billion to the Saudi and foreign governments in taxes, royalties, and other payments in 2024.

$583 million
Social investments
(2023: $475 million)[1]

$1.6 billion
R&D spend
(2023: $1.4 billion)[2]

$437 billion
Revenue
(2023: $441 billion)

$240.0 billion
Cumulative iktva GDP contribution
(2023: $202.9 billion)

$204 billion
Payments to the Saudi and foreign governments
(2023: $206 billion)[3]

$127 billion
Dividends
(2023: $102 billion)[4]

$106 billion
Net income
(2023: $121 billion)

Sustainability in action

Supporting R&D activities in Saudi Arabia

Aramco signed a Memorandum of Understanding (MoU) in 2024 with KAUST to provide up to $100 million over 10 years to support research that focuses on environmental and commercial projects. The MoU aims to support collaborative projects related to the energy transition, sustainability, materials transition, upstream technologies, and digital solutions, with ambitions on developing commercially-viable outcomes.

Research is expected to focus on areas such as liquids-to-chemicals conversion, future refineries research, and LCAF. The MoU's priorities include hydrogen, CCS, renewables, and energy storage solutions, while additional projects are expected to focus on advanced carbon materials and geothermal energy.

Link to strategic theme:
Localization and the promotion of National Champions

Link to strategic enabler:
Technology

1. Social investment for Aramco is defined as money spent on social and environmental initiatives which benefit societies. In 2024, the boundary for this metric has been expanded to operational control, as it now includes our overseas subsidiaries, like ARLANXEO and Motiva. Under the prior year reporting boundary, the social investment would be $581 million.
2. This figure covers entities under Aramco Group.
3. Figures include income taxes, royalties, and dividends to the Saudi Government.
4. Dividends paid include dividends to shareholders and non-controlling interests in subsidiaries.

National content

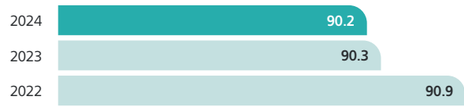
Aramco possesses a longstanding tradition of fostering education and professional development for both Saudi nationals and our international workforce. By investing in schools, providing comprehensive training opportunities, and supporting thousands in their undergraduate and postgraduate studies, we are developing a future-ready workforce.

Our efforts help equip Saudi men and women with the skills necessary to drive innovation and excellence within our Company and contribute to the broader development of the Kingdom.

Saudization: Building local workforce and supply chain

Aramco continues to develop local talent and strengthen national capacities in alignment with the Kingdom's Saudization program. In 2024, Saudi nationals accounted for 90.2% of our workforce, reflecting our dedication to empowering local citizens. Additionally, we continue progressing the Saudization of service contracts, accounting for 55.6% of total contracts in 2024, with the rate for construction contracts at 26.6%.

Saudization of Aramco's workforce
(%)



Saudization of construction contracts
(%)

Saudization of service contracts
(%)

iktva

Aramco's in-Kingdom Total Value Add (iktva) program continues to be a key focus of our efforts to localize supply chains and drive economic growth in Saudi Arabia. Its aim is to increase local content in Aramco's procurement spend to 70.0% by the end of 2025.

In 2024, the program achieved an iktva rate of 67.0%, reinforcing our progress toward this aim. Through iktva, Aramco contributed $37.1 billion to Saudi Arabia's GDP, showcasing its role in supporting the Kingdom's economic development.

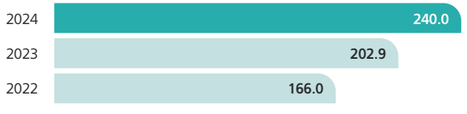
As part of our ambition to strengthening local industries, Aramco entered into 145 corporate purchase agreements in 2024, valued at more than $17.52 billion (﷼65.7 billion). Since the iktva program inception, 350 new local manufacturers were established, introducing 47 items manufactured for the first time in-Kingdom, including drilling chemicals, multi-phase flow meters, demulsifiers, high-performance elastomers, and marine loading arms.

To date, the iktva program has collectively contributed over $240.0 billion to Saudi Arabia's GDP. This achievement underscores the program's role in fostering local economic growth, driving investments, and building a dynamic, Saudi-led industrial ecosystem.

Through iktva, Aramco is catalyzing transformative opportunities for Saudi industries to contribute to the global energy transition, advance the Kingdom's Vision 2030, and unlock their potential to reduce the carbon emissions of the energy industry.

iktva procurement spend in-Kingdom[1]
(%)

Cumulative iktva GDP contribution
($ billion)



Sustainability in action

Empowering local youth through knowledge transfer and engagement

In 2024, Aramco's Jazan Refinery Engineering Department partnered with the College of Engineering at Jazan University to deliver 20 technical workshops. These sessions, led by subject matter experts, aim to bridge between theoretical studies and industry applications for Chemical and Electrical Engineering students.

As part of our corporate social responsibility initiatives, the Jazan Refinery hosted a Field Engagement Program with Jazan University. The program provided students majoring in Science, Chemical, Electrical, and Mechanical Engineering an opportunity to explore refinery operations, engage with specialized divisions, and gain practical insights into the industry.

These initiatives reflect our efforts towards fostering education, skill development, and meaningful community impact, aligning with our focus on social responsibility and citizenship.

Link to strategic theme:
Localization and the promotion of National Champions

Link to strategic enabler:
People

$240.0 billion
Cumulative iktva GDP contribution

1. Applies to the Saudi Arabian Oil Company (the Company).

National Champions

Aramco's National Champions program aims to establish a hub of innovation that fosters business growth, job creation, and economic development in Saudi Arabia. The program acts as an incubator to transform promising business ideas into investment opportunities, nurturing them into successful enterprises. By empowering these National Champions, we are supporting the creation of high-value jobs and contributing to sustainable economic growth in alignment with the Kingdom's vision for the future.

Across Saudi Arabia and beyond, we engage in diverse initiatives with a view to empower development. The following highlights recent achievements of our National Champions, showcasing their impact in creating opportunities, advancing innovation, and supporting economic growth in the regions where we operate.

Spotlight

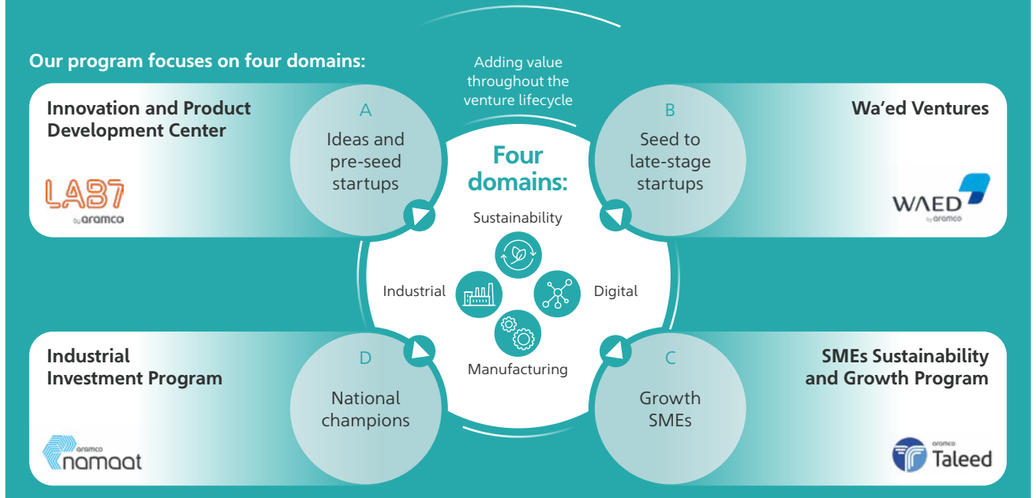
Supporting economic diversification in Saudi Arabia

Aramco's National Champions program is unique in its scale of contribution to a local economy. Since the inception of our National Champions program, we have managed to finalize investments that are expected to create over 78,800 jobs and potentially contribute over $17.9 billion to Saudi Arabia's GDP.

The program is focused around four domains – manufacturing, industrial, sustainability, and digital – to drive development from an initial idea through to a global business.

Link to strategic theme:
Localization and the promotion of National Champions

Our program focuses on four domains:



World-class
A world-class cluster of innovation that drives business and job creation, and national economic growth

+78k
Potential jobs created

+$17.9 billion
Potential impact to Saudi Arabia's GDP

Namaat

Namaat, meaning "growth" in Arabic, partners with global and local stakeholders to help drive large-scale investment opportunities and foster the growth of transformative industries. In 2024, Namaat developed and obtained FID for six transactions, adding $7.9 billion to in-Kingdom Localization Capital Enablement figures, with an expected future increase in Saudi Arabia's GDP of $3.2 billion and expected creation of more than 21,800 jobs. Several other strategic initiatives include:

- Signing a shareholders' agreement in 2023, to form a JV among Aramco, Baosteel, and PIF to establish the Kingdom's first integrated steel plate manufacturing complex. Once completed, the facility is expected to have the capacity to produce 1.5 million tons of steel annually, by using natural gas and hydrogen, which emit lower-carbon emissions compared to conventional fuels. In 2024, further progress was made towards the project by forming the JV company, carrying out site preparation activities, securing land allocations, obtaining an eligibility certificate for the economic incentives zone, and advancing project financing discussions with lenders.
- Progressing sustainability initiatives, such as exploring Constructed Wetlands technology for wastewater management and advancing an Integrated Waste Management facility aligned with circular carbon economy goals.
- Localizing IoT gadgets and wearables to improve industrial safety and operational efficiency.

Taleed

Taleed continues to support scalable and sustainable job growth for Saudi SMEs, focusing on partnerships, business development, and investment attraction.

In 2024, its Carbon Net Zero Support program helped over 800 SMEs progress toward carbon neutrality through 12 training sessions. The program provides SMEs with a roadmap to carbon neutrality, including baseline setting, target definition, action planning, carbon emissions reduction strategies, and progress tracking. Participating SMEs gained access to practical tools, such as an emissions calculator and cost-effective GHG emissions mitigation levers, with one SME developing a Carbon Net-Zero emissions monitoring tool to further support businesses in the Kingdom.

Taleed initiated the localization of Validation and Verification Bodies (VVBs), essential third-party auditors for carbon offset projects. With interest secured from two global VVB players – Earthood and TUV Nord – Taleed aims to localize the first VVB by 2025. The localization of Earthood is through the establishment of a JV with a local partner, ASR Financial Consulting, with inauguration targeted by mid-2025. TUV Nord will partner with the National Inspection and Technical Testing Company, FAHSS, with its inauguration targeted by the end of 2025. This localization initiative is aligned with the efforts of the Kingdom's regulators and enablers such as the Clean Development Mechanism Designated National Authority (CDM-DNA) to establish local standards and ensure market integrity.

Taleed remains a supporter of sustainability and innovation for SMEs, empowering businesses to navigate the transition to a lower-carbon economy.

Wa'ed Ventures

Now marking over a decade of fostering innovation, Wa'ed Ventures has continued to support Saudi Arabia's startup ecosystem with a $500 million venture capital fund focused on advancing local tech-based startups and localizing global innovations in order to support the development of Saudi Arabia's startup ecosystem.

In 2024, the fund made strides in sustainability, AI, and portfolio management to align with the Kingdom's Vision 2030 priorities:

- **Sustainability initiatives:** Progressed with the Sustainability Venture Builder (Roots Ventures), launched to diversify the portfolio and strengthen local ecosystems. Six venture-built entities focused on carbon credits and emissions optimization have been incorporated, with three fully operational and two securing external investment.
- **Strategic investments:**
  - **Tenderd:** Added $1.3 million to enhance AI-driven fleet optimization and emissions reduction in construction and logistics sectors.
  - **Excess Materials Exchange (EME):** Allocated an additional $4 million to the circular economy platform for reducing environmental impacts.
  - **Zension:** Invested $5 million to reduce e-waste and encourage circular economy practices within the consumer electronics industry in the region.
  - **aiXplain:** Invested $5 million in the California-based platform, which offers AI solutions aimed at simplifying the process of adopting AI for businesses with limited technical resources.
  - **Rewaa:** Added $6.4 million in Saudi's leading omnichannel inventory management system, accounting, and POS platform for the retail industry.
  - **Rebellions:** Invested $15 million in South Korea's leading AI semiconductor startup, which plans to establish a subsidiary in Saudi Arabia to expand chip manufacturing in the Gulf.
- **AI-focused initiatives:** Allocated $100 million for AI investments to position Saudi Arabia as a global AI hub. This initiative includes forming an advisory panel with experts from institutions like Meta, Amazon, MIT, and Oxford University, to support deal sourcing and global talent localization.
- **Portfolio development:** Institutionalized a post-investment venture growth program to provide advisory services, talent acquisition, governance support, and market access to portfolio companies.
- **Global VC collaboration:** Established a network with leading global VC firms, including Segovia, Lightspeed, Khosla Ventures, Temasek, and A16z, enhancing access to advanced tech investments.
- **Strategic partnerships:** Facilitated over 200 introductions between portfolio companies and key stakeholders such as NEOM and Saudi Agricultural & Livestock Investment Company (SALIC), ensuring alignment with the Kingdom's strategic objectives.
- **Ministry of Communications and Information Technology (MCIT) Collaboration:** Through partnership with the National Technology Development Program (NTDP), eight portfolio companies received grants totaling over $0.8 million (over ﷼3 million). These companies include Sadeem, Terra Drone, aiXplain, WakeCap, WhiteHelmet, Lisan, IR4LAB, and Cura.

Wa'ed Ventures continues to serve as a cornerstone of Saudi Arabia's innovation landscape, supporting technology-driven economic growth and sustainability initiatives.

Sustainability in action

SPARK

The King Salman Energy Park (SPARK) is being developed as an industrial ecosystem and aims to capture full economic value from the energy value chain in Saudi Arabia and throughout the region.

SPARK aims to contribute to Saudi Arabia's Vision 2030 by supporting the Kingdom's efforts in building a strong economy of which one of the pillars is revenue diversification.

The energy hub can become a 21st century platform for the energy sector, where tenants and investors providing energy-related industrial, commercial, and logistical goods and services will grow and prosper in a vibrant international industrial community built on excellence and innovation. It can offer tenants convenient access to the economies of the surrounding region via easily available transport links. It is expected to contribute more than $6 billion to the Kingdom's GDP annually and create up to 100,000 direct and indirect jobs at maturity.

Link to strategic theme:

Localization and the promotion of National Champions

LAB7

The Innovation and Product Development Center (LAB7) continues to support the growth of Saudi Arabia's innovation ecosystem by fostering technology-based startups and supporting the Kingdom's venture capital landscape. As a quality-feed venture builder, LAB7's focus is to solve key challenges facing the world today, as the center works with entrepreneurs to create disruptive and lasting change in domains such as sustainability, digitalization, and industrial innovation.

In 2024, LAB7, in collaboration with the Technology Oversight and Coordination (TOC) administrative area, led the TecShift Hackathon 2024, the Company's first public hackathon. The Hackathon attracted 376 participants across 131 teams from industry, academia, and entrepreneurship sectors, all competing to deliver innovative solutions for the Circular Carbon Economy (CCE) and Hydrogen Economy. The platform served as an opportunity to raise awareness of sustainability's vital role in the global energy transition.

Furthermore, LAB7 achieved the Leadership in Energy and Environmental Design (LEED) Gold Certification for its building design and construction. This globally recognized award, accredited by the US Green Building Council, underscores LAB7's dedication to environmental stewardship and sustainable development.

Sustainability in action

SafaSun: advancing solar panel maintenance

SafaSun, developed by LAB7, enhances solar panel cleaning with its autonomous, waterless, and self-cleaning technology. SafaSun's electromagnetic based solution is tailored for dust-prone regions, and it helps address a major challenge in solar energy adoption by eliminating manual labor, reducing operational costs, and enhancing energy efficiency.

With high cleaning efficiency, and minimal energy consumption, SafaSun aims to achieve optimal panel performance in regions like the KSA, where conventional cleaning methods of a solar plant are time consuming, SafaSun's technology cleans the panels in seconds, boosting operational timelines and efficiency.

By overcoming the barriers of dust accumulation and maintenance inefficiencies, SafaSun helps accelerate solar energy adoption in the Middle East. This potential solution supports the Kingdom's sustainability goals, helping make renewable energy more accessible and reliable.

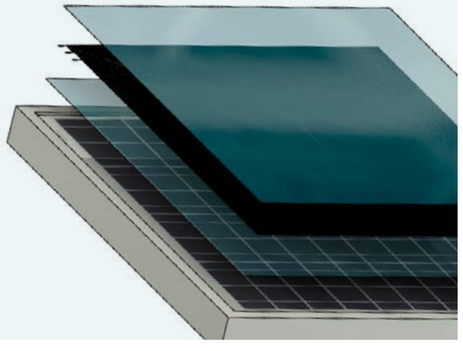
Link to strategic themes:

- Lower-carbon initiatives
- Localization and the promotion of National Champions

Link to strategic enabler:

- Technology

SAFASUN



Human rights in the supply chain

Aramco requires its suppliers to share our values and respect human rights and ethical practices throughout their operations. Our SCoC, which outlines expectations for ethical sourcing, labor conditions, and human rights compliance, is communicated early in the bidding process.

All active suppliers in Saudi Arabia have signed the SCoC, committing to provide safe and sanitary living conditions, adequate safety equipment, and adherence to local labor laws. Suppliers are required to promptly notify Aramco of any potential or actual violations of the SCoC and to propose corrective actions. Aramco monitors compliance through routine assessments of its suppliers, JVs, and business relationships to ensure alignment with its values and standards.

To strengthen awareness, Aramco delivers SCoC training and ethical conduct sessions to suppliers. In 2024, three awareness sessions were conducted with an attendance of over 1,000 suppliers, two of them during Riyadh and Jeddah Supplier Forums in collaboration with the Chamber of Commerce.

Procurement teams inspect suppliers, particularly in high-risk areas, for non-compliance, such as unsafe accommodation or underpayment of wages, ensuring conformance to our SCoC and/or agreed contractual arrangements.

Active suppliers signed up to Aramco's Supplier Code of Conduct (%)

Sustainability in action

Supplier Sustainability Assessment and Rating System launched

Aramco has launched a Supplier Sustainability Assessment and Rating System offering supply chain transparency and measurable sustainability improvements. The system evaluates suppliers on sustainability-related criteria, using audits, certifications, and real-time dashboards to score and benchmark performance.

Suppliers are categorized by risk level, enabling improvements through action plans, training, and incentives. By measuring against our sustainability criteria, identifying measurable risks and improvements, we increase our supply chain visibility and accountability.

Community and society

Social investment

Since it was founded, Aramco has played a vital role in the Kingdom's development. Initially from the 1930s to the 1970s, efforts focused on building infrastructure and driving industrial growth to meet business needs. Over time, Aramco has taken a more proactive role in voluntary citizenship initiatives, aligning with the Kingdom's vision of fostering a knowledge-based society.

From developing infrastructure and cultural landmarks like Ithra to supporting micro-industries and advancing health and education, these initiatives have positively influenced many lives in the Kingdom.

Our citizenship efforts today prioritize people's development and environmental stewardship. We believe that the most important source of energy is people and their ability to drive meaningful change for their communities and the environment.

Aramco also supports the Kingdom's Vision by investing in biodiversity initiatives and empowering local communities through initiatives that help develop human capital and improve their well-being.

Aramco is expanding its social investments globally, reflecting the expansion of its commercial operations.

In 2024, Aramco allocated $583 million[1] to social investments both within Saudi Arabia and internationally. These contributions focus our efforts on uplifting communities and fostering sustainable development. Additional details on key projects can be found on page 106.

Sustainability in action

Blood donation campaign

In 2023, Aramco launched its annual Blood Donation Campaign, unifying previously discrete efforts into a cohesive program. This initiative streamlined collaboration with local blood banks, enhanced reporting and impact. The Company hosted 87 donation events in its inaugural year, with nearly 4,300 donors contributing lifesaving blood. Building on this success, 2024 saw 110 campaigns conducted across various locations, with over 7,700 employees collectively donating blood to local blood banks and hospitals. Furthermore, a significant milestone was achieved with the launch of a blood donor tracking system, made possible through the efforts of donors, who collectively contributed over 11,000 volunteer hours. Blood donations play a crucial role in sustaining hospital and clinic supplies, especially during emergencies and for patients with chronic conditions. These campaigns demonstrate how collective employee efforts make a tangible difference in saving lives.

Link to strategic enabler:

People

Sustainability in action

Empowering future generations through innovation and education

In 2024, Aramco partnered with the World Robot Olympiad (WRO) to empower future generations through innovation and education. This partnership expanded the WRO "Future Innovators" competition, providing a global platform for young inventors to develop solutions to real-world challenges, and introduced WRO LEARN, a digital platform offering STEM educational content.

Over 15,000 students from over 85 countries competed in three age groups for the Future Innovators category, with the Aramco Innovation Award given to the winners from the senior age group for the first time as part of the WRO Grand Final Competition. The award, presented by Aramco in partnership with Aston Martin Aramco Formula One® Team, recognizes excellence in robotics design, technology, innovation, problem-solving, critical thinking, and creativity in applying robotics to real-world solutions by WRO competitors.

Link to strategic enablers:

People Technology

1. In 2024, the boundary for this metric has been expanded to operational control, as it now includes our overseas subsidiaries, like ARLANXEO and Motiva. Under the prior year reporting boundary, the social investment would be $581 million.

Sustainability in action

Ithra: a hub for cultural enrichment

The King Abdulaziz Center for World Culture "Ithra" is Aramco's flagship citizenship initiative and is currently the leading cultural and creative destination in Saudi Arabia. Since it opened in 2018, Ithra has welcomed around five million visitors and knowledge-seekers. In 2024, Ithra offered more than 9,000 programs to the community, covering art, literature, culture, and creativity. Ithra engaged more than 120,000 children through school and special visits, offering programs, exhibitions, and workshops that promote culture, knowledge, and creativity.

Ithra facilitated important discussions on the global stage on the topic of digital well-being and AI including during the USA Roadshow alongside the 79th UN General Assembly (UNGA) and at the Global Digital Well-Being Forum. These discussions featured representatives from leading organizations such as the World Health Organization (WHO), Yale University, Massachusetts Institute of Technology (MIT), Google DeepMind, and Microsoft.

Working with Ithra, Aramco facilitates a well-established volunteer program for the public, empowering individuals to contribute to the center's non-profit mission. Through this, Aramco has significantly expanded its employee volunteer program, providing more opportunities for meaningful engagement.

Link to strategic theme:

Localization and the promotion of National Champions

Sustainability in action

Community development through micro-industries

Initiatives like the Saudi Coffee Initiative, Honey Production and Beekeeping, and most recently, the Bajali Almond Cultivation, empower local communities, enhance traditional crafts, and promote sustainable livelihoods. Today, Aramco supports seven active micro-industries where it continues to build infrastructure, capacity, and exits when the industry is sustainable for continuous growth.

In 2024, Aramco inaugurated the first Saudi Coffee Development Center as a gift to the local community of Jazan to support the coffee processing from seedling to the cup. The center has an annual production capacity of 14,000 tons and reduces processing time from 21 days to six hours. Our coffee initiative aims to equip coffee farmers with the needed tools to expand their production of coffee beans, enabling them to earn a sustainable income and support their communities.

Aramco continues to expand its citizenship efforts and supports the development of more sustainable, thriving micro-industries. In turn, this development will help support local communities to shape their future and preserve local traditional crafts for future generations. By connecting people and ideas, we expand possibilities to spur diversification, drive economic growth, and add meaningful jobs to the labor market in our communities and beyond.

Link to strategic theme:

Localization and the promotion of National Champions

Global citizenship

During 2024, Aramco contributed $583 million[1] to social investment in the Kingdom and globally across various initiatives. The case studies below present some highlights of our projects during the year outside of Saudi Arabia. For projects in Saudi Arabia, please refer to pages 104-105.

Sustainability in action

A snapshot of our social investment projects around the world

Our social investment has two pillars

Planet
Investment activities prioritize biodiversity, including reforestation, and coral reef regeneration.

People
Social investments focus on three key areas of support, knowledge, creativity, and social economic development.

Europe

In Europe, Aramco has supported 11 non-profit organizations across the Netherlands, Italy, Poland, Spain, and the UK.

United Kingdom

Project ENTHUSE

Providing support in delivering a high-quality professional development (CPD) program for teachers of STEM subjects and supporting schools in disadvantaged communities across London. Our current program supports schools in 19 areas in London aiming to reach 83 schools impacting 180 teachers and benefiting 18,000 students by Q2 2025.

Poland

Talent Open

In partnership with The High-Tech Foundation (FZT) Accelerator Program for Young Talents below the age of 25, it is the scientific version of the tennis grand slam tournaments. A program helping young talent to turn groundbreaking research and social projects into market-oriented ventures led by them as founders. The program included startup hackathons and 13 workshops with 3,040 young student competitors having applied.

Americas

In the Americas, Aramco has supported 17 non-profit organizations, including national, regional, and/or state charities, in environmental, STEM, and social projects.

United States

Aramco iExplore Biodiversity Education Program

Heading into its 12th year, solely funded by the Company, the program focuses on teachers from predominantly low-income and underserved school districts being certified/recertified to teach the biodiversity curriculum, followed by immersive student field trips. During the 2024-2025 school year, 60 teachers participated in the on-site workshops and 1,600 students from these school districts are scheduled to participate in the immersive field trips.

National Fish and Wildlife Foundation

Aramco Americas supported nine projects designed to restore and protect approximately 60 acres of coral reefs throughout the USA by reducing land-based sources of pollution, expanding out-planting of 1,250 nursery-grown corals, and enhancing coral reef management practices.

Asia

In Asia, Aramco has supported 10 organizations across China, India, Japan, Malaysia, South Korea, Singapore, and Vietnam, with various environmental, educational, social, and medical initiatives.

India

Partnership with Indian STEM Foundation

The project "Combination of Renewable Energy Solar System & Robo Siksha Kendra – STEM Tinkering Lab" established solar-powered STEM education infrastructure in two schools in Mumbai and Delhi-NCR. As part of the project, solar panels with 10 KW output capacity and a net-metering system, that credits the solar system owners for the electricity they add to the grid, have been installed in both schools. At each site, the solar panels support 10 classrooms with electricity. The STEM education infrastructure ensures hands-on education in using computation tools including 3D printing, DIY Robotics Kit, and micro-controller, which benefits 4,000 students who will be prepared to participate in STEM and Tinkering Competitions.

Malaysia

Mangrove Forest Education and Awareness

Aramco Malaysia supported the Mangrove Tree Planting with Schools Program, which saw the participation of 12 primary and secondary schools. A total of 241 participants successfully planted 400 Rhizopora Mucronata. Additionally, Aramco supported the Mangrove Forest Education and Awareness Carnival, which saw the participation of 12 primary and secondary schools, totaling to 2,619 students and community members. The carnival consisted of a range of activities designed to educate and inspire school students through interactive exhibitions and activities.

China

"Shoot for the Future" Courts refurbishment

Partnering with the Chinese Basketball Association, Aramco renovated public basketball courts in Beijing using advanced materials, with flooring partly made from recycled plastic. Aramco collaborated with SABIC, and Enlio, the exclusive supplier of 3x3 basketball floors for the Tokyo and Paris Olympics. Enlio developed a custom material using SABIC's advanced recycled plastic as the main material component. The project highlights the role of advanced materials in a circular carbon economy, while supporting Aramco's aim to empower communities and youth through sports.

Japan

Aramco STEAM Challenge

"Aramco STEAM Challenge" in Japan is currently providing free hardware teaching materials to 5,000 middle and high school students nationwide. This two-year initiative, aimed at promoting science, technology, engineering, arts, and mathematics (STEAM) education across Japan, will continue until next year. These materials are designed to help students develop problem-solving skills through practical learning. Additionally, the program offers ongoing support to teachers, including individual consultations, lesson planning assistance, and review sessions, with the goal of building a better future through education.

1. In 2024, the boundary for this metric has been expanded to operational control, as it now includes our overseas subsidiaries, like ARLANXEO and Motiva. Under the prior year reporting boundary, the social investment would be $581 million.

Building a culture of giving

Our Corporate Donation Program aims to enhance the social and economic conditions of the communities in which it operates. In 2024, 27% of donation contributions were allocated to education, benefiting about 25,327 individuals, helping to pave the way for brighter futures. In healthcare, 33% of donations were directed toward essential medical support, specifically earmarked for necessary medical equipment and supporting PwDs through various programs, reaching 13,477 people in need of care. Additionally, 40% of donation funds were directed to social initiatives focused on renovating homes for those affected by natural disasters. This effort reached 5,500 individuals, restoring homes and hope in their communities.

Empowering people through education and training

Aramco-built schools

Since 1954, when Aramco opened its first government school, it has partnered with the Government of Saudi Arabia to deliver the infrastructure and resources needed to educate over two million students – equivalent to 6% of the Kingdom's total population as of 2024. Currently, we support 160 schools, including 147 public schools, seven Aramco-based schools, four private schools, and two special needs schools, serving approximately 83,000 students and 8,000 staff. In 2024, Aramco invested $94 million in school maintenance and upgrades, along with an additional $90 million for reconstruction. Beyond infrastructure, Aramco enhances education through tailored programs, leveraging its expertise. This year, Aramco supported student initiatives with 26 programs and sessions in 72 schools, benefiting over 11,000 students. These programs covered topics such as health, career readiness, environmental stewardship, and renewable energy, empowering students with the knowledge to make informed decisions about their futures, health, and the environment.

Education programs

The Company strives to advance educational opportunities and nurture the potential of students through three transformative programs. The Summer Enrichment Program and Tomooh Program are designed to empower young learners with the skills, knowledge, and experience necessary to achieve academic and career success. Together, the programs empowered 11,500 students across the Kingdom and globally.

Adding to this is the Advantage Academy, designed to positively impact the lives of underprivileged high school students by providing strategic programs and services to 346 students. These programs and services enhance students' skills, knowledge, and overall academic experience through tailored activities in English, Math, IT, and life skills with the objective of preparing them for future opportunities.

Number of people in Aramco sponsored community education programs

Spotlight on National Training Centers

Empowering Saudi talent through specialized academies

Aramco, in collaboration with the Technical and Vocational Training Cooperation (TVTC), the Human Resources Development Fund (HRDF), and business partners, has established 16 NTCs across 10 cities in the Kingdom. These centers, as part of a strategic initiative launched in 2008, address workforce readiness by offering diploma, upskilling, and certification programs tailored to meet market demand. Over 33,000 Saudis have graduated from core diploma programs, with an additional 40,000 participants in short, upskilling, and certification programs in 100+ disciplines.

The NTCs provide a wide range of training products covering more than 100 different trades and skills including short programs, aimed at bridging the skills gaps in critical industries such as energy, technology, construction, tourism, marine, aviation, and finance. To date, more than 71,000 Saudis have benefited from these programs, reflecting a high level of demand for skilled labor across the Kingdom's industrial and service sector. This initiative plays a role in supporting Vision 2030 by fostering career progression, promoting employment-led training, and transforming business environments.

In 2024, the NTCs achieved a record-high utilization rate of 93%. This is driven by the NTCs' aim to foster strong collaboration with key Aramco stakeholders, alongside the strategic diversification of program offerings and expansion into new sectors.

Our National Training Centers bring Aramco's vocational training legacy to local communities

To support the growth of the Kingdom's economy, as well as to provide a robust pipeline of qualified local labor, Aramco began the NTCs initiative in 2008. The NTCs are the product of a strategic partnership between Aramco, select government entities, and the private sector to train young Saudis in critical and emerging industries.

To date, over 57,900 students have graduated from the NTCs in more than 80 different disciplines, with over 10% being women. Given this record, the centers remain on track to meet their aim of 100,000 graduates by 2030.

Link to strategic theme:

Localization and the promotion of National Champions

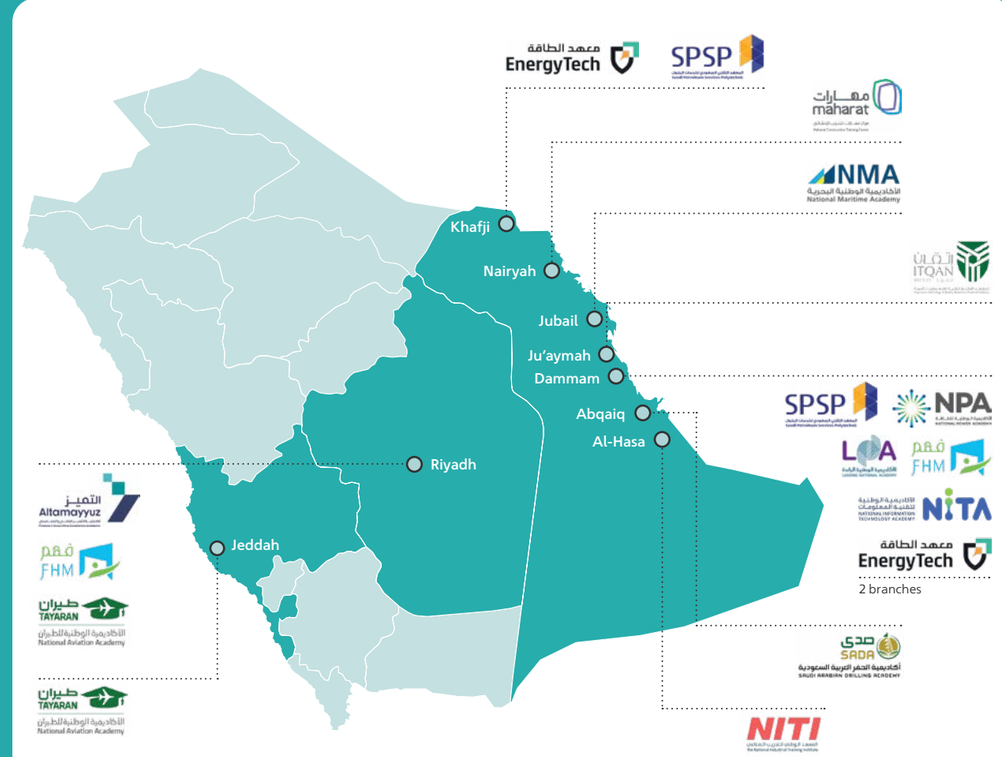
Link to strategic enabler:

People

>100
Training disciplines

>71,640
Graduated to date

>10%
Female representation



Sports development

Aramco supports and invests in Qadsiah Sport Community Club, a hub which offers a wide range of sports and community activities to residents of the Eastern Province. With over 200,000 individuals participating in Qadsiah community activities over the last year, the club continued promoting sports, well-being, healthy living, and youth development in the region.

The Qadsiah Sport Community Club provides a platform for people of all ages to engage in 16 different sports, as well as community, charity, and volunteering events. Aramco's investment in the club has also enabled the establishment of the Al Qadsiah Academy in Khobar. This season, over 500 young athletes, aged 5-16, have participated in Qadsiah football academies, providing them with opportunities to develop their skills and pursue their passion for football.

Qadsiah's promotion to the Saudi Pro League drew over 100,000 attendees. Furthermore, the Sports Camps have attracted 350 children, and Qadsiah Academy try-outs engaged over 500 young male and female footballers offering them the chance to showcase their skills and the potential to join the Qadsiah talent pathway.

Qadsiah continues to provide community engaging activities through events, festivals, and fan-zones. The Qadsiah Football Festival, a community-focused event that showcased the history of Qadsiah and offered interactive games and experiences, attracted over 50,000 attendees. Furthermore, the fan zones at each match engages an average of 7,000 attendees, creating an engaging atmosphere that brings people together.

Volunteering

Aramco fosters a strong culture of volunteering, offering diverse opportunities for employees and community members to engage in meaningful initiatives. In 2024, the number of volunteers increased, driven by enhanced efforts from the Citizenship Division and Ithra. This aligns with Aramco's target of achieving one million volunteering hours by 2027.

Key 2024 milestones include the introduction of blood donor tracking, with each donor contributing one volunteer hour, in-line with the donation process. Additionally, Aramco expanded its reporting to include volunteering contributions from wholly-owned subsidiaries such as SASREF, Motiva, ARLANXEO, and Aramco Trading Company (ATC).

2024 also saw the launch of the global volunteer program in celebration of the "International Volunteer Day", uniting employees worldwide under a shared mission. Aramco hosted its first Volunteering Hackathon, where participants developed innovative initiatives, with three winning ideas now under implementation.

Total number of volunteers

2024	21,192[1]
2023	7,037
2022	4,941

Number of employee volunteers

2024	13,419[1]
2023	3,405
2022	Metric not disclosed previously

Number of Aramco facilitated community volunteers

2024	7,773[1]
2023	3,632
2022	Metric not disclosed previously

Total number of volunteering hours

2024	223,785[1]
2023	171,633
2022	168,590

Number of employee volunteering hours

2024	37,650[1]
2023	18,179
2022	Metric not disclosed previously

Number of Aramco facilitated community volunteering hours

2024	186,136[1]
2023	153,454
2022	Metric not disclosed previously

1. In 2024, the reporting boundary for the volunteering metrics was expanded to include Aramco Trading Company, ARLANXEO, Motiva, and SASREF.

Governance

Hawiyah Unayzah gas storage plant is Saudi Arabia's first gas storage facility, and is part of Aramco's Master Gas System. The plant can produce up to 2.0 bscfd during periods of high summer demand in the Kingdom, enhancing the Kingdom's lower-carbon energy capabilities.

Corporate governance

We recognize the importance of good governance, which is integral in fostering transparency, accountability, and ethical conduct across our business. Corporate governance practices in Aramco are guided by a set of governance policies and procedures, in line with the Corporate Governance Regulations as well as Company-relevant global ethics and compliance policies.

Board composition

The Board of Directors values independence and diversity of talent, skills, viewpoints, and experience, and believes that such diversity enhances the performance of the Board in discharging its oversight duties.

Accordingly, the Nomination Committee takes E&I into account when reviewing the Board's composition, as well as when nominating new Director candidates. The Committee also considers each Director's professional experience, integrity, honesty, judgment, independence, accountability, willingness to express independent thought, and understanding of the Company's business.

The 11 members of the Board in 2024 include senior Saudi Government appointees and former senior executives from the international oil and gas, chemical, petroleum refining, and finance industries, five of whom are independent. The relevant Director skills and experience are presented in the table below:

Director skills and experience

Skills and experience	Definition	Members
Executive leadership experience	Possesses a deep understanding of organizations and strategy to assist the Board in oversight of the Company's global operations and strategic planning.	11
Financial experience	Brings valuable financial experience to the Board, including oversight of financial reporting, internal controls, financial disclosure, investment and portfolio management, and/or trading.	11
Risk management experience	Aids the Board in its risk oversight and can effectively identify, prioritize, and manage a broad spectrum of risks.	11
Global business leadership experience	Provides perspective on diverse business environments, customers, and supply chains associated with the Company's global business and strategy.	9
Regulatory, legal, public policy, and government experience	Supports the Board in assessing and responding to evolving legal and regulatory environments.	8
Other public company Board experience	Aids the Board with an understanding of issues commonly faced by public companies, and provides insight on corporate governance practices and trends.	8
Energy and chemicals industry expertise	Demonstrates a practical understanding of the energy and chemicals industry and provides valuable perspective on issues specific to the Company's business.	7
Technology, innovation, cybersecurity, and scientific experience	Assists the Board in overseeing the Company's leadership in technological change and innovation including with respect to the Company's sustainability initiatives.	6

Metrics	2024	2023	2022
Number of independent Board members	**5**	5	5
Number of females on Board	**1**	1	1
Number of nationalities on Board*	**4**	4	4
Board composition by average tenure (years)	**7**	7	6
Board composition by average age (years)	**63.54**	63.45	62.45
Board members' average attendance (%)	**100**	100	100

The effectiveness of the Board is also promoted through procedures and practices that ensure accountability. In 2024, the Board members attended all Board meetings. The Board has also performed its annual self-assessments as part of Board evaluations, which provide insights into the Board effectiveness and areas for improvements.

Additional information on Aramco's governance, including the profile of each Board member, can be found in the Aramco Annual Report 2024 in the Organizational Structure and Corporate Governance section.

* Metric reported for the first time in Aramco's Sustainability Report.

Ethics and compliance

Ethics and compliance matters are overseen at the corporate level by the Conflict of Interest and Business Ethics Committee, chaired by the President and CEO. The Committee is responsible for applying the Company's policies pertaining to conflicts of interest and business ethics in compliance with applicable laws and regulations. It is also tasked to promote a culture of accountability through regular assessments, monitoring, review of policies, systems, and controls related to conflict of interest and business ethics.

Code of Business Conduct

Our CoBC provides guidelines to the Directors, senior management, employees, and contract employees of the Company and its controlled subsidiaries regarding, among other things, health, safety, and environmental protection, competition and anti-trust, anti-bribery and anti-corruption, conflicts of interest, disclosures controls, insider trading, related-party transactions, data privacy, international trade controls, internal investigations, and compliance with applicable law. Our corporate values of integrity, excellence, safety, accountability, and citizenship serve as the basis of our CoBC.

Supplier Code of Conduct

Our SCoC promotes our values and extends and maintains our ethical standards across our supplier network, enabling long-term, mutually beneficial partnerships. It outlines mandatory policies on conflicts of interest, bribery, kickbacks, gifts and fraud, monitoring and compliance, in addition to environmental, health, and safety issues, fair trade practices, and ethical sourcing.

More information on the SCoC can be found in the Growing Societal Value chapter of this Report.

Reporting and handling of concerns

Aramco provides its employees, suppliers, and stakeholders with the General Auditor Hotline to report suspected misconduct, including allegations related to bribery or corruption in an anonymous manner. This hotline enables reporting through several channels including email, telephone, and Company intranet.

Aramco maintains a zero-tolerance stance against any form of retaliation for good-faith reporting of suspected misconducts. Responsible committees review findings of misconduct, ensuring the prompt implementation of appropriate and consistent remedial measures.

In 2024, the number of allegations received through the hotline increased by 17.2% compared to 2023, which could be due to the growing reach of our awareness programs.

Anti-bribery and anti-corruption

The Company has a zero-tolerance policy for unethical behavior, requiring its employees and business partners to adhere to the principles outlined in its Anti-Bribery and Anti-Corruption Policy.

The Company requires periodic acknowledgment of the Company's ethics policies by its personnel, attesting to awareness of, and adherence to the Company's ethical and regulatory compliance standards. This helps ensure our policies are continuously reinforced.

The Company has also established an ongoing internal training plan in support of the Company's ethics and regulatory compliance programs, continuously raising awareness on ethics and corruption risks. 23,652 hours of anti-corruption training were delivered throughout the Company in 2024, with a focus on our in-Kingdom Downstream operations, following a campaign in Upstream in the prior year. The training hours recorded in 2024 therefore decreased with this shift in focus, as Downstream represents a smaller number of employees, relative to our Upstream operations.

Number of allegations received through the 24-hour hotline

Anti-bribery and anti-corruption training hours

Our sustainability governance

We seek to integrate sustainability into all levels of governance, risk management, and decision-making. To that end, we have established a comprehensive structure to govern sustainability matters within the Company, with clear roles and responsibilities.

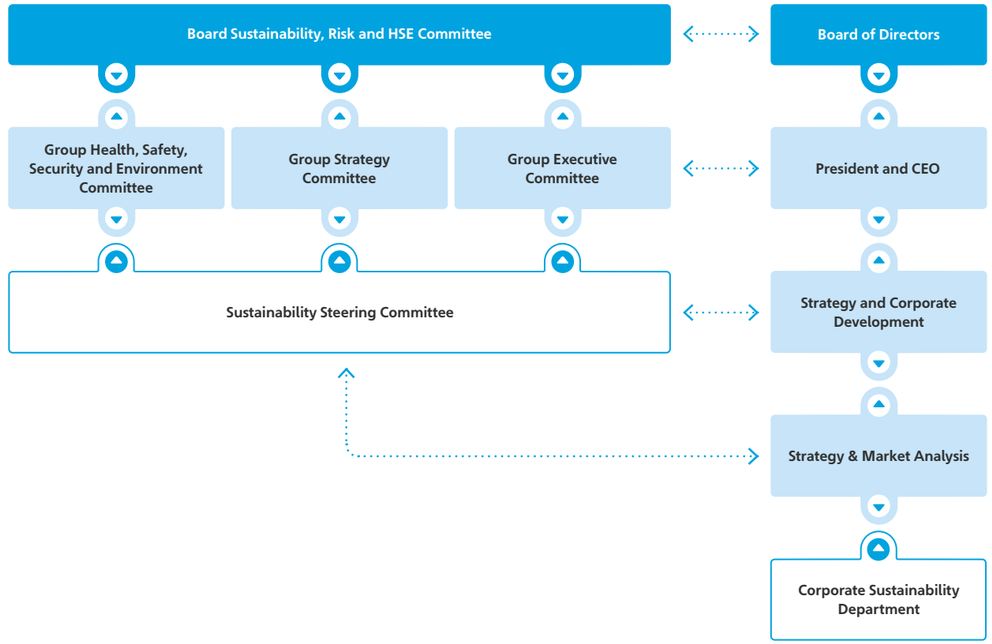
Board of Directors

The Board of Directors is responsible for overseeing the Company's management, providing strategic leadership and guidance, as well as assessing business opportunities. It is also responsible for the Company's governance, risk, and compliance regime, including those related to sustainability matters. In performing this oversight duty, the Board is assisted by its Sustainability, Risk and HSE Committee.

This Board-level committee, which meets quarterly, assists the Board in providing leadership, direction, and oversight with respect to sustainability matters, by:

- Overseeing the Company's strategy, performance, and reputation regarding sustainability matters that contribute to long-term value creation throughout the Company's global business;
- Reviewing the effectiveness of the Company's policies, programs, and practices with respect to safety, health, environment, and social issues, as well as making such recommendations to the Board; and
- Reviewing summary reports on material health, safety, and environmental incidents within the Company.

Sustainability governance framework



The Sustainability, Risk and HSE Committee held four meetings during 2024.

During the year, the Committee received updates from management on routine assessments and reviews that were conducted regarding several top corporate risks that the Company is actively managing, including those relating to major industrial incidents, major transactions, market disruption, cyberattack, environmental compliance, and climate change.

Further, in 2024 the Committee received several updates relating to the preparation of the Company's Sustainability Report and endorsed the 2023 Sustainability Report for approval by the Board.

In addition, the Committee reviewed the Company's 2023 performance with respect to safety incidents and with respect to certain HSE metrics and targets. The Sustainability, Risk and HSE Committee also reviewed the Company's quarterly performance for the first three quarters in 2024 with respect to HSE metrics and targets, along with reviewing proposed HSE corporate key performance indicator metrics and targets for 2025.

A summary of the additional activities and updates received by the Committee in 2024 can be found in the Sustainability, Risk and HSE Committee section of the Aramco Annual Report 2024 in the Organizational Structure and Corporate Governance section.

Corporate Committees

Responsibility for implementing and monitoring sustainability activities at the Company level rests with the President and CEO, supported by the Group Executive Committee (GEC), Group Strategy Committee (GSC), and the Group Health, Safety, Security and Environment Committee (GHSSE). The GEC approves major sustainability initiatives and targets (e.g., GHG mitigation investment plans), while the GSC reviews and approves functional strategies including those pertaining to HR, technology, and sustainability (e.g., our net-zero emissions ambition across our wholly-owned operated assets).

The GHSSE Committee, led by the President and CEO guides Aramco's health, safety, security, and environmental policies, evaluating material issues, such as safety initiatives, environmental and safety performance, compliance reviews, insurance survey results, major incidents, and cybersecurity.

Business Committees

At the business level, the Sustainability Steering Committee (SSC) comprises Aramco Senior Vice Presidents representing business lines and administrative areas across the Company. The Committee is chaired by the Executive Vice President of Strategy and Corporate Development, with the Senior Vice President of Strategy and Market Analysis, heading risk and sustainability, and serving as the Secretary.

The SSC reviews and guides decisions and strategies related to sustainability, and enables the Company to assess potential impacts on long-term value creation for stakeholders and the business. It evaluates the Company's GHG mitigation plans and corporate risk assessments for items related to sustainability. Outcomes from these evaluations are presented to and endorsed by the GEC before final approval by the Board.

In 2024, the SSC held 12 meetings, where discussion included:

- Evaluation of the GHG mitigation plan (including interim targets) up to 2050;
- Review of the annual materiality assessment;
- Endorsement of the 2023 Sustainability Report;
- Updates on global sustainability-related regulations; and
- Review of current and planned sustainability investments.

The Company has established corporate-level and business-level committees to oversee specific sustainability-related topics, e.g., people and organization, conflict of interest, business ethics, energy management, information security risk management, oil spills, iktva, and citizenship committees.

External advisory group

The Climate and Energy Transition Advisory Group comprises up to six independent advisers whose advice is sought to bring external perspectives to key issues. This advisory group has now been in place for four years. To reinforce its independence, it is managed by a third party on behalf of the Company. The advisory group provides feedback direct to management, including members of the SSC.

Executive remuneration

Senior executive remuneration is linked to our sustainability performance with eight of our 20 KPIs being sustainability-related and linked to variable pay, ensuring a robust corporate governance framework. This ensures transparency, oversight, accountability, and alignment of our sustainability targets with our business strategy and key objectives.

It follows a framework that incorporates fixed and variable components, where the variables component is market-aligned and subject to fulfillment of predefined performance goals, including sustainability performance. This component consists of two distinct variable pay plans, namely:

- Short-Term Incentive Plan (STIP), an annual cash-based initiative rewarding performance in financial, operational, safety, and sustainability areas; and
- Long-Term Incentive Plan (LTIP), designed to recognize key financial, strategic, and environmental/sustainability achievements over a three-year period.

Sustainability in action

Strengthening environmental, health, and safety governance in Aramco

Enhancing safety oversight across affiliates

As Aramco's global presence expands, so does our dedication to improving safety performance across all affiliates. To drive safety excellence, we implemented a five-pillar safety oversight strategy that combines Aramco's expertise with insights from affiliates, fostering a unified approach to health and safety.

In addition to monthly one-on-one engagements with each affiliate and quarterly virtual technical exchanges with all affiliates, in 2024, we also organized our third in-Kingdom Global HSE Forum, which brought together leaders, safety professionals, and industry experts from affiliates worldwide. These engagements and forums serve as platforms to exchange insights, share solutions, and reinforce alignment, ensuring continued progress on our safety excellence journey.

Link to strategic enabler:

People

Aligning environmental and health practices across Aramco

Aramco is enhancing its governance practices by developing a uniform approach to environmental and health (E&H) performance and related activities across its global and in-Kingdom affiliates. This alignment aims to realize the benefits of partnership and promote the interests of numerous stakeholders.

We successfully organized the inaugural E&H Roadshow in February and March 2024 to enhance our engagement with affiliates. It was hosted in the Kingdom and across three geographical regions – the Americas, Europe, and Asia.

The roadshow's objective was to guide affiliates' E&H performance, accelerating their readiness for reporting programs, and obtaining alignment on E&H metrics, covering topics such as climate change, biodiversity, NbS, and circular economy.

The roadshow, which was attended by more than 300 participants including CEOs, senior executives, and leaders from 32 affiliates, provided a platform for participants to present their E&H programs, and consider key solutions and best practices tailored to their operations.

Data

The following table presents Aramco's sustainability metrics for the years 2024, 2023, and 2022. Reporting boundaries for each metric and for each year are shown for transparency, and where possible, comparability.

There are three common terms used in reference to the metrics' reporting boundaries and the definitions of the commonly used terms are:

- Company in-Kingdom – Saudi Arabian Oil Company in-Kingdom wholly-owned operated assets.
- Operational control – Saudi Arabian Oil Company in-Kingdom wholly-owned operated assets, SASREF, Motiva, ARLANXEO, Aramco Trading Company (ATC), Aramco Services Company (ASC), Aramco Overseas Company B.V. (AOC), and Saudi Aramco Asia Company Ltd. (SAAC).
- Group – Saudi Arabian Oil Company, together with its consolidated subsidiaries, and where the context requires, its joint operations, JVs, and associates.

Description of image used: Aramco's Dammam 7 Supercomputer is a high-performance computing system used primarily for scientific research, data analysis, and simulations. It is part of Aramco's efforts to enhance its technological capabilities, particularly in fields like oil and gas exploration, AI, and machine learning. The supercomputer is designed to handle large-scale computational tasks, such as complex modeling, data processing, and simulations, which are crucial for industries like energy and natural resources.

Our metrics

Climate change and the energy transition

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Climate change	Scope 1 emissions (million metric tons of CO_2e)	**56.1**Ⓐ	**Operational control excluding ATC, ASC, AOC, and SAAC**	54.4Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC	55.7Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC
	Scope 2 emissions (million metric tons of CO_2e) Location-based	**18.5**Ⓐ	**Operational control excluding ATC, ASC, AOC, and SAAC**	18.2Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC	16.1Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC
	Scope 2 emissions (million metric tons of CO_2e) Market-based	**12.4**Ⓐ	**Operational control excluding ATC, ASC, AOC, and SAAC**	13.0Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC	10.3Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC
	Upstream carbon intensity (ratio of total upstream GHG emissions (Scopes 1 and 2) to production sold, kg CO_2e/boe) Location-based	**11.2**Ⓐ	**Operational control**	10.7Ⓐ	Operational control	10.3Ⓐ	Operational control
	Upstream carbon intensity (ratio of total upstream GHG emissions (Scopes 1 and 2) to production sold, kg CO_2e/boe) Market-based	**9.7**Ⓐ	**Operational control**	9.6Ⓐ	Operational control	9.3Ⓐ	Operational control
	Upstream methane emissions (metric tons of CH_4)	**24,548**Ⓐ	**Operational control**	27,708	Operational control	29,193	Operational control
	Upstream methane intensity (Methane emissions from upstream operations per volume of marketed natural gas, %)	**0.04**Ⓐ	**Operational control**	0.05	Operational control	0.05	Operational control
	Flaring intensity[1] (Volume of hydrocarbon gas flared per barrel of oil equivalent produced, scf/boe)	**6.07**Ⓐ	**Operational control**	5.64Ⓐ	Operational control	4.6Ⓐ	Operational control
	Flared gas[1] (MMscf)	**28,846**Ⓐ	**Operational control**	27,506	Operational control	23,818	Operational control
	Energy intensity[1] (ratio of total net energy consumption and total production, thousand Btu per boe)	**162.9**	**Operational control**	153.8	Operational control	146.2	Operational control
	Energy consumption (MMBtu/hr)	**88,091**	**Operational control**	85,649	Operational control	Metric not disclosed previously	
	% of sustainability-related R&D out of total R&D spend[2]	**63**	**Company in-Kingdom (including Global Research Centers)**	63	Company in-Kingdom (including Global Research Centers)	59	Company in-Kingdom (including Global Research Centers)

* Metric reported for the first time externally.
Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.
1. This metric is not applicable to our office-based entities: ATC, ASC, AOC, and SAAC.
2. The reporting boundary for this is Company in-Kingdom (including Global Research Centers). As part of Aramco's innovation ecosystem, our Global Research Centers play an enabling role in advancing long-term goals related to energy innovation, sustainability, and operational efficiency. Facilitated through access to top universities and global talent, these Global Research Centers help in fostering early-stage research, technology scouting and the creation of novel solutions. A research center's scope and activities are functionally aligned with at least one R&D program, with many centers focusing on multiple objectives and programs.

Climate change and the energy transition

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Climate change	% of patents filed relating to sustainability technologies (sustainability patents filed/total patents filed, %)	**26**	**Company in-Kingdom (including Global Research Centers)**	20	Company in-Kingdom (including Global Research Centers)	15	Company in-Kingdom (including Global Research Centers)
	Number of patents granted relating to sustainability technologies*	**150**	**Company in-Kingdom (including Global Research Centers)**		Metric not disclosed previously		
	Sustainability Fund: Number of new portfolio companies*	**7**	**Operational control**		Metric not disclosed previously		
	Sustainability Fund: $ invested (million)*	**107**	**Operational control**		Metric not disclosed previously		

Safe operations and people development

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Workforce protection	Number of fatalities	**8**Ⓐ	**Operational control**	3Ⓐ	Operational control	5Ⓐ	Operational control
	Fatal accident rate (number of recordable workforce fatalities x 100,000,000/total work hours)	**0.771**Ⓐ	**Operational control**	0.305Ⓐ	Operational control	Metric not disclosed previously	
	Lost time injury/illness rate (number of LTI cases x 200,000/ total work hours)	**0.021**Ⓐ	**Operational control**	0.018Ⓐ	Operational control	0.014Ⓐ	Operational control
	Total recordable case rate (Total recordable incidents x 200,000/total work hours)	**0.046**	**Operational control**	0.042	Operational control	0.050	Operational control
	Health performance (%) (number of overdue major health findings/total number of open major health findings x 100)	**15**Ⓐ	**Operational control excluding ATC, ASC, AOC, and SAAC**	19Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC	15Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC
Process safety and asset integrity	Number of Tier 1 process safety events	**9**	**Operational control**	15	Operational control	11	Operational control

* Metric reported for the first time externally.
Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

Safe operations and people development

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Human rights	Number of grievances raised	**112**	**Company in-Kingdom**	230	Company in-Kingdom	293	Company in-Kingdom
	Sites with a grievance mechanism in place (%)	**100**	**Company in-Kingdom**	100	Company in-Kingdom	100	Company in-Kingdom
Labor practices	Number of Company employees	**75,118**	**Company in-Kingdom**	73,311	Company in-Kingdom	70,496	Company in-Kingdom
	Number of contractor employees	**8,517**	**Company in-Kingdom**	8,125	Company in-Kingdom	7,639	Company in-Kingdom
	Number of nationalities in workforce	**94**	**Company in-Kingdom**	94	Company in-Kingdom	90	Company in-Kingdom
	Breakdown of Company employees by age						
	– 35 years and younger	**44,667**	**Company in-Kingdom**	45,277	Company in-Kingdom	45,043	Company in-Kingdom
	– 36 to 44 years	**16,389**	**Company in-Kingdom**	14,464	Company in-Kingdom	12,771	Company in-Kingdom
	– 45 years and above	**14,062**	**Company in-Kingdom**	13,570	Company in-Kingdom	12,682	Company in-Kingdom
	Breakdown of Company employees by age* (%)						
	– 35 years and younger	**59.5**	**Company in-Kingdom**	61.8	Company in-Kingdom	63.9	Company in-Kingdom
	– 36 to 44 years	**21.8**	**Company in-Kingdom**	19.7	Company in-Kingdom	18.1	Company in-Kingdom
	– 45 years and above	**18.7**	**Company in-Kingdom**	18.5	Company in-Kingdom	18.0	Company in-Kingdom
	Number of female employees	**5,935**	**Company in-Kingdom**	5,294	Company in-Kingdom	4,503	Company in-Kingdom
	Female (%) of total employees	**7.9**	**Company in-Kingdom**	7.2	Company in-Kingdom	6.4	Company in-Kingdom
	Number of female employees in leadership positions	**308**	**Company in-Kingdom**	233	Company in-Kingdom	176	Company in-Kingdom
	Females (%) in leadership positions	**5.8**	**Company in-Kingdom**	4.8	Company in-Kingdom	3.8	Company in-Kingdom
	Female (%) of total number of new hires	**24.0**	**Company in-Kingdom**	24.1	Company in-Kingdom	28.4	Company in-Kingdom
	Total hours of training and development (million hours)	**13.8**	**Company in-Kingdom**	9.0	Company in-Kingdom	Please refer to footnote 2	
	Average number of training hours per employee[1] (hours)	**140**	**Company in-Kingdom**	95	Company in-Kingdom	Please refer to footnote 2	

* Metric reported for the first time externally
1. Previously total hours of training and development (per employee).
2. In 2023, a ministerial decision was issued mandating that any establishment with 50 employees and above shall disclose its training data annually as per a specific procedural guide. Therefore, the 2024 and 2023 training and development hours are reported using the methodology as outlined by the Ministry Procedural Guidelines. The 2022 figure previously reported in the 2022 Sustainability Report would not be comparable under this methodology, thus this figure is not disclosed in this Report.

Safe operations and people development

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Labor practices	Number of hired graduates	**1,124**	**Company in-Kingdom**	1,665	Company in-Kingdom	1,459	Company in-Kingdom
	Number of apprentices (new intakes)	**1,986**	**Company in-Kingdom**	2,200	Company in-Kingdom	1,728	Company in-Kingdom
	Number of interns	**3,222**	**Company in-Kingdom**	3,201	Company in-Kingdom	3,190	Company in-Kingdom
	Employee experience index rating[1] (%)	**88**	**Company in-Kingdom**	Not applicable[2]		85	Company in-Kingdom
	Attrition rate (%)	**2.8**	**Company in-Kingdom**	2.2	Company in-Kingdom	2.4	Company in-Kingdom
	Employee acknowledging performance review meetings (%)	**96.5**	**Company in-Kingdom**	92.0	Company in-Kingdom	90.6	Company in-Kingdom
	Employee turnover by gender* (%)						
	– Male	**2.8**	**Company in-Kingdom**	2.2	Company in-Kingdom	2.4	Company in-Kingdom
	– Female	**2.9**	**Company in-Kingdom**	2.7	Company in-Kingdom	4.2	Company in-Kingdom

Minimizing environmental impact

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Local environmental impact	Number of hydrocarbon spills[3] (Total number of accidental release events of liquid petroleum hydrocarbon into the environment, where the spill incident is > 1 bbl)	**7**Ⓐ	**Operational control**	12	Operational control	15	Operational control
	Volume of hydrocarbon spills[3] (barrels) (Total volume of liquid petroleum hydrocarbon accidentally released into the environment, where the spill incident is > 1 bbl)	**34**Ⓐ	**Operational control**	8,566Ⓐ	Operational control	142,885Ⓐ	Operational control
	Recovered hydrocarbon[3] (%) (% of liquid petroleum hydrocarbon removed from the environment through recovery methods)	**49**Ⓐ	**Operational control**	88Ⓐ	Operational control	9Ⓐ	Operational control
	Hydrocarbon discharge to water[3] (barrels) (The total of hydrocarbons that are systematically released to surface water through regulated industrial wastewater discharges)	**11.6**Ⓐ	**Operational control**	14.3Ⓐ	Operational control	16.4Ⓐ	Operational control
	SOx emissions[3,4] (metric kilotons)	**145.3**Ⓐ	**Operational control**	146Ⓐ	Operational control	167Ⓐ	Operational control
	Sites with ISO 14001 certification[3] (%)	**95**Ⓐ	**Operational control**	100Ⓐ	Operational control	98Ⓐ	Operational control

* Metric reported for the first time externally.
Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.
1. Previously employee engagement score (%).
2. The Employee Experience Survey is performed every two years. None was conducted in 2023.
3. This metric is not applicable to our office-based entities: ATC, ASC, AOC and SAAC.
4. The Jazan Refinery is excluded from our SOx reporting in 2022. In 2023 and 2024, data from Jazan Refinery's stabilized units is included in our SOx reporting.

Minimizing environmental impact

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Biodiversity	Net positive impact (biodiversity and ecosystem services)[1] (%) (total biodiversity areas (km^2)/ footprint area (km^2)* x 100)	**91.0**Ⓐ	**Operational control**	85.6Ⓐ	Operational control	53.0Ⓐ	Operational control
Water management	Freshwater consumption (million m^3) (The difference between the volume of freshwater removed from the environment, incl. surface water, groundwater, for use in operations, and freshwater returned to the source. The total dissolved solids (TDS) concentration of this type of water is up to 2,000 mg/l)	**83.0**Ⓐ	**Operational control excluding ATC, ASC, AOC, and SAAC**	89.9Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC	93.6Ⓐ	Operational control excluding ATC, ASC, AOC, and SAAC
	Freshwater consumption (water-stressed regions) (million m^3)	**30.3**Ⓐ	**Company in-Kingdom**		Breakdown not disclosed previously		
	Freshwater withdrawal (million m^3)	**97.2**	**Operational control excluding ATC, ASC, AOC, and SAAC**	135.7	Operational control excluding ATC, ASC, AOC, and SAAC	136.6	Operational control excluding ATC, ASC, AOC, and SAAC
	Freshwater intensity (%) (Total freshwater consumed relative to our hydrocarbon production)	**0.02**Ⓐ	**Operational control excluding ATC, ASC, AOC, and SAAC**	0.02	Operational control excluding ATC, ASC, AOC, and SAAC	Metric not disclosed previously	
Product stewardship and waste management	Industrial waste disposed[1,2,3] (The total amount of industrial waste, hazardous and nonhazardous, generated from operating facilities, not including waste recycling, re-using, and recovery) (metric tons)	**512,980**Ⓐ	**Operational control**	481,561	Operational control	318,656	Operational control
	Industrial waste disposed[1,3] – Upstream (metric tons)	**320,287**	**Operational control**	253,044	Operational control	Breakdown not disclosed previously	
	Industrial waste disposed[1,3] – Downstream (metric tons)	**138,855**	**Operational control**	174,790	Operational control	Breakdown not disclosed previously	
	Industrial waste recycled[1] (%)	**47.8**Ⓐ	**Operational control**	35.7Ⓐ	Operational control	39.9Ⓐ	Operational control

Growing societal value

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
National content	Saudization (%)	**90.2**	**Company in-Kingdom**	90.3	Company in-Kingdom	90.9	Company in-Kingdom
	Saudization of construction contracts (%) (% of Saudi construction contractors relative to the total construction contractors workforce)	**26.6**	**Company in-Kingdom**	29.7	Company in-Kingdom	28.0	Company in-Kingdom
	Saudization of service contracts (%) (% of Saudi service contractors relative to the total service contractors workforce)	**55.6**	**Company in-Kingdom**	56.2	Company in-Kingdom	57.2	Company in-Kingdom
	iktva procurement spend within the Kingdom (%)	**67.0**	**Company in-Kingdom**	65.0	Company in-Kingdom	63.0	Company in-Kingdom
	Cumulative iktva GDP contribution ($ billion)	**240**	**Company in-Kingdom**	202.9	Company in-Kingdom	166	Company in-Kingdom
Human rights	% of active suppliers signed up to Aramco's Supplier Code of Conduct	**100**	**Company in-Kingdom**	100	Company in-Kingdom	100	Company in-Kingdom
	Number of active suppliers	**3,512**	**Company in-Kingdom**	3,472	Company in-Kingdom	3,199	Company in-Kingdom
Community and society	Social investment ($ million)	**583**	**Operational control**	475	Company in-Kingdom including ASC, AOC, and SAAC	453	Operational control
	Number of volunteers	**21,192**	**Operational control**	7,037	Company in-Kingdom including ASC, AOC, and SAAC	4,941	Operational control
	Number of volunteer hours	**223,785**	**Operational control**	171,633	Company in-Kingdom including ASC, AOC, and SAAC	168,590	Operational control
	Number of employee volunteers	**13,419**	**Operational control**	3,405	Company in-Kingdom including ASC, AOC, and SAAC	Metric not disclosed previously	
	Number of employee volunteering hours	**37,650**	**Operational control**	18,179	Company in-Kingdom including ASC, AOC, and SAAC	Metric not disclosed previously	
	Number of Aramco facilitated community volunteers	**7,773**	**Operational control**	3,632	Company in-Kingdom including ASC, AOC, and SAAC	Metric not disclosed previously	
	Number of Aramco facilitated community volunteering hours	**186,136**	**Operational control**	153,454	Company in-Kingdom including ASC, AOC, and SAAC	Metric not disclosed previously	
	Number of people on Aramco sponsored programs	**15,400**	**Company in-Kingdom**	15,099	Company in-Kingdom	12,160	Company in-Kingdom

Ⓐ This figure has undergone external limited assurance in accordance with the ISAE 3000 (revised). The assurance report can be found **online** in the Sustainability section of our website.

1. This metric is not applicable to our office-based entities: ATC, ASC, AOC, and SAAC.
2. Industrial waste disposed number includes operationally controlled affiliates and other waste streams not generated by Upstream and Downstream operations.
3. The name of this metric was changed from industrial waste generated to industrial waste disposed in 2023. The definition of the metric remained the same.

Growing societal value

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Economic contribution	Direct economic value generated and distributed[1]:						
	– Revenues ($ million)	**436,613**	**Group**	440,875	Group	535,188	Group
	– Other income related to sales[2] ($ million)	**43,833**	**Group**	54,158	Group	69,178	Group
	– Operating costs ($ million)	**273,879**	**Group**	263,489	Group	299,279	Group
	– Employee wages and benefits ($ million)	**17,974**	**Group**	16,088	Group	14,665	Group
	– Dividends paid includes dividends to shareholders and non-controlling interests in subsidiaries[3] ($ million)	**127,427**	**Group**	101,628	Group	78,863	Group
	– Payments to the Saudi and foreign governments[4] ($ million)	**204,072**	**Group**	205,553	Group	229,995	Group
	– Payments to the Saudi government[4] ($ million)	**199,674**	**Group**	199,754	Group	226,426	Group
	Total R&D expenses ($ million)	**1,550**	**Group**	1,386	Group	1,178	Group

Governance

Material issue	Relevant metric	2024 Actual	2024 Boundaries	2023 Actual	2023 Boundaries	2022 Actual	2022 Boundaries
Corporate governance	Number of independent Board members	**5**	**Company in-Kingdom[5]**	5	Company in-Kingdom[5]	5	Company in-Kingdom[5]
	Number of females on Board	**1**	**Company in-Kingdom[5]**	1	Company in-Kingdom[5]	1	Company in-Kingdom[5]
	Number of nationalities on Board*	**4**	**Company in-Kingdom[5]**	4	Company in-Kingdom[5]	4	Company in-Kingdom[5]
	Board composition by average tenure (year)	**7**	**Company in-Kingdom[5]**	7	Company in-Kingdom[5]	6	Company in-Kingdom[5]
	Board composition by average age (year)	**63.54**	**Company in-Kingdom[5]**	63.45	Company in-Kingdom[5]	62.45	Company in-Kingdom[5]
	Board members' average attendance (%)	**100**	**Company in-Kingdom[5]**	100	Company in-Kingdom[5]	100	Company in-Kingdom[5]
Ethics and compliance	Number of allegations received through the 24-hour hotline	**968**	**Company in-Kingdom**	826	Company in-Kingdom	655	Company in-Kingdom
	Anti-bribery and anti-corruption training hours	**23,652**	**Company in-Kingdom**	27,674	Company in-Kingdom	22,575	Company in-Kingdom

* Metric reported for the first time externally in Aramco's Sustainability Report.

1. This metric is converted at a fixed rate of U.S. dollar 1.00 = ﷼3.75 for convenience only.
2. Aramco sells certain hydrocarbons within the Kingdom at regulated prices mandated by the Government. The Government implemented an equalization mechanism to compensate the Company for revenues directly forgone as a result of its compliance with the Government mandates related to crude oil and certain refined products. Effective September 17, 2019, the Government implemented an equalization mechanism related to Regulated Gas Products. Effective January 1, 2020, the Government expanded the equalization mechanism to include LPGs and certain other products.
3. Dividends paid include dividends to shareholders and non-controlling interests in subsidiaries.
4. Figures include income taxes, royalties, and dividends to the Saudi Government.
5. For this metric, Company in-Kingdom refers to Saudi Arabian Oil Company.

Abbreviations, terms, and glossary

Currencies

Currency conversion
All financial amounts in ﷼ and USD in this Report are reported in line with the exchange rates reported in the Aramco Annual Report 2024.

﷼/SAR/Saudi Riyal
Saudi Arabian Riyal, the lawful currency of the Kingdom

$/USD/US$/Dollar
US Dollar

Units of measurement

Barrel (bbl)
Barrels of crude oil, condensate or refined products

boe
Barrels of oil equivalent

bscf
Billion standard cubic feet

bscfd
Billion standard cubic feet per day

Btu
British thermal unit

GW_{ac}
Gigawatt (alternate current)

GW
Gigawatts

Mboed
Thousand barrels of oil-equivalent per day

MMboed
Million barrels of oil-equivalent per day

MMbd
Million barrels per day

MMscf
Million standard cubic feet

MMtpa
Million metric tons per annum

$MtCO_2e$
Thousand metric tons of carbon dioxide equivalent

$MMtCO_2e$
Million metric tons of carbon dioxide equivalent

MW
Megawatts

kg CO_2e/boe per day
Kilogram of carbon dioxide equivalent per barrel of oil equivalent per day. Calculation is based on a calendar year (Gregorian)

ppm
Parts per million

scf
Standard cubic feet

Ton
Metric ton (equals to 1,000 kg)

Terms and glossary

Affiliate
Except with respect to financial information, the term Affiliate means a person who controls another person or is controlled by that other person, or who is under common control with that person by a third person. In any of the preceding, control could be direct or indirect.

With respect to financial information, the term Affiliate means the Company's subsidiaries, joint arrangements and associates, each as defined by IFRS.

ARLANXEO
ARLANXEO Holding B.V., a wholly-owned specialty chemicals subsidiary.

ATC
Aramco Trading Company, a wholly-owned subsidiary of Aramco.

BPA
Biodiversity Protection Area.

Carbon credit
A tradable instrument that represents either: a permit to emit one metric ton of CO_2 or equivalent GHG (tCO_2e) into the atmosphere, or a certificate that represents the avoidance or removal of one metric ton of CO_2 or equivalent GHG (tCO_2e) from the atmosphere.

Carbon dioxide (CO_2)
A naturally occurring gas, and also a by-product of burning fossil fuels and biomass, as well as land-use changes, and other industrial processes. It is the principal greenhouse gas that affects the Earth's radiative balance. It is the reference gas against which other greenhouse gases are measured and therefore has a Global Warming Potential of 1.

Carbon capture, and storage (CCS)
A set of technologies that can mitigate CO_2 emissions from new and existing coal- and gas-fired power plants, industrial processes, and other stationary sources of CO_2. It is a three-step process that includes the capture of CO_2 from power plants, industrial sources, and/or atmosphere; the transport of the captured and compressed CO_2 (usually in pipelines); and underground injection and geologic sequestration, or permanent storage, of that CO_2 in rock formations that contain tiny openings or pores that trap and hold the CO_2.

Sequestration and storage are often used interchangeably.

Carbon capture, utilization, and storage (CCUS)
A set of technologies that can mitigate CO_2 emissions, where captured and stored CO_2 is reused in other applications e.g., fuels and chemicals.

Carbon intensity
A measure of GHG emissions in carbon dioxide (CO_2) equivalent per unit production.

Carbon markets
Two types of carbon market exist:

(1) Regulatory compliance markets – used by companies and governments that by law have to account for their GHG emissions. It is regulated by mandatory national, regional, or international carbon reduction regimes.

(2) Voluntary markets – the trade of carbon credits is on a voluntarily basis.

Carbon offset
Mitigation credits generated in one location that are transferred to another location or entity, and are usually denominated in metric tons of a reduced emission or MWh of renewable energy produced.

CHP
Combined heat and power.

Circular carbon economy
A framework for managing and reducing emissions. It is a closed loop system involving 4Rs: reduce, reuse, recycle, and remove.

Circular economy
An economic system designed and built to retain the highest value of company resources by utilizing sustainable and environmental business models.

Climate
Usually defined as the "average weather," or more rigorously, in terms of the mean and variability of relevant quantities over a period of time ranging from months to millions of years.

Climate change
Any significant change in the measures of climate lasting for an extended period of time. Climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.

Cogeneration
A method that uses heat and power systems to capture waste heat from gas turbines and converts it into steam. This process captures heat, reducing its escape into the atmosphere, and enables the production of electricity as a natural by-product.

Company
Saudi Arabian Oil Company (The Company).

Concession
As defined on page 130 of the Aramco Annual Report 2024.

CO_2
Carbon dioxide.

CO_2e
Carbon dioxide equivalent; a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). Carbon dioxide equivalents are commonly expressed as "million metric tons of carbon dioxide equivalents ($MMtCO_2e$)." The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP $MMtCO_2e$ = (million metric tons of a gas) x (GWP of the gas).

CoBC
Code of Business Conduct.

Condensate
Light hydrocarbon substances produced with raw gas, which condense into liquid at normal temperatures and pressures associated with surface production equipment.

CSI
Construction Safety Index.

Direct Air Capture (DAC)
Technologies and processes that extract CO_2 directly from the atmosphere. The CO_2 can be permanently stored in geological formations or used as a feedstock in the production of fuels, chemicals, building materials, and other products containing CO_2.

Domestic
Refers to the Kingdom of Saudi Arabia.

E&I
Equity and inclusion.

Ecosystem services
The benefits that are derived from biodiversity (and broader nature).

Emissions
The release of a substance (usually a gas when referring to the subject of climate change) into the atmosphere.

Emissions reduction
A quantified absolute decrease in CO_2 or GHG emissions specifically related to/arising from an activity.

Energy efficiency
Using less energy to provide the same service. Energy efficiency is one of the core strategies for reducing GHG emissions from fossil fuels.

Energy intensity
An index for measuring the total energy consumed to generate a unit of product, represented in thousand Btus per total production in barrel of oil equivalent.

Energy transition
A significant structural change in an energy system.

Environment
The natural world, as a whole or in a particular geographical area, especially as affected by human activity.

Flaring intensity
Volume of gas flared per barrel of oil equivalent produced (scf/boe).

FOQA
Flight Operations Quality Assurance.

Freshwater
Groundwater or surface water with total dissolved solids concentration up to 2,000 mg/l.

G20
Group of Twenty is an intergovernmental forum comprising 19 countries and the European Union (EU).

GDP
Gross domestic product. The broadest quantitative measure of a nation's total economic activity, representing the monetary value of all goods and services produced within a nation's geographic borders over a specified period of time.

GEC
Group Executive Committee.

Greenhouse gas (GHG)
Any gas that absorbs infrared radiation in the atmosphere rather than allowing it to radiate into space. Greenhouse gases include CO_2, methane, nitrous oxide, ozone, chlorofluorocarbons, hydrochlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

GHG avoidance
The avoidance of GHG emissions that would otherwise occur without the protective actions implemented by an offset project.

GHG emission mitigation
The process of reducing CO_2 (GHG) emissions from the Company's operations.

GHG reduction
A quantified absolute decrease in GHG emissions specifically related to/arising from an activity.

GHG removal
Withdrawal of a GHG and/or a precursor from the atmosphere by a GHG sink or GHG removal technology.

GHSSE
Group Health, Safety, Security, and Environment.

Government
The Government of the Kingdom of Saudi Arabia (and "Governmental" shall be interpreted accordingly).

Greenhouse gas (GHG) emissions
Any gaseous compound in the atmosphere that is capable of absorbing infrared radiation. Generally, consists of water vapor, CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Aramco's inventory includes CO_2, methane, and nitrous oxide.

Greenhouse Gas Protocol
The GHG Protocol establishes comprehensive global standardized frameworks to measure and manage greenhouse gas emissions from private and public sector operations, value chains and mitigation actions. It is a product of the collaboration between the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD).

Group
Saudi Arabian Oil Company, together with its consolidated subsidiaries and, where the context requires, its joint operations, joint ventures, and associates.

GSC
Group Strategy Committee.

HR
Human Resources.

HSSE
Health, Safety, Security, and Environment.

HSE
Health, Safety, and Environment.

HUP
Hosted University Program.

Hydrocarbons
Substances containing only hydrogen and carbon. Fossil fuels are made up of hydrocarbons.

Hydrocarbons law
Law governing hydrocarbons, hydrocarbon resources, and hydrocarbon operations existing within the territory of the Kingdom, enacted by Royal Decree No. M/37, dated 2/4/1439H (corresponding to December 20, 2017), as amended.

Important Bird and Biodiversity Area (IBA)
A subset of Key Biodiversity Areas (KBAs), specifically focusing on sites important for bird conservation, while KBAs encompass all forms of biodiversity. IBAs are primarily managed by BirdLife International and their partner networks, and KBAs are identified using a global standard managed through a partnership coordinated by the IUCN.

IFRS
International Financial Reporting Standard(s) that are endorsed in the Kingdom and other standards and pronouncements endorsed by Saudi Organization for Chartered and Professional Accountants (SOCPA).

iktva
In-Kingdom Total Value Add. The Company's program to promote the development of a localized energy/industrial ecosystem.

Income tax law
Income Tax Law issued under Royal Decree No. M/1 dated 15/1/1425H (corresponding to March 6, 2004) and its Implementing Regulations issued under Ministerial Resolution No. 1535 dated 11/6/1425H (corresponding to August 11, 2004), as amended from time to time.

IAAP
International Association of Accessibility Professionals.

Ipieca
International Petroleum Industry Environmental Conservation Association.

IPO
Initial public offering.

ISO
International Organization for Standardization.

Joint venture/JV
The term joint venture, as defined by IFRS, means a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement.

KAUST
King Abdullah University of Science and Technology.

KBA
Key Biodiversity Area.

KFUPM
King Fahd University of Petroleum and Minerals.

Kingdom/KSA
Kingdom of Saudi Arabia.

Lower Carbon Aviation Fuel (LCAF)
Defined in Annex 16 Environmental Protection (Volume IV) of the United Nations International Civil Aviation Organization's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) as a fossil-based aviation fuel that meets the CORSIA Sustainability Criteria. LCAF can serve as a complementary measure alongside Sustainable Aviation Fuels (SAF) in helping to reduce aviation greenhouse gas (GHG) lifecycle emissions.

LTI
Lost time injuries/illnesses.

LPCR
Loss Prevention Compliance Review.

Master Gas System (MGS)
An extensive network of pipelines that connects Aramco's key gas production and processing sites throughout the Kingdom.

Methane (CH_4)
A hydrocarbon that is a greenhouse gas with a global warming potential most recently estimated at 25 times that of carbon dioxide (CO_2). Methane is produced through anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Mukamalah
Mukamalah Aviation Company.

Namaat
Aramco's industrial investment program.

National
Refers to the Kingdom of Saudi Arabia.

National Champions
Aramco program serving as an incubator to transform business ideas into enterprises, leading to business growth, job creation, and economic development in Saudi Arabia.

Natural gas
Underground deposits of gases consisting of 50% to 90% methane (CH_4) and small amounts of heavier gaseous hydrocarbon compounds such as propane (C_3H_8) and butane (C_4H_{10}).

NbS
Nature-based solutions, which serve as carbon sinks and provide other natural benefits, e.g., mangrove plantations.

Net-zero emissions
This is achieved when anthropogenic GHG emissions to the atmosphere are balanced by anthropogenic removals.

NGL
Natural gas liquids, which are liquid or liquefied hydrocarbons produced in the manufacture, purification, and stabilization of natural gas. For purposes of reserves, ethane is included in NGL. For purposes of production, ethane is reported separately and excluded from NGL.

Nitrogen oxides (NOx)
Gases consisting of one molecule of nitrogen and varying numbers of oxygen molecules. Nitrogen oxides are produced in the emissions of vehicle exhausts and from power stations. In the atmosphere, nitrogen oxides can contribute to the formation of photochemical ozone (smog), can impair visibility, and have health consequences; they are thus considered pollutants.

NORM
Naturally occurring radioactive material.

NPI
Net positive impact on biodiversity and ecosystem services is measured by comparing the surface area of Biodiversity Protection Areas (BPAs) (km^2) against that of Aramco's operational footprint (km^2).

Operational control
Saudi Arabian Oil Company in-Kingdom wholly-owned operated assets, SASREF, Motiva, ARLANXEO, Aramco Trading Company (ATC), Aramco Services Company (ASC), Aramco Overseas Company B.V. (AOC), and Saudi Aramco Asia Company Ltd. (SAAC).

Original Concession
See definition of "Concession".

PIF
Public Investment Fund of Saudi Arabia.

Production costs
The sum of operating costs and depreciation, reflecting both the erosion of asset value over time on an accounting basis and the cost of operating the business.

PwD
People with disability.

R&D
Research and development.

Reliability
Total products volume shipped/delivered within 24 hours of the scheduled time, divided by the total products volume committed. Any delays caused by factors that are under the Company's control (e.g., terminal, pipeline, stabilization, or production) negatively affect the score, whereas delays caused by conditions that are beyond the Company's control, such as adverse weather, are not considered. A score of less than 100% indicates there were issues that negatively impacted reliability.

Reserves
Those quantities of liquids and gas, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible – from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations – prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence within a reasonable time.

ROACE
Return On Average Capital Employed.

RSI
Rig Safety Index.

RTP
Reinforced Thermo Plastics.

SABIC
Saudi Basic Industries Corporation.

SASREF
Saudi Aramco Jubail Refinery Company, a subsidiary of Aramco, formerly known as Saudi Aramco Shell Refinery Company.

SATORP
Saudi Aramco Total Refining and Petrochemical Company, a JV established by Aramco and Total Refining Saudi Arabia SAS in 2008.

Saudi Aramco/Aramco
Saudi Arabian Oil Company, together with its consolidated subsidiaries, and where the context requires, its joint operations, joint ventures, and associates. Any reference to "us", "we", or "our" refers to Aramco except where otherwise stated.

Unless otherwise stated, the text does not distinguish between the activities and operations of the Company and those of its subsidiaries.

Saudi Green Initiative (SGI)
A national initiative that unites environmental protection, energy transition, and sustainability programs with the overarching aim of offsetting and reducing emissions, increasing the Kingdom's use of clean energy, and addressing climate change.

Scope 1 GHG emissions
Direct emissions, which include GHG emissions from on-site fuel combustion, flaring, venting, and fugitive emissions.

Scope 2 GHG emissions
Indirect emissions, which account for GHG emissions from offsite power generation including electricity and steam.

SCoC
Supplier Code of Conduct.

Senior executives/Management Committee
The members of the senior management of Aramco holding the title of CEO, President, or Executive Vice President.

Senior management
The senior management and other officers of Aramco who, while subordinate to the senior executives, are still involved in the management of Aramco and participate in driving its strategies, decisions, or operations.

Shareholder
Any holder of shares.

Shareek program
A cooperative government program that is designed to provide support via various pillars, including financial, monetary, operational, and regulatory cooperation and asset investment, striving to enhance the development and resilience of the Saudi economy by increasing the gross domestic product, providing job opportunities, diversifying the economy, and strengthening cooperation between public and private sectors.

SME
Small and medium enterprise.

SOCPA
Saudi Organization for Chartered and Professional Accountants.

S-Oil
S-Oil Corporation.

SRU
Sulfur recovery unit.

SSC
Sustainability Steering Committee.

STEM
Science, technology, engineering, and mathematics.

Subsidiaries
Except with respect to financial information, the term subsidiaries means the companies that Aramco controls through its ability to influence the actions or decisions of another person through, whether directly or indirectly, alone or with a relative or affiliate (i) holding 30% or more of the voting rights in a Company, or (ii) having the right to appoint 30% or more of the Board of a Company.

With respect to financial information, the term subsidiaries is defined by IFRS, meaning entities over which the Company has control.

Sulfur oxides (SOx)
Gases consisting of one molecule of sulfur and varying numbers of oxygen molecules, such as sulfur dioxide (SO_2) and sulfur trioxide (SO_3).

Sustainable aviation fuels (SAF)
Renewable or waste-derived aviation fuels that meets sustainability criteria as contained within Annex 16 Environmental Protection (Volume IV) of the United Nations International Civil Aviation Organization's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

Synthetic fuels
A broad class of hydrocarbon fuels that are chemically synthesized from hydrogen and CO_2 that is captured either directly from the air or from industrial installations.

Taleed
Aramco program supporting scalable and sustainable job growth for Saudi SMEs.

Tier 1 process safety event
An unplanned or uncontrolled release of any material, including non-toxic and non-flammable materials, from a process that results in one or more of the consequences listed in API Recommended Practice-754.

Total recordable case (TRC) rate
Sum of recordable cases that occurred in the workplace per 200,000 work hours.

TSI
Turnaround Safety Index.

UN SDGs
United Nations Sustainable Development Goals.

Upstream carbon intensity
A measure of greenhouse gas in carbon dioxide (CO_2) equivalent emitted to produce a barrel of oil equivalent. Upstream carbon intensity is calculated based on the total upstream Scope 1 and Scope 2 GHG emissions divided by the upstream marketed production and excludes sales gas own use and AGOC, as found on the assurance statement.

U.S./United States/USA
United States of America.

Wa'ed Ventures
Aramco program supporting Saudi Arabia's startup ecosystem.

WEF
World Economic Forum.

WSI
Well Safety Index.

VOCs
Volatile organic compounds.

YLAB
Young Leaders Advisory Board.

Zero carbon
Applies only to energy sources, processes, products, projects, etc., that emit zero carbon emissions.

Forward-looking statements

This Sustainability Report (the "Report") may contain certain forward-looking statements with respect to Aramco's financial position, results of operations and business, and certain of Aramco's plans, intentions, expectations, assumptions, goals, and beliefs and include all matters that are not historical fact and generally, but not always, may be identified by the use of words such as "believes," "expects," "are expected to," "anticipates," "intends," "estimates," "should," "strive," "will," "shall," "may," "is likely to," "plans," "targets," "outlooks," "goals," or similar expressions, including variations and the negatives thereof or comparable terminology. These statements include, among other things, statements about expectations in connection with Aramco's sustainability initiatives, including the targets and goals set forth in this Report.

Prospective investors should be aware that forward-looking statements are not guarantees of future performance and that Aramco's actual performance may differ significantly from those made in or suggested by these forward-looking statements. Factors that could cause actual results to differ materially from Aramco's expectations, including our goals related to sustainability, and mitigating our environmental impact, safe operations and people development, and growing societal value within the Kingdom, include, among other things, the following:

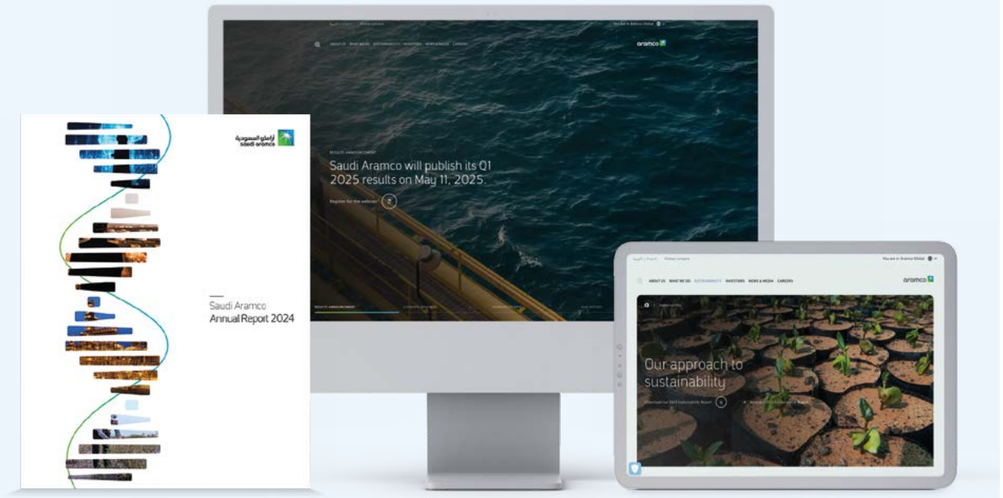
- the inability to successfully meet the targets set forth in this Report, including through the management of GHG emissions; the inability to meet our plastic waste and water management targets or successfully protect biodiversity; the inability to develop and deploy technology solutions to allow us to deliver the benefits of oil and gas hydrocarbons for future generations;
- global supply, demand and price fluctuations of oil, gas, refined products, and petrochemicals;
- global economic market conditions;
- competition in the industries in which Aramco operates;
- climate change concerns, weather conditions, and related impacts on the global demand for hydrocarbons and hydrocarbon-based products;
- risks related to Aramco's ability to successfully meet its sustainability targets, including its failure to fully meet its GHG emission reduction targets by 2050;
- conditions affecting the transportation of products;
- operational risk and hazards common in the oil and gas, refining, and petrochemicals industries;
- the cyclical nature of the oil and gas, refining, and petrochemicals industries;
- political and social instability and unrest and actual or potential armed conflicts in the MENA region and other areas;
- Aramco's exposure to inflation, interest rate risk, and foreign exchange risk;
- risks related to operating in a regulated industry and changes to oil, gas, environmental, health, safety, or other regulations that impact the industries in which Aramco operates;
- legal proceedings, international trade matters, and other disputes or agreements; and
- other risks set forth in our Annual Report 2024 available on our website.

In light of these risks, uncertainties, and assumptions, the forward-looking statements described in this Report may not occur in the manner described or may not occur at all. These forward-looking statements speak only as of the date of this Report. We undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events, or otherwise. All subsequent written and oral forward-looking statements attributable to us or to persons acting on our behalf are expressly qualified in their entirety by the cautionary statements referred to above and contained elsewhere in this Report. Undue reliance should not be placed on the forward-looking statements.

Except where noted, the information covered in this Report highlights the Company's performance and initiatives in fiscal year 2024. The inclusion of information in this Report should not be construed as a characterization regarding the materiality or financial impact (or potential impact) of that information. Sections of this Report have been prepared with reference to and guidance from various reporting frameworks, standards, and guidelines, as outlined at the start of this Report. The Company's application of the various frameworks, standards, and guidelines is based on its interpretation and judgment.

This Report may contain references to links to or information from other internet sites. Such links and information are not endorsements of any products or services on such sites, are not being incorporated by reference herein, and no information on such sites has been endorsed or approved by Aramco.

This document should be read together with Aramco's public reporting, including our Annual Report, our website, and our policies.



- Please see our Annual Report 2024 at **www.aramco.com/en/investors/annual-report**
- Please visit **www.aramco.com** for more information
- Please visit **www.aramco.com/sustainability** for more information on our approach to sustainability, our basis of preparation, and our independent assurance statements for 2019, 2020, 2021, 2022, 2023, and 2024

Contact us

We hope you find this Report engaging and informative, and we continue to welcome your input and views:

sustainability@aramco.com

Social media

We are also active on the below social media platforms, so please follow us to learn more about Aramco and our sustainability journey:

@aramco

linkedin.com/company/aramco

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