

the arabian sun

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CEO speaks at Nikkei

Aramco president and CEO Amin Nasser calls the company's young workforce his 'personal passion' as he speaks virtually at the Nikkei Global Management Forum in Tokyo, while also touching on the topics of increasing demand, the need for more inclusive energy policies, and more.

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Ninth in a series



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Aramco Team Series returns to the Red Sea

Team Pedersen, teen Pia Babnik top field

Jiddah — Saudi Arabia has become persistent in its push to break boundaries in sports, as exemplified by the uniquely formatted Aramco Team Series (ATS), which recently held its last golf tournament of the year from Nov. 10-12, at the Royal Greens Golf & Country Club in King Abdullah Economic City.

Building on the company's sponsorship of Saudi Arabia's first-ever women's golf tournament last year, the launch of ATS underscores the Kingdom's efforts toward gender equality and female empowerment in the world of golf, by providing an exciting new platform through which women can excel in this global sport.

This represents a triumph for the equality movement within sports, accelerating the course that Saudi Arabia is already on, while providing another example of Aramco's commitment to diversity and inclusion, which isn't new for the company.

Aramco has a long history of supporting the sport in the Kingdom, where it built its first golf course in 1945, followed by more courses in Ras Tanura, Abqaiq, and 'Udhailiyah.



Mohammed Y. Al Qahtani congratulates individual champion Pia Babnik for carding the lowest individual score over the tournament.

Jiddah Tournament

The ATS team format consisted of four players who competed to shoot the lowest combined score throughout the span of three days.

All teams featured three Ladies European Tour (LET) players, paired through a unique draft system — where team captains choose only one player, and the rest of the team was randomly as-

signed. The fourth member of each team was an amateur golfer, providing an opportunity to all players to participate through the tournament's "Team Up" competition.

In addition, individual professional players also competed to have the lowest individual score, with a \$200,000 prize awarded from the overall pot.

Winners

The tournament commenced with practice rounds, followed by the championship, which consisted of two sessions each day. The event was finalized by a championship ceremony, to congratulate and award the winners.

Team Pedersen consisting of Emily K. Pedersen, Hannah Burke, Krista Bakker, and Ahmed A. Al-Subaey, the team's amateur player, was the teams' champion. Teenager Pia Babnik, 17, was the individuals' champion.

As the proud sponsor of the Team Series, Aramco's senior vice president of Downstream, Mohammed Y. Al Qahtani, and vice president of Marketing, Sales, and Supply Planning, Ahmed A. Al-Subaey attended the Jiddah leg and were delighted to present the winning trophies to Babnik and Team Pedersen.

“

We're committed to empowering women in all walks of life, including sport.

— Ahmed A. Al-Subaey

Al-Subaey said, "We're committed to empowering women in all walks of life, including sport. The values of golf, in particular sportsmanship, hard work, and respect for others, align strongly with our values here at Aramco." He added, "Our sponsorship is an extension of our efforts to provide equal opportunities for women, and a platform to succeed."

To find out more, visit www.aramcoteamseries.com.



Video

Aramco congratulates the winners of the Aramco Team Series — Jiddah.

Industrial Security Operations Academy wins prestigious Brandon Hall Group award

The Industrial Security Operations Academy (ISOA) was recently awarded the 2021 Brandon Hall Group Human Capital Management, Bronze Medal Award, for Excellence in Learning, in the "Best Advance in Learning Technology Implementation" category.

ISOA won the award for the implementation and positive feedback of the SmartED learning environment initia-

tive. SmartED is where selected courses at the ISOA are transformed from static and one dimensional, to interactive curriculums, using advanced training technologies such as virtual reality, augmented reality, podcasts, animation, interactive games and graphics, simulating real work environments and scenarios.

The Brandon Hall Group is a preeminent research and analyst firm, with

more than 10,000 clients globally and more than 20 years of delivering research-based solutions that empower excellence in organizations.

Previous winners of Brandon Hall awards include world famous companies such as Ford Motor Company, Johnson and Johnson, Google, Pfizer, IBM, Shell, and SAP.



ISOA competed with hundreds of companies globally and the award is a testimony to the high quality of training and services that ISOA provides for Aramco and external customers.

Your voice



By Zakaria H. AlDarwish
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Your Voice reflects the thoughts and opinions of the writer, and not necessarily those of the publication.

Offering much gratitude to teachers

There is a person who is important and dear to all — the teacher.

All great civilizations could not exist without teachers, who play such a critical role in illuminating the paths of humans and guiding them through the wander orbit of science. It is the teacher who lays the foundations of the roads that have led to industrial revolutions and changed the course of human history.

Being a teacher isn't just a profession or a job one does for financial gain. It is much more than this. Being a teacher is one of the highest human professions because of its great impact on society.

Teachers have an active and significant role in building societies both

scientifically and educationally.

Since ancient times, the teacher has played the largest role as a mediator to bridge the gap between the seekers of knowledge from those who are eager to learn all they can, and the breadth of modern sciences and vast amounts of knowledge that have emerged and are rapidly developing in our everyday life.

So what key elements are necessary to help teachers meet the basic tenants of their job and simultaneously unleash the creativity required in modern times? One of the most important is infrastructure, from buildings to laboratories, and catalysts for scientific research, as well as an environment that stimulates such creativity.

The success of societies is reflected

in its teachers. We measure societies by science and education because they advance culture, knowledge, industry, technology, and civilization. Therefore, the teacher plays a primary role in communicating this knowledge through various channels to people of all ages. The teacher's ability to lead and motivate students of knowledge corresponds directly of how far a country or civilization can succeed.

The teacher, whether they are professors, educators, fathers, brothers, or whatever title they bear, deserve much gratitude. Thank you, teachers throughout our years, who have helped individuals and all of society, raising the banner of knowledge and science high for all to see.

CEO at Nikkei: Aramco's young leaders key to its bright future

Tokyo — “My personal passion” is how president and CEO Amin Nasser described preparing the company's young workforce for their, and the company's future ambitions.

Speaking via video link at the Nikkei Global Management Forum in Tokyo last week, Nasser was quick to point out that young employees in Aramco are front and center of the company's future.

“We have a lot of young people, preparing them for the company, and in the other direction, preparing the company for them, are my personal passion.”

The forum brings together some of the world's most successful business executives to discuss management philosophies, corporate strategies, and the latest global trends in management.

And listeners were left in no doubt to the key skill the company sees as crucial for young leaders.

“If you pick one aspect of a good corporate manager, when we look at them and evaluate them, it would be people-related skills,” Nasser said.

Attendees heard how Aramco's young employees make up between 60%-70% of the workforce, and the CEO explained the crucial role the Young Leaders Advisory Board plays in ensuring the aspirations of young employees are heard by senior management.

“They are a board of young people that have better connectivity with our young employees that will lead and operate our company in the future — and understanding how they think, what motivates them and what doesn't, are important matters.

“They help us as executive management to identify their needs, aspirations, and desires.”

Vision 2030 powers forward

The CEO told the forum attendees that Aramco was playing a crucial role in supporting the Kingdom's Vision 2030, which seeks to develop different sectors for growth in the Kingdom.

Commenting on making the Kingdom business friendly for investment in the private sector, he noted the crucial role Aramco is playing.

“We are creating a lot of joint ventures in the Kingdom with our partners, capitalizing on a lot of the regulation that's happening and the ecosystem that has completely shifted in the Kingdom.”

Nasser told listeners that the Kingdom had excellent infrastructure and connectivity within the region.

‘Historical announcement’

In his opening his comments, Nasser said how excited he was about the

“

If you pick one aspect of a good corporate manager, when we look at them and evaluate them, it would be people related skills.

historic announcement by His Royal Highness the Crown Prince about the Kingdom reaching net-zero in terms of emissions by 2060.

“This is a historical announcement. It means a lot to all of us, and it will create the right platforms for Aramco and other entities, within the Kingdom and globally, to follow suit.”

Noting this announcement comes from the biggest hydrocarbon producer in the world, Nasser went on to observe that Aramco was also excited to announce that the company will achieve an ambition of being net-zero from its operations by 2050.

Asked by the moderator to comment more broadly on the energy market, with the oil price at its highest level in seven years, Nasser observed that demand is healthy.

“Estimates vary, but several analyses showed that switching from gas to oil may reach one-half of a million barrels or higher this winter. According to the IEA, the expected 2021 fourth quarter demand is going to be close to 99 million barrels per day. If you look at next year, we will be past the pre-COVID-19 levels, we will be above 100 million barrels,” Nasser said.

“With many international oil companies seeking to downsize their oil portfolios and some producing countries struggling to revive upstream invest-

ment, Aramco stands to benefit and gain in market share, as it embarks on raising its crude production capacity from 12 million barrels per day (bpd) to a world leading 13 million bpd by 2027.”

A multi-speed transition

Addressing the energy transition, Nasser noted that from now until 2050, there are going to be an estimated 2 billion more energy users in the world and population growth would be led by developing countries, where energy transition will be much slower, “Therefore, I expect oil and gas demand will be healthy for many decades to come.”

“We should expect a multi-speed transition ... because of the different needs of the more and less developed countries and their unique situations, one-size-fits-all solutions are not appropriate. For example, the transition blueprint for Europe, which might be able to afford expensive solutions, is unlikely to be suitable for developing countries.”

Inclusive energy policies

“I believe alternatives such as renewables and electric vehicles are not yet ready to fulfill the growing energy needs of rising world population ... the world needs [a green and clean] energy policy that is more inclusive,” he said.

“The pace of that transition will take time, and as such the need for gasoline and diesel will continue.”



Nasser noted that the internal combustion engine would not be the same in 10 and 20 years from now compared to what we have today in the market.

“It's a continuous improvement ... [and] ... this needs to go in parallel until this transition takes place ... [which] ... is long and complex.”

Accordingly, Nasser said, oil and gas will continue to be Aramco's key businesses for a long time to come.

Reducing our carbon footprint

“We will continue our efforts to further reduce our carbon footprint of oil and gas. Efforts to reduce the company's carbon footprint will be executed with a combination of strategies, including carbon capture, gas to hydrogen, liquid to chemical, and more,” Nasser said.

The CEO told his audience that the company had been working on that strategy with its board of directors for more than a year to reduce emissions and meet the ambition of net-zero by 2050.

“We will use a combination of nature-based solutions, and carbon capture and sequestration ... to achieve gas to hydrogen; blue hydrogen will require carbon capture and sequestration. Liquid to chemical will be a major part of our business. [Also] ... noncombustible uses for oil [including] nonmetallics for construction, for auto industries and for other uses of nonmetallics globally that will increase and add value to our products.

“If you look at our upstream emissions, intensities for carbon dioxide and methane, it's one of the lowest in the industry. That did not come because our hydrocarbon is different. It is all because of our investment and strategy and what we do to reduce our carbon footprint. Our commitment is for Scope 1 and Scope 2, which is what we emit from our operations and what we receive from the utility side in terms of emissions,” Nasser said.



The Aramco hydrocarbon journey (9)

NGL | Decades of greenhouse gas mitigation in our operational DNA

By Janet Pinheiro

Natural gas liquids (NGL) are highly valued components of natural gas, which are separated out in the form of liquids, and are key raw materials for chemicals and vehicle fuel blends.

Separating a hydrocarbon's molecular chain is seemingly an endless voyage of discovery.

Among the processes used to peel back a hydrocarbon's layers are gravity, heat, pressure, chilling, or by a catalyst. Remarkably, when these techniques are applied even further, a hydrocarbon keeps on giving generously.

Valuable natural gas byproducts

Natural gas is much more than methane. Applying the processing techniques of soaking or chilling to gas, reveals its concealed natural gas liquids (NGL).

Saturated with ethane, propane, butane, isobutane, and natural gasoline (pentanes plus), NGL are highly valued fluids for their wide applications — from specialized fuels, fertilizers, to petrochemical feedstocks.

Giant desert freezer

About an hour's drive west of al-Hasa's palm groves and oasis, a solitary steel forest of pipes and tanks rises quietly from the ad-Dahna desert's baked sands.

The Hawiyah NGL plant, built in one of the hottest parts of Saudi Arabia in 2008, is essentially a giant freezer for gas.

A job of the chilly titan's three NGL trains is to extract NGL from gas received from the nearby Haradh and Hawiyah gas plants.

Extraction is achieved by bringing the temperature of the gas down to a frigid minus 110 degrees Celsius.

After the freezing, leftover sales gas is sent directly to the Master Gas System customers, while the NGL goes to Shed-

gum for feeding to various fractionating plants.

The fractionating plants separate out ethane for industrial customers, while the remaining streams are fractionated into valuable liquids.

Industrial energy efficiency

Reductions in flaring and greenhouse gas (GHG) emissions can be achieved when industrial plants are efficient in the production of energy.

Prominent at most Aramco oil and gas plants is the whirl of gas turbines, creating power for machinery like generators, pumps, compressors, and processing trains.

Reducing GHG emissions from gas turbines, and increasing their operational flexibility, are among key ongoing Aramco operational targets.

Four gas turbines mechanically drive four giant sales gas compressors at the Hawiyah NGL plant, and their power is generated by flowing air through an engine, pressurizing it, and feeding it to a combustion chamber at speeds of hundreds of kilometers per hour.



Energy is then added by spraying fuel gas into the air and igniting it to generate a high temperature flow, causing turbine blades to spin, which drive a compressor that converts the kinetic energy into pressure.

Digitization improving air, heat, and fuel mixes

In "lean-lean" mode, a combustor's two primary and secondary zones have an actual flame, whereas in the "premix" mode, only the secondary zone has a flame.

"Premix is where the air and fuel

are thoroughly mixed before combustion," says outside operator Omar N. Almodrhim, who joined the Hawiyah NGL plant in 2012 after training for 18 months at Aramco's industrial training facility in al-Hasa.

In 2017, Hawiyah installed new software to get the best out of its premix. Now, from inside the plant's central control room, where all facilities are monitored 24/7 in real-time, the premix switch is done with the mere push of a button.

Using a digital helping hand to smartly switch the air-fuel formula from "lean-lean" to "premix" means gas flaring and de-loading are no longer required, therefore, achieving a reduction of nitrous oxide (NOx) and carbon monoxide emissions, as well as less need for maintenance, and higher availability.

"Introducing fuel gas to the first zone, before it is actual flame in the second zone, is better for the environment as its combustion products produce less NOx," adds Almodrhim.



Natural gas liquids (NGL) are key raw materials for chemicals and vehicle fuel blends, and the Hawiyah NGL plant, in addition to producing sales gas for the Master Gas System, prepares NGL in a combined stream for its journey to specialist refining plants for separation (fractionation), and retention in a liquid state for storage, shipping, and consumption.



Operator Omar N. Almodrhim works with Aramco’s CO₂ capture and reinjection project at the Hawiyah NGL recovery plant, where CO₂ has been returned underground since 2015.

Aramco NGL infrastructure	
NGL recovery straddle plants	Hawiyah NGL Shaybah ‘Uthmaniyah
NGL fractionation plants	Ju‘aymah Yanbu’ Ras Tanura Wasit

Carbon capture, utilization and storage (CCUS)

Making friends with our climate change adversary

Carbon dioxide (CO₂) moves silently between our air, land, plants, animals, and people. Without CO₂, natural life on Earth would not survive.

Global industrialization has dramatically increased greenhouse gases emitted into our atmosphere, and CO₂, our life-sustaining friend, has also become our climate change adversary.

Carbon capture, utilization and storage (CCUS) is widely regarded as one of the primary ways toward managing the world’s excessive CO₂ emissions.

CCUS captures CO₂ at the source, and then compresses it.

After the CO₂ is shrunk, it can be transported for long-term underground storage, or it can be recycled into a useful purpose by turning it into marketable industrial and commercial products.

Standing above the world’s largest discovered conventional onshore oil field, Ghawar, Hawiyah NGL plant operator Omar N. Almodrhim is four hours into his 8-hour day shift.

In front of him is the compressor for the Middle East’s most advanced large-scale CO₂ capture and reinjection project.

Holding a clipboard, he diligently focuses on checking the machine’s 10 temperature gauges, carefully jotting down the readings. This is the second of four CO₂ compressor checks he completes each shift.

Omar, who joined the Hawiyah NGL plant in 2012, witnessed the CO₂ project’s construction in 2015, and the world’s rapid growing interest in it.

“The project provides better protection for the environment,” says Almodrhim. “Instead of routing CO₂ to the thermal oxidizer, we put it back where it came from.”

“We have the capability to capture and process 45 million standard cubic feet of CO₂ every day.”

In standard temperature and pressure, CO₂ is a colorless gas, and compressing it transforms into a supercritical state.

After separating the CO₂ from the gas, a Hawiyah internally geared compressor uses seven stages to compress the CO₂.

At the fifth stage, the CO₂ is routed to a gas dehydration unit, before being returned to the compressor for stages six and seven.

The final stage compresses the gas between 1,500 psi to 1,600 psi, then pipes it 85 kilometers in an 8-inch steel alloy pipeline to the ‘Uthmaniyah gas-oil separation plant 7, where a custom-built reinjection facility safely reinjects the CO₂ back into the Ghawar oil field.

A sizable portion of the CO₂ remains sequestered, while the remaining unlocks residual oil in the reservoir — a better option for enhanced oil recovery than water.



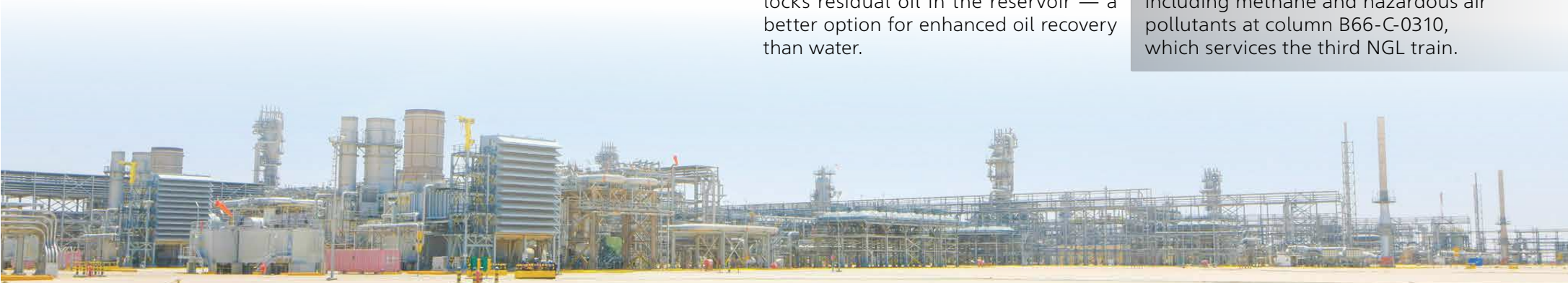
LDAR in action

Aramco’s flare gas recovery systems, asset integrity management, energy efficiency, and leak detection and repair programs (LDAR) help reduce its carbon footprint.

At the Hawiyah NGL plant, the LDAR program is applied regularly by a third party in accordance with U.S. EPA Method 21 of 40 CFR Part 60, while the site conducts its own annual survey, as well as checks after any test and inspection, or when equipment is opened.

Three 59-meter high demethanizer columns stand at the heart of the Hawiyah NGL plant, and mechanical inspector Abdullatif K. Al-Johar uses a toxic vapor analyzer to check for any fugitive volatile organic compounds, including methane and hazardous air pollutants at column B66-C-0310, which services the third NGL train.

Carbon reinjection into Ghawar field	Middle East’s most advanced large-scale CO ₂ capture and reinjection project
	Up to 800,000 tons reinjected each year since July 2015



Aramco’s Hawiyah NGL plant separates and compresses CO₂ from natural gas, before sending it 85 kilometers to a custom-built reinjection facility in ‘Uthmaniyah.

Dew Point Control Unit to tackle condensation in Abqaiq

Part of the new contracting strategy efforts announced by Aramco last year for the company's oil and gas brown-field, Project Management (PM) has awarded a new contract for a Dew Point Control Unit Project at Abqaiq Plants.

The JGC Gulf Engineering Co. Ltd. was chosen for the project, which is intended to resolve liquid condensation and accumulation in the gas pipelines going to Shedgum and Berri gas plants by providing a new Dew Point Control Unit at Abqaiq NGL Plants.

This project will support the growth of the Kingdom's petrochemical industry and drive for localization, in addition

to increasing employment. The work includes upgrading the triethylene glycol dehydration system, installing a new condensate stripper column, replacing an export gas compression unit, installing a new pipeline, as well as providing infrastructure upgrades to achieve the project's objectives.

Abdulkarim A. Al Ghamdi, Aramco's vice president of PM, emphasized the importance of such projects as they promote localization, provide training opportunities, and encourage technology deployment and digitalization while maintaining the highest standards of safety, quality, and cost performance.



Participating in the signing ceremony between Aramco and JGC Gulf Engineering Co. Ltd. for the new Dew Point Control Unit project in Abqaiq are Abdulkarim A. Al-Ghamdi, Aramco's vice president of Project Management (right); and Naoki Dai, manager of JGC Gulf Engineering Co. Ltd. (left). In the back, from right, are Abdullah A. Al-Sughaiyer, Aramco's general manager of Upstream Gas Project Management; Mohammed A. Al-Ayadah, manager of Aramco's Gas Facilities Projects Department; Sachio Kaneko, CEO of JGC Gulf International Co. Ltd., and Esam M. Al-Kadi, partner of JGC Gulf Engineering Co. Ltd.

Five Aramco departments offer up best practices Sharing Saudization success stories, strategies

By Dalia Darweesh

As an integral part to support the Kingdom's Vision 2030, and Aramco's commitment toward Saudization — the Local Workforce Development Department (LWDD) has organized the second corporatwide Saudization Exchange Session, sharing best practices, knowledge, and expertise, as well as success stories from five Aramco organizations.

The session was attended by more than 120 Saudization officers, contracts advisors, HR assistants, project engineers, and other Saudization representatives representing 14 Admin Areas around the company.

Abdulaziz A. Hijji, head of the Local Workforce Expansion Division, noted that Saudization's effect extends "beyond our

company, with a greater purpose to develop and expand the Saudi workforce that is in line with Vision 2030."

LWDD, along with proponent organizations and their business partners, work to support Saudization by identifying and developing opportunities within the contractors' workforce to increase growth in the national workforce.

Transportation and Equipment Services Department (T&ESD)

Saad M. Minah from T&ESD noted, "We consider it our duty to extend a hand to Saudis who seek to support their families, while also contributing to the community."

Beginning in September 2018, T&ESD established a workforce that increased the Saudization percentage from 32.9% to 46.29% today. Among its success stories have been enabling females to work as taxi drivers, business system analysts, customer service agents, dispatchers, and bus monitors. It also successfully collaborated with charities to help with recruitment, and added a steering committee to improve Saudization.

Utilities and Facilities Services Division (U&FSD)

Abdullah N. Dughaiter and Shaimaa A. Al-Hindaas, from U&FSD's Community Services Department (CSD), presented on best practices and challenges.

"Our school of thought is to keep exceeding business plan targets continu-

ously, as Saudization is a noble goal that will set the foundation for successful future generations," said Dughaiter.

In September 2020, CSD had a total of 5,502 Saudis, which has increased to 6,035 as of today.

Al-Hindaas emphasized the importance of following Saudization procedures, including retaining Saudis through competitive job offers, employee training, and benefits. She also emphasized the importance of ensuring contractors' compliance to the Saudization policies and enforcing corrective measures on those who fail.

Project and Technical Support Department (P&TSD)

Ahmed M. Ghamdi, from PD&T, shared their journey toward Saudization excellence. As of 2021, the Saudization percentage has increased to 38% compared to 35% in 2018.

P&TSD works all over the Kingdom, which can make it difficult for contractors to recruit, maintain, and train Saudis. To enhance the Saudization program, P&TSD began developing monthly reports to track Saudization and counseled noncompliant contractors. This was in addition to conducting awareness sessions alongside LWDD.

Project Management Support Services Department (PMSSD)

Shaikha A. Balooshi, from PMSSD, spoke about construction contractor

well-being.

PMSSD visited sites to identify areas for improvement in terms of living conditions, work efficiency, training and development, and medical insurance. Through planning and development improvements, the Saudization percentage rose from 15% in 2019 to 24% in 2021.

PMSSD established internal procedures and monthly calls and reports to ensure Saudization compliance.

Southern Area Oil Operations (SAOO)

Essa J. Alsaif Alsleem, from the Sea Water Injection Department, noted a dedicated team was assigned in 2013 to increase Saudization levels — reaching a total of 63% compared to 36% in 2013.

The team monitored and analyzed data, set monthly reports, and participated in Saudization audits. Their responsibility also includes holding job fairs, forums, and workshops and initiating field audits to ensure compliance and offer feedback for improvement.

Mohammed S. AlShahri, from LWDD, concluded the session. "Together we enable Saudization through supporting Aramco contractors to increase, develop, and retain the Saudi workforce by providing consultations, engagement, training, and recruitment support" with the collaboration of various government and proponent organizations and their business partners.

Saudization Success

Increases by department

T&ESD

32.9% in 2018 to 46.29% today

U&FSD

5,502 Saudis in 2020, which has increased to 6,035 today

P&TSD

35% in 2018 to 38% today

PMSSD

15% in 2007 to 24% today

SAOO

36% in 2013 to 63% today

T&D

Delivering best-in-class training for company, Kingdom, and the future

As part of Aramco’s Human Resources, Training and Development (T&D) delivers services across a wide range of areas and provides critical training in line with Aramco’s Digital Transformation strategy.

All of this is done to nurture a workforce for the future, says T&D general manager Sami T. Al Murshed.

“T&D contributes to the creation of a workforce that is well-equipped to meet the requirements and the evolving nature of both Aramco’s operations, and also the Kingdom’s economy as outlined in Vision 2030,” Al Murshed explains.

Industrial training for the new millennium

One of T&D’s best-known programs, the Industrial Training Department (ITD) Aramco Apprenticeship Program, has been responsible for training nearly 70% of the company’s workforce.

After being chosen through a highly selective recruitment process, trainees are dispatched to one of seven Industrial Training Centers in the Kingdom. There, they are enrolled in the Apprenticeship Program for Non-Employees and Vocational College Graduate Non-Employee program, receiving training needed for careers in the company’s industrial workforce.

T&D provides trainees with smart learning environments, employing technology such as smartboards, iPads, and distance learning platforms.

“T&D never stops finding new ways to address the challenge of building a skilled workforce,” said Mohammed T. Alsubaiei, director of ITD. “Whether it’s virtual and distance learning options or immersive virtual reality, we strive to stay ahead of the curve in training.”

Higher education, here and abroad

T&D develops Aramco’s Arab employees educationally, placing them in top academic programs around the world to acquire critical professional skills.

The College Degree Program for Non-Employees (CDPNE) creates a pathway to employment for non-employees by sponsoring them to attend top universities and obtain degrees in fields important to the company’s operations.

The Advanced Degree Program (ADP) provides employees with opportunities to pursue advanced degrees at international universities.

In addition to these programs, the Hosted University Program provides employees with the chance to work while pursuing advanced degrees through best-in-class universities worldwide.

“We strive to build a pipeline of top talent for Aramco, starting with our early education programs, continuing with our Qudarat and Tahsili college exam prep classes, extending to our efforts to send gifted young Saudis to the



In the Apprenticeship Program for Non-Employees, trainees receive the knowledge they need for careers in the company’s industrial workforce. It is just one of myriad programs Aramco Training and Development offer to best prepare it and the Kingdom’s workforce for the future.

“Whether it’s virtual and distance learning options or immersive virtual reality, we strive to stay ahead of the curve in training.”

— Mohammed T. Alsubaiei

best colleges at home and abroad, and of course, supporting our employees to continue their higher education,” said Wail S. Abolkhair, acting director of the Academic Programs & Partnerships Department.

Reaching out to, and upskilling the future Saudi workforce

A product of strategic partnerships between Aramco, government entities, and the private sector since 2008, National Training Centers (NTCs) are an integral training element, too.

So far, the 12 NTCs have graduated

more than 32,000 young Saudis in 50 vocational trades, with a target of more than 100,000 trainees graduating by 2030.

The NTCs fall under the guidance of T&D’s Local Workforce Development Department.

Saad M. Al-Shahrani, administrator of Training Capacity Development, said the NTCs align extremely well with Saudi Vision 2030 with a goal “to expand vocational training to drive economic development” while also helping reduce unemployment and supporting key sectors and increasing female participation in the workforce.

“A dedicated female training center has been created for that purpose,” he said.

Aramco also provides invaluable work experience to college students through its University Internship Program and Vocational College Internship Program, which places university and vocational college students in work assignments at the company to help them make a smoother transition from school to career.

“We have a broad scope and the efforts of our people are ensuring that workforce capabilities are built robustly, with best-in-class training, alongside



The College Degree Program for Non-Employees creates a pathway to employment for non-employees by sponsoring them to attend top universities and obtain degrees in fields important to the company’s operations.

development and education programs,” said Mohammed A. Marry, director of the Local Workforce Development Department.

Commitment to public service

T&D also engages in a number of outreach activities that support the development of the Kingdom’s education system, including:

- ACCEL International Center, which helps prepare students for college
- Ajyal International School for developmentally disabled children
- The Saudi Aramco Driving Center (SADC), a driver education facility for women.

Asma A. Altuwaijri, principal of the SADC, says that the initiative is a way of giving something back to communities and reduce economic costs as a result of motor vehicle accidents.

“Being a part of Aramco has driven SADC to not only provide high quality training for driving, but has meaningfully allowed us to contribute to the transformation of lives and to enhance our communities,” she says.

Embracing the Fourth Industrial Revolution

T&D continues to embrace emerging technologies in its programs such as the Immersive Virtual Reality (IVR) initiative, which improves Aramco’s use of VR technologies.

Adnan A. Zahrani, acting administrator of the Program Development and Evaluation Department, says: “Augmented reality (AR) allows us to give our trainees the most realistic learning scenario possible in a controlled and safe environment. AR can also be used to provide skill development during every stage of a person’s career.”



The Saudi Aramco Driving Center not only provided high quality training for driving, but has meaningfully allowed Aramco to contribute to the transformation of lives and to enhance our communities.

Last chance to win F1 tickets.

Log on to Aramco LIFE to learn more.

Drilling and Workover buys in big at SPARK

King Salman Energy Park (SPARK), the world-class energy and industrial city, marked another significant milestone recently as Aramco and the Horizon Project Company Ltd. broke ground on a 277,000 m² drilling and workover site.

Construction is scheduled to be completed by the second quarter of 2023.

The project includes new office and warehouse space, industrial workshops, staging yards, dining facilities, vehicle parking, and other support facilities. It will provide infrastructure and amenities for a workforce of 1,200 Drilling and Workover employees. Aramco and the Horizon Project Company Ltd. have signed a 22-year Build, Own, Operate and Transfer (BOOT) contract for the project.

Horizon Project Company Ltd. is jointly owned by a consortium consisting of Al Fouzan Al Sabiq Holding Company and Almutlaq Real Estate Investment Company.

The project will strategically situate new facilities for the Drilling and Workover Services Department at one city



Nasir K. Al Naimi and Abdulhameed A. Al Rushaid were among those on hand for a ground-breaking ceremony at King Salman Energy Park (SPARK) for a new 227,000 m² drilling and workover facility. The project will strategically situate new facilities for the Drilling and Workover Services Department at one city with centralized drilling services and operations.

with centralized drilling services and operations.

Nasir K. Al Naimi, senior vice president of Upstream at Aramco, said, “This is another significant Aramco venture to ensure business continuity. The new facilities for Drilling & Workover will attract other oil field services to play an indispensable role within an integrated energy ecosystem in a collaborative setting.”

Abdulhameed A. Al Rushaid, vice president of Drilling and Workover at

Aramco, said: “The development strategically advances our role as an anchor tenant at SPARK. As an integrated ecosystem for the energy sector, SPARK is being designed to capture the full economic value of demand for energy-related goods and services.

“Aramco intends to leverage the scale of our drilling activities to meet that demand and ensure continuity of energy supply, thereby cementing our position as a global leader in energy and bolstering the Kingdom’s position as a hub for

“The new facilities for Drilling & Workover will attract other oil field services to play an indispensable role within an integrated energy ecosystem in a collaborative setting.

— Nasir K. Al Naimi

energy services,” he said.

Saif S. Al Qahtani, SPARK president and CEO, said: “We’re excited to announce Aramco’s new Drilling & Workover main head office and industrial hub at SPARK. The establishment will enhance the oil and gas supply chain within the city by utilizing SPARK’s advance offerings such as the logistics hub and dry port to establish a solid eco-system.”

Dhahran trainees’ artwork inspires COVID-19 resilience

By Jim Cook

Ghala Al Ghamdi lights up when describing her artwork at the Training and Development (T&D) Art Exhibition.

Al Ghamdi, a trainee at the Dhahran Industrial Training Center (ITC) talks about the time and effort she put into the piece, which shows a nurse with the world in balance, and how working on the project made her more comfortable with getting the COVID-19 vaccine.

“The people in the health field are working to help people get better and I wanted to take the vaccine to do my part to help the world get better,” she said.

An outlet for talents and passions

The T&D Art Exhibition provides trainees with an outlet for their creative talents and passions. Originally intended to showcase artwork by trainees related to the fight against COVID-19, the exhibition will be an ongoing feature of the Dhahran ITC and will display other artwork reflecting positive social messaging in the future.

Mishal Alqahtani, an ITC trainee, worked with a team of other trainees on a collage that took clippings from



Norah A. Albahussain discusses how her artwork is arranged to create a narrative about COVID-19 at the Training and Development Art Exhibition. At right, trainees (from left) Mishal Alqahtani, Mohammed Al Qusir, and Abdulaziz Al Hubishi celebrate their art.

company publications and used them to form the shape of a mask. Alqahtani said working on the project changed his views toward COVID-19 safety protocols.

“At first, I didn’t see the masks as very important, but after working on the project I learned that wearing the mask was very important to protect myself and others,” he said.

The exhibition currently displays artwork submitted by trainees during the T&D Creative Competition in 2020 and a 2021 competition promoting vaccination. The exhibition features select

artwork from the competitions, while all artwork submitted from the competitions may be viewed via an app.

Developing social responsibility and awareness

Norah A. Albahussain, a business analyst in the Industrial Training Department who has played a leading role in the creation of the exhibition, said the art contests and exhibition play an instructive role for trainees by encouraging them to develop their abilities and in developing social consciousness. Albahussain said participating in the competitions resulted in many of the



trainees taking the time to learn more about COVID-19 and how they could contribute to stopping the pandemic by following public health guidelines and getting vaccinated.

Albahussain drew upon her own creativity to organize some of the artwork featured in the exhibition into a display showing how the world looked before, during, and hopefully after the pandemic.

Albahussain said that inspiring creativity among trainees and employees has the practical benefit of teaching them to harness their imagination and flexibility of thought and apply it to workplace challenges. The end result is a more adaptable and innovative workforce.