

# Safe operations and people development

At Aramco, safety is at the heart of everything we do. It is a core value that helps protect our people, assets, and environment.

We are committed to a strong safety culture across our employees, contractors, and suppliers. We prioritize the training of our workforce to perform their jobs safely, while also promoting an open reporting culture.

We empower our people to reach their full potential through providing a safe, respectful, and professionally challenging working environment. We are committed to respecting and protecting the rights of every single member of our workforce (employees and contractors); we expect and support our suppliers to do the same.

## Material topics

## Relevant metrics

## Relevant UN SDGs

### Workforce protection

Number of fatalities  
 Lost time injuries/illnesses rate (number of LTI cases x 200,000/total work hours)  
 Total recordable case frequency (total recordable incidents x 200,000/total work hours)  
 Health performance\* (number of overdue major health findings) x (100)/total number of open major health findings



### 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

Attrition rate\* (%)  
 Number of company employees  
 Number of female employees\*  
 Female (%) of total employees  
 Female (%) of total number of new hires\*  
 Number of female employees in leadership positions\*  
 Female employees (%) in leadership positions  
 Number of contractor employees\*  
 Employee engagement score\* (%)  
 Employees receiving regular performance reviews (%)  
 Number of hired graduates  
 Number of apprentices  
 Number of interns  
 Total hours of training and development\*  
 Average hours of training and development\* (per employee)



\* Metric reported for the first time externally.



Learn more about how Aramco developed a safety strategy and worked on imbedding it as part of its culture since the 1940s.

☰ For more details on relevant metrics, see page 86.

# Workforce protection

## Our approach

Aramco is committed to providing a safe workplace for our people. We believe that all injuries are preventable. We conduct business in a manner that strives to prevent incidents that have the potential to impact people, damage assets, or harm the environment.

We are committed to developing our people, embracing diversity, and strengthening global collaboration with industry leaders to share safety knowledge, build capabilities, and address emerging challenges.

Visible management commitment to safety is a cornerstone of the successful implementation of Aramco's global safety policy. The Executive Management Safety Review (EMSR) program has been in place for over 40 years. Every month the president and CEO, along with a team of executive management, visit one of the Company's major operational areas. During the visit, the executive team meets with area management to review their HSE performance and engage with employees and contractors to discuss any safety issues or concerns.

## Safety performance

The table below provides an overview of our HSE performance over the past three years.

	2022	2021	2020
Number of fatalities <sup>1</sup>	<b>5<sup>2</sup></b>	1 <sup>2</sup>	1 <sup>2</sup>
Total recordable case frequency <sup>1</sup> (total recordable incidents x 200,000/ total work hours)	<b>0.050</b>	0.054	0.044
Lost time injuries/ illnesses rate <sup>1</sup> (number of LTI cases x 200,000/ total work hours)	<b>0.014<sup>2</sup></b>	0.017	0.011

Sadly, we had five fatalities in our workforce (one employee and four contractors) during the year. One employee passed away due to heat exposure after their car became stranded in the desert.

## What are we doing?

### Responsible Care

Responsible Care is the global chemical industry's voluntary initiative to continuously improve environmental, health, safety and security knowledge and performance.

Our wholly-owned subsidiary ARLANXEO completed the Responsible Care® 14001:2015 certification process for all of its worldwide locations. This broadens the scope of ISO 14001 beyond environmental management systems to include health safety and security and other Responsible Care requirements — the culmination of a project that commenced in 2020.

Within our contractors and partners, one contractor lost his life due to a motor vehicle accident, a second contractor was struck by rotating equipment on a drilling rig, a third contractor was involved in a pipe stack collapse incident, and a fourth contractor was involved in a pipeline rupture fire.

Each case has been fully investigated and the lessons learned have been communicated to all parties. We continue to work closely with our contractors to build a strong safety culture and prevent such incidents.

1. For 2020, the reporting boundary was Company in-Kingdom. As we progress on our reporting journey and our controls around ESG data mature, for this metric from 2021 onwards, the reporting boundary has been expanded to operational control. Please refer to page 86 for more details on our metrics' reporting boundaries.  
 2. This figure has undergone external limited assurance in accordance to the ISAE 3000 (revised). The assurance report can be found [online here](#).

## Transportation safety initiatives



### Safety on the road

Aramco has over 11,000 vehicles, including over 500 buses, to transport our people for business, and in 2022, our vehicles traveled over 199 million kilometers. We closely monitor and support the safety of our people on the road. In addition to mandatory traffic training and education, we use digital solutions aimed at improving traffic safety.

The Company launched SafeTravel — a digital journey management tool that provides real-time journey data to supervisors and journey coordinators — that enables personnel to complete their journeys in a safe manner. In addition, we piloted a number of AI solutions in vehicle monitoring systems that detect fatigue, distractions, drowsiness, and other negative driving conditions.

Recent initiatives:

- Introduced a “Safety Corridor” initiative to reduce accidents on an 80 km stretch of the Dhahran - Al-Hasa Highway.
- A traffic safety campaign, “The Park,” was conducted at the Dhahran Expo to promote traffic safety within local communities. The campaign attracted more than 41,000 visitors in person and more than 6 million views across social media platforms.
- An initiative to enhance traffic safety on the roadways leading to Qatar; 1,950 km of roads were surveyed and evaluated and the technical report was shared with relevant ministries.



### Safety at sea

We operate a fleet portfolio of over 270 vessels with more than 7,000 employees and contractors traveling over 1.4 million nautical miles. Our strategy is to enable safe behavior through focused international maritime, safety, and environmental standards as well as cybersecurity compliance. Aramco is committed to enabling excellence in safety, both onshore and offshore. Aramco’s marine operations span along 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 critical offshore operations such as exploration, drilling, producing, exportation, crew transfer, oil spill response, subsea repairs, offshore logistics, and offshore security.



### Safety in the air

Aramco’s Aviation Department operates one of the world’s largest corporate fleets, consisting of 49 owned and leased aircraft (both fixed wing and rotary), that annually transport more than 900,000 passengers safely to Kingdom-wide destinations, and globally. During 2022, we carried our people on some 29,000 flights traveling some 4 million miles.

Our flights support Aramco’s operations by providing transportation, special missions, search and rescue, and evacuation services to our onshore and offshore operations.

We maintain the highest level of safety standards while being mindful of our responsibility toward the environment. Our flight operations are benchmarked against airline industry standards and best practices, and are continually audited by internal and third-party aviation assessors.



### Emergency preparedness

Aramco invests heavily in incident prevention, while also taking every measure to ensure emergency readiness. The Company has a dedicated Corporate Emergency Management Taskforce to ensure resilience and readiness through pre-planning and risk-based site-specific emergency response plans.

In 2022, over 1,100 emergency exercises were conducted to train people and evaluate improvement opportunities.

### Contractor safety

Aramco is committed to maintaining the safety and well-being of its contractors. Our approach is focused on proactive engagement, effective field presence, performance measurement, and governance.

This approach is supported by a suite of custom risk-based tools that monitor contractor safety performance to ensure compliance with safety requirements. Our Construction Safety Index (CSI) monitors our construction contractors' safety performance to ensure compliance with construction-related safety requirements. In 2022, over 3,300 CSI inspections were conducted. Driven by this success, the Company implemented a Turnaround Safety Index (TSI) focused specifically on contractors performing turnaround and inspection. In 2022, over 670 TSI inspections were completed. During the fourth quarter of 2022, we launched the Rig Safety Index (RSI) that monitors onshore and offshore drilling rigs. Over 60 RSI inspections were completed since its launch.

We recognize the importance that state-of-the-art technologies play in delivering a proactive approach to safety. The Smart Site Safety Solution (4S) combines innovation and technology to detect and prevent construction site incidents. It extends support to management to mitigate major risks through zone monitoring, collision avoidance, confined space monitoring, and heat stress management. Using custom-developed software, 4S collects and processes data in real-time through video analytics and smart wearables.

### What are we doing?

## Safety at the world's largest oil field — Ghawar

We have established the Ghawar Intelligence Center as a unified information and collaboration hub. This has enabled the deployment of more than 300 Fourth Industrial Revolution technologies across safety, environment, health, and corrosion. This includes drones taking preprogrammed routes within the facility, which automatically confirm and check several safety and environmental aspects within the plant. Off-road navigation and trip management solutions are also deployed to enhance the safety of the workforce working off-road.



### A new vision for safety training and certification

Safety training and development has always been a key focus area for Aramco. In line with the Company's focus on digitalization, we are transforming our training from a conventional classroom-based learning experience to a hands-on competency-based learning approach.

Through immersive virtual reality (VR) simulations, trainees are able to conduct exercises in real-time, and we have introduced a collaborative training environment that enables multiple individuals to participate in simulations together. Aramco has deployed VR environments that allow personnel to undergo practical testing virtually. For example, scaffolding supervisors and inspectors are now tested in a VR environment.

These technologies offer a multitude of benefits when compared with traditional and more conventional training methods, including cost-effectiveness, just-in-time learning, and the experience of high consequence failures in a safe environment.

In 2022, over

1,100

**emergency exercises were conducted to train people and evaluate improvement opportunities**

# Process safety and asset integrity

## Safety Management System

Aramco's Safety Management System (SMS) drives our commitment to safety across our business. It provides a framework that integrates occupational and process safety, and assists business units in meeting safety expectations.

Our SMS was developed following comprehensive benchmarking with industry peers. It is aligned with requirements outlined in Occupational Health and Safety Management System ISO 45001:2018, and has been evaluated by an independent third party to ensure alignment with international practices.

All Aramco organizations are assessed against SMS expectations, through our internal corporate safety assessment program. With over 50 SMS assessments performed in 2022, this program has been expanded further to include both in-Kingdom and international affiliates.

## Process safety

Aramco adopts strong process safety practices to protect people, assets, and the environment. We employ a proactive approach to managing process safety through well-established programs covering safe operations, preventative maintenance, and asset integrity. We maintain a dedicated program aimed at assessing and monitoring process safety risks throughout our facilities.

## Tier 1 process safety events

In 2022, the Company recorded 11 Tier 1 process safety events, all of which were investigated, with root causes identified and corrective actions implemented.

	2022	2021	2020
Number of tier 1 process safety events <sup>1</sup>	11	11	9

Out of the 11 events, nine occurred at in-Kingdom wholly-owned operated assets and two at an entity under Aramco's operational control. None of the Tier 1 incidents in 2022 resulted in operational interruption. Two incidents were classified as major with the remaining classified as moderate. Six incidents resulted in injuries, including one fatality.

## What are we doing?

### Closed loop well testing

A new closed loop well testing equipment design was developed to provide a remote interaction in sour environments. The design includes equipment and fluid monitoring devices that operate remotely to control the flow and measure the fluid properties. The design also minimizes personnel exposure to toxic gases during operations.

This technology is now being rolled out for all sour wells in Saudi Arabia.



1. For 2020, the reporting boundary was Company in-Kingdom. As we progress on our reporting journey and our controls around ESG data mature, for this metric from 2021 onwards, the reporting boundary has been expanded to operational control. Please refer to page 86 for more details on our metrics' reporting boundaries.

## Human rights

### Our people

Aramco is home to over 70,000 individuals from all over the world, comprising more than 85 nationalities. We are proud of the multiculturalism and diverse thinking that our community brings to the Company and strive to maintain an environment of respect and understanding.

As per our commitment to the UN SDG 5 (Gender Equality) and UN SDG 8 (Decent Work and Economic Growth), along with our support for Saudi Vision 2030, we provide our people with opportunities and a safe environment to develop personally and professionally.

### Human rights in the workplace

To be treated with dignity and respect is the right of everyone. We strive to uphold human rights in the workplace by acknowledging our role as a corporate citizen and promoting a positive culture that adheres to those values. We are committed to ensuring that employees are not subject to abusive or inhumane practices. We are opposed to all forms of slavery and exploitation, and child labor.

Our corporate strategy involves engaging with stakeholders to prevent incidents that negatively impact human rights. We seek to make positive and lasting contributions in the areas of governance, transparency, respect for the rule of law, and social and economic development.

We comply with local laws and respect international human rights principles, such as, the Universal Declaration of Human Rights, the Fundamental Conventions of the International Labor Organization, the UN Guiding Principles on Business and Human Rights, and the principles of the UN Global Compact.

Aramco strives to ensure employees feel respected and safe. Our Code of Business Conduct lays out the minimum expectations we have of our people, our suppliers, and key stakeholders. The Code articulates our values: integrity, excellence, safety, accountability, and citizenship.

We strive with our suppliers to ensure that all goods or services meet country of origin standards for human rights, including health and safety as a minimum.

Aramco  
is home to over  
**70,000**  
people comprising  
more than  
**85**  
nationalities



## Employee relations

To ensure our people enjoy working at Aramco, we engage with them regularly via various communication channels, such as town hall meetings, engagement surveys, recognition events, the intranet, periodic performance reviews, and the Young Leaders Advisory Board. We have a Workers Committee, which is managed by a voluntary team of elected employees to ensure our employees are heard and hold management accountable.

Wherever we operate, we strive to comply with all labor laws with the goal of providing equal employment opportunities to employees and job applicants, while maintaining a workplace free from discrimination, harassment, and retaliation. We hire and promote the most qualified individuals, regardless of age, disability, gender, nationality, race, religion, or any other applicable protected category.

Aramco has a non-retaliation policy which empowers our people to speak freely and confidently about issues and concerns that could improve our operations and to act with integrity. People who come forward with concerns play an important role in maintaining our ethical workplace. Employees are expected to report suspected violations of the law, policies, and the Code. To encourage an open, candid culture, Aramco offers several channels for employees to ask questions and speak up:

- Management escalation;
- Personnel department, Compliance department, Internal Audit department;
- Corporate Security Division; and
- An anonymous hotline.

### What are we doing?

## Workers' Committee

Aramco Workers' Committee is a team of selected employees who voluntarily represent all workers. The Workers' Committee mandate is to present recommendations to management related to the areas listed below:

- Promoting safety and occupational health;
- Improving workers' health and hygiene;
- Improving work conditions and circumstances; and
- Enhancing workers' productivity and work-life balance.

## Grievances

Aramco has a formal grievance process, which is overseen by our Personnel Department. This process ensures all items raised are fairly and objectively assessed.

At Aramco, we believe that speaking up is an employee's right. We ensure that all sites have grievance mechanisms in place for our employees to raise any concerns in confidence.

	2022	2021	2020
Number of grievances raised*	293	236	297
Sites with a grievance mechanism in place* (%)	100%	100%	100%

\* Metric reported for the first time externally.



**Employee engagement**

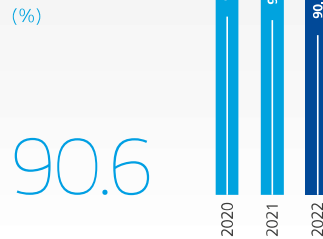
In October 2022, the corporate-wide Employee Engagement Census Survey was launched across Aramco to over 75,000 employees and contractors. The survey closed with a 59% response rate, which represents a healthy corporate response as validated against external benchmarks through an independent vendor.

An analysis of our most recent engagement surveys concluded that employees wanted leaders who enable, care for, recognize and develop their teams. To assist leadership in enhancing the engagement of their people, a new set of Employee Experience Tools for leaders was created in relation to each key theme. In total, 16 new tools were created as part of an interactive online toolkit. These include one-to-one conversation and team conversation guides. These tools have been downloaded more than 10,000 times.

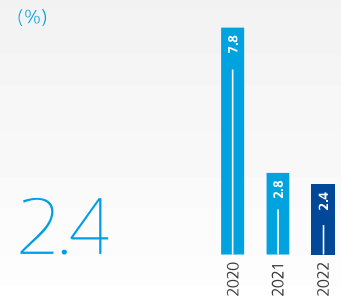
In addition, to support leaders at every level, a new virtual training, “An Introduction to Employee Experience for Leaders” was created in-house. The workshop provides useful definitions for employee experience and employee engagement, and shares practical steps chief position holders can implement to improve employee engagement. In addition to leaders, employee engagement is also supported by over 250 Employee Experience Champions who are embedded across the business.

As a final step in the performance management program year-end cycle, annual employee performance reviews are facilitated by senior management during the months of January and February. For the 2022 business cycle, 90.6% of employees received a performance review.

**Employees receiving a performance review**



**Attrition rate\***



**What are we doing?**

**Our 2022 Forbes award**

For the third year in a row, Aramco was ranked number one on the 2022 Forbes “Top Companies to Work for in the Middle East” list and the highest rated company in the construction, oil and gas, mining and chemicals sectors. This is reflected in our low attrition rate.



\* Metric reported for the first time externally.

# Labor practices

## Diversity and inclusion

We are proud of the diversity and inclusivity our community brings to the Company with our people being from more than 85 different nationalities. We strive to maintain an environment of mutual respect and understanding. We are focused on continuing to build on our diverse workforce by increasing the number of opportunities for women.

A major contributor to Aramco's success in boosting diversity has been the establishment of diversity and inclusion corporate targets, metrics on female representation, females in leadership, and people with disabilities representation.

This focus and effort, led by a dedicated diversity and inclusion team has resulted in the number of female hires increasing year-on-year for the past five years.

	2022	2021	2020
Number of female employees*	<b>4,503</b>	3,802	3,400
Female (%) of total employees	<b>6.4%</b>	5.6% <sup>1</sup>	5.1% <sup>1</sup>
Female (%) of total number of new hires*	<b>28.4%</b>	31.2%	34.1%
Number of female employees in leadership positions*	<b>176</b>	136	110
Female employees (%) in leadership positions	<b>3.8%</b>	3.1%	2.7%

### What are we doing?

## Visible progress on diversity

In 2022, we achieved an 18% increase compared to 2021 in the number of female employees in our workforce.

Aramco female employees include engineers and scientists across our operations, and in our research and development centers.

In 2022, 50% (208 out of 414) of overall enrollments in our College Preparatory Program were female students. The CPP is a 10-month college preparatory program where students receive support to prepare them for the challenges of a top-tier university.

During 2022, our Security organization and Industrial Services organizations have developed and hired women into roles they had not traditionally held previously, e.g., security guards.

18%

increase in female representation compared to the previous year

23%

increase in female employees in leadership positions

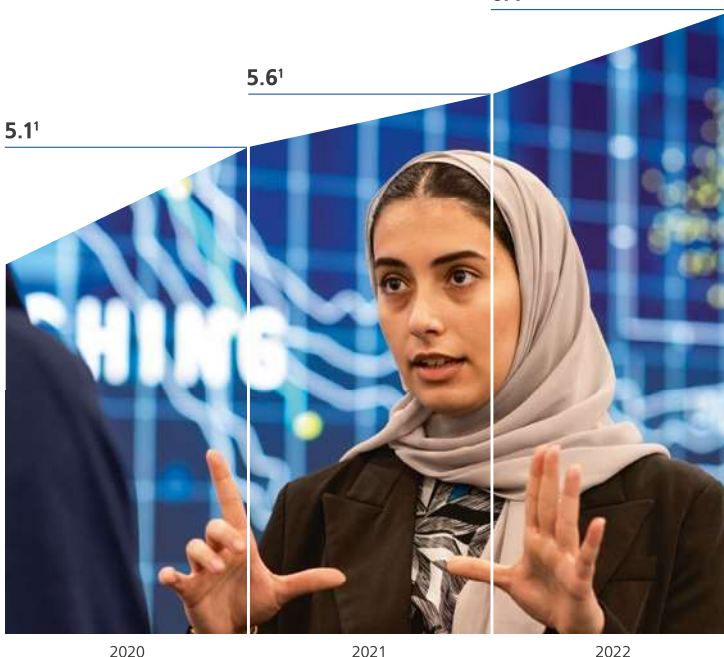
28.4%

of direct new hires are female\*

## Female employees at Aramco

(%)

6.4



\* Metric reported for the first time externally.

1. This figure has undergone external limited assurance in accordance to the ISAE 3000 (revised). The assurance report can be found [online here](#).



**Investing in our workforce**

Our success is based on having a happy, healthy, motivated, skilled, and diverse workforce.

During 2022, we welcomed over 6,000 new people joining us either full-time or part-time. There was a:

- 26% increase in the number of apprentices (1,728 in 2022 versus 1,369 in 2021); and
- 66% increase in the number of interns (3,190 in 2022 versus 1,922 in 2021) joining Aramco.

**Education and training**

As a global energy and chemicals company, we are faced with addressing some of the world’s biggest technical, logistical, and environmental challenges. To ensure that our workforce can handle these challenges, we invest in talent development. We have a proud history, spanning decades, of providing opportunities for educating and training Saudi nationals, as well as our international workforce. Depending on employees’ training and development requirements, Aramco provides sponsored training to MBA level and specialized master’s programs at prestigious institutions around the world.

The Company has delivered leadership and targeted development programs to over 18,500 participants through The Leadership Center, a world-class facility located in Ras Tanura and through affiliation with top-ranked business schools and world-class development partners such as Harvard, Wharton, and the London Business School.

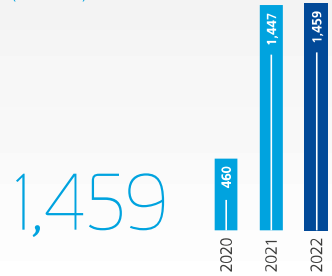
**What are we doing?**

**Embracing diversity and inclusion**

- Launched a Global Diversity Awareness Campaign.
- Conducted a Disability Inclusion Awareness Campaign, in collaboration with Johns Hopkins Aramco Healthcare.
- Recognized World Autism Awareness Day on April 2, 2022.
- Hosted the Company’s first-ever Saudi Sign Language training.
- Partnered with an international school to establish an in-Kingdom center to provide therapeutic and educational services for individuals with special needs (children and adults).

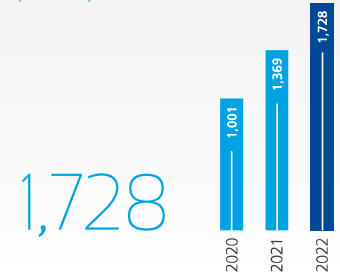
**Hired graduates**

(number)



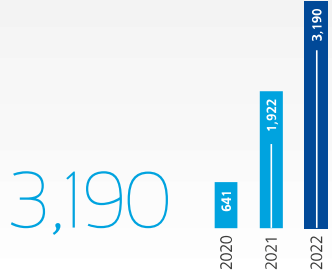
**Apprentices**

(number)



**Interns**

(number)



In 2022, we recorded 13 million T&D hours provided to upskill our workforce and ensure they are provided with strong support to perform their roles effectively.

In 2022, over \$200 million was invested in the following training programs:

Regular Development Program

Non-Employee Programs

Hosted University Programs

Leadership Programs

Executive Leadership Programs

Assessment Centers

### Workforce well-being

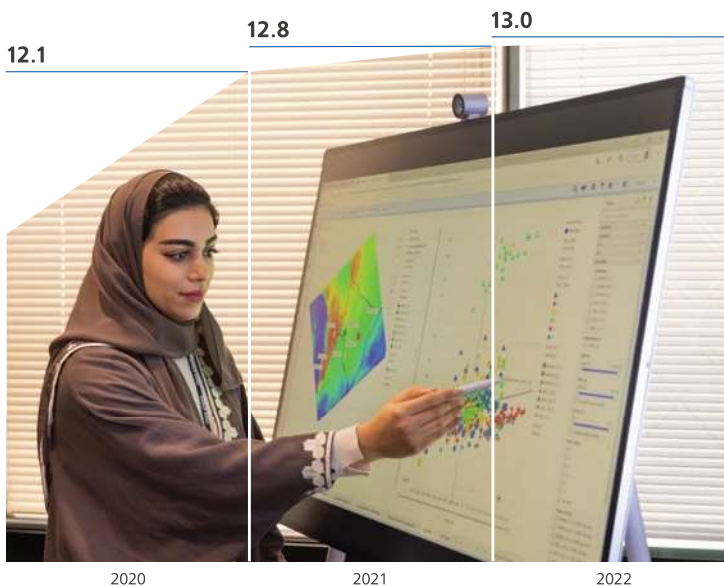
A healthy working environment is critical for employee health, positive engagement, and operational safety. To support our employees, dependents, and their families, medical services are provided across all Aramco sites and made easily accessible to our people. In 2022, a review of the existing well-being programs and activities at Aramco identified an opportunity to broaden the scope to reflect the Company's size and scale. This resulted in the creation of new well-being strategy that focused on four key elements of well-being: physical, emotional, social, and financial.

In addition, to support our contractor workforce, we have developed a Contractor Well-Being Program that provides a range of free services including a 24/7 hotline, video counseling and online resources.

The program is complimented further by the Contractor Passport Solution that tracks salary payments and living conditions, which are assessed through a comprehensive contractor accommodation inspection program.

### Total hours of training and development\*

(million hours)



The Company has delivered leadership and targeted development programs to over

**18,500**  
participants

\* Metric reported for the first time externally.



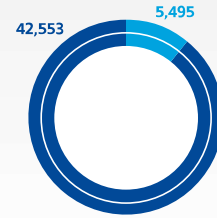
What are we doing?

## National Training Centers

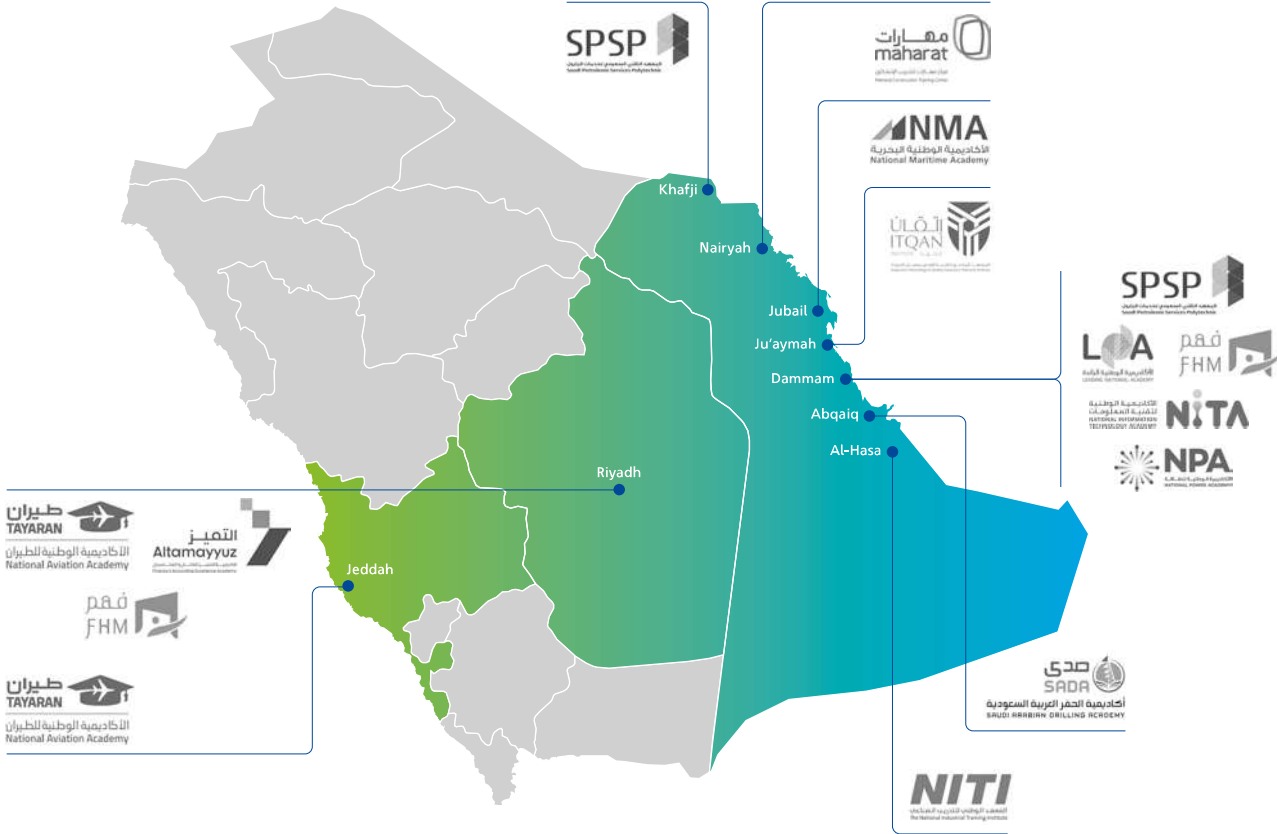
National Training Centers (NTCs) are the product of a strategic partnership between Aramco, selected government entities, and the private sector, which started in 2008. The established NTCs focus on the training of young Saudis. The centers prepare men and women to join different industry sectors, including oil and gas, drilling and workover, maritime, aviation, construction, inspection, IT, facility and hospitality management, power, and finance. The mission of the partnership is to equip Saudi Arabia with a highly motivated and qualified Saudi workforce.

Total graduates as of December 31, 2022

48,048



■ Male (89%)  
■ Female (11%)



To enable front-line leaders to provide greater support for their employees, Aramco introduced the “Supporting Employee Well-Being for Leaders” training, together with a globally recognized third-party vendor. During the year, over 600 leaders were trained in the pilot phase of the project, with a goal to train all leaders within two years. In addition, demand for well-being training continued in 2022 reaching over 5,000 employees.

As a provider of both retirement and savings benefits for our employees, we encourage financial literacy and provide regular access to financial well-being programs and on-site financial consultants. We also provide unique amenities to promote a healthy work-life balance, including leisure activities, recreational facilities, self-directed groups, and nutrition and fitness coaching. We strive to ensure that all of our facilities are accessible to staff with disabilities.

### Mental health

Mental health forms an important part of the overall well-being program at Aramco, and a dedicated team provides regular seminars to support employees, including:

- Release Your Stress;
- Move for Energy;
- Human Energy Management;
- Digital Detox; and
- Resiliency and Thriving

Our “Work-Life Support Program” provides 24/7 access to mental health services for employees and their families. The program works with a qualified vendor to link to a global network of mental health professionals who provide one-on-one counseling, life coaching, digital health programs, and many more offerings. The service is completely confidential and has been invaluable in helping employees to manage stress, mental health, work-life balance, and personal relationships. Since its inception, it has been accessed over 73,000 times.

