Aramco announces expansion of iktva program

New international partnerships and the establishing of companies through an Industrial Investment Program (IIP) are added to iktva.

Risk-free drive with Advance Journey Management System

With safety top of the agenda, Southern Area rolls out a journey management system ensuring 24/7 tracking of fleet cars.

Diversity and Inclusion

Annual LEWAS forum drives diversity talk, recognizes top achievements in women’s empowerment.

F1 in Schools

The premier global education challenge, has announced a long-term partnership with Aramco.

Driving nonmetallic solutions

From traffic signs to solar panels, company puts nonmetallic strategy into action.

Don't lose sight of safety.

COVID-19 is still a threat. Never let your guard down.
driving nonmetallic solutions
glass fiber reinforced polymer traffic signs deployed within Aramco’s facilities

By Waseem A. Khatri

Dhahran — In alignment with the company directives to promote nonmetals in the building and construction sector, the Consulting Services Department (CSD) and the Transportation and Equipment Services Department (T&ESD) piloted glass fiber reinforced polymer (GFRP) traffic signs and signal poles within Aramco’s facilities.

Design
The traffic sign and signal poles were designed and produced to international standards and meet the loading and temperature requirements of the Kingdom. GFRP is produced indirectly through crude oil, and as such, promotes the use of crude oil derivatives in supporting the Kingdom’s economy.

GFRP traffic sign poles were installed for the first time in Dhahran at the intersection of Old Abqaiq Road and the T&ESD Admin Building. The poles were installed between July 2019 and April 2020, and will be monitored for a minimum of six months from their installation date to assess their overall performance.

The reason for piloting the GFRP poles is to reduce the ongoing maintenance liability, and increase the safety of vehicle occupants — in case of a collision — in comparison to steel posts.

There are thousands of traffic signs and poles in company facilities and throughout the Kingdom. These are essential to direct and control the traffic movements at intersections, roundabouts and roadways, and to inform and warn drivers and pedestrians of road direction changes and hazards. Generally, these traffic signal and sign poles are made of steel, aluminum, or cast iron.

Steel posts are heavy to transport and install. Also, the steel posts and fittings (nuts, bolts, and washers), which hold the traffic sign and signal equipment in place are susceptible to corrosion. This is a major issue, which results in frequent repair and or replacement to maintain the serviceability of these traffic signs and signal poles.

A better value
The GFRP poles are lightweight, easier to install, construct, and do not suffer from corrosion in comparison to steel poles. The fittings to fix the traffic signs and signal equipment are also tailor-made from GFRP to meet the specific equipment fitting requirement. This removes the issue of constant replacement and inspection of these fittings, which are difficult and expensive to repair and replace.

The GFRP poles have a higher initial cost than steel poles, however, they have a lower maintenance cost and are expected to last longer. When comparing these attributes based on life cycle cost, the GFRP poles are expected to provide greater value.

Sound construction
The GFRP traffic sign poles are directly embedded into the concrete foundation and the traffic sign is fixed on the pole. The traffic sign plates are constructed using GFRP, and the reflective sheeting is glued to the plate. The traffic signal poles and bases are also made of GFRP and fixed using anchor rods to prefabricated concrete foundations. Fixing the signal head to the pole is easily done, along with cameras and other fittings.

CSD advocates the use of nonmetallic in the Kingdom for lighting, traffic signs and signal poles through technical events, and in association with the local standard body Saudi Standards, Metrology and Quality Organization.

The GFRP poles are lightweight, easier to install, construct, and do not suffer from corrosion in comparison to steel poles.
nonmetallic solar panels shine light on brighter future

by Joao Tavares

Solar panels, also known as photovoltaic panels, were created at a commercial level for the first time in 1957. Past progression of the solar panel as a product was mostly driven by innovation of solar cell technology. 70 years ago, a solar panel generated energy with an efficiency below 6%, but decades of development have allowed panels to function today with an efficiency above 20%. In addition to the solar cells, a typical solar panel is composed of multiple layers of different materials for protection and insulation. All components have an important purpose, but the front glass sheet is the first barrier of defense for the solar cells against external damage. The front glass sheet also represents approximately 70% of the total weight of a panel, which normally exceeds 20 kg, making installation more complex and less safe. A nonmetallic solar panel can weigh 75% less than a typical glass panel, allowing installation time to be reduced by 40% due to ease of handling, while transportation costs are reduced by 50%.

Nonmetallic strategy in action

Aramco, as part of its nonmetallic strategy, is exploring opportunities to introduce plastic materials in the renewable solar energy industry, and the Consulting Services Department is leading the deployment efforts. The main objective is to create a new market for plastics, and consequently, increased demand for crude oil.

Aramco identified a supplier of ethylene tetrafluoroethylene (ETFE) nonmetallic solar panels and advocated for its deployment. This year, the Aramco team reached an important milestone by deploying the first ETFE panels in-Kingdom. The ETFE panels will remain under surveillance to collect energy data and approve its performance and further utilization in future projects in Saudi Arabia.

From a list of alternative plastic candidates, polycarbonate (PC) was also identified as a high potential plastic material to be used in solar panel applications due to its high transparency, very high impact resistance, and low weight. This led Aramco to partner with SABIC to explore PC use in solar panel applications, which is currently conducting extensive test campaigns to develop an innovative PC-based product. Part of the material testing is conducted in-Kingdom at the King Abdullah University of Science and Technology (Aramco Satellite Center), while another significant part of the trial is performed at the Fraunhofer ISE labs in Germany, the leading institute for solar panel research in Europe.

So far, the results and findings have been promising. In parallel to the research and development activities, Aramco has already kicked off collaborations with large international solar panel manufacturers and end-users that have shared the excitement to see a breakthrough in the solar panel material structure, enabled by the utilization of nonmetallic materials.

Sales A. Al Amer and Aaron K. Adkins appointed as Associate General Counsel

Sales A. Al Amer was appointed as an Associate General Counsel effective December 1, 2020. He had previously been in an acting capacity since November 2019. In this role, he oversees the Intellectual Property (IP) and the Litigation and In-Kingdom Advisory Legal Practice Areas. The IP practice area provides legal counsel in the areas of copyrights, trademarks, and trade secrets. The Litigation and In-Kingdom Advisory is responsible for the company's litigation portfolio as well as providing domestic legal advisory and advocacy services.

Al Amer began his career with the company in September 1998 as a participant in the College Degree Program for Non-Employees, earning a bachelor's degree in Chemical Engineering from the Pennsylvania State University in 2003.

He worked as a plant engineer in Abqaiq Plants and as a corrosion engineer in various corrosion control divisions in Engineering Services, before being selected in 2008 for the company's Out-of-Kingdom Law Degree Program—through which he earned his Juris Doctor degree in Law from the University of Pittsburgh in 2011.

Thereafter, Al Amer joined the Law Organization where he held a number of positions of increasing scope and responsibility, including acting management positions as an Associate General Counsel, and in the Corporate Compliance Department and the Corporate Business Ethics Office. Al Amer also provided counsel on international environmental matters (including the 2015 Paris Climate Change Agreement), and is responsible for managing local and international litigations and overseeing a number of high-profile cases in a number of Saudi courts.

He also oversaw a number of transformation projects in the Law Organization, including the Corporate Secretariat transformation project.

In 2018, Al Amer was awarded a bachelor's degree in Shariah (Islamic Law) from the Imam Mohammed ibn Saud University in the Kingdom.

Al Amer is a member of the State Bar of Pennsylvania and the State Bar of the District of Columbia. In addition, he has completed several leadership programs during his career with Aramco, including the Aramco Management Development Seminar, the Advanced Management Program at Columbia University, and more recently, the Leading Creative Transformation in Critical Times Program at Stanford University.

Aaron K. Adkins was appointed as an Associate General Counsel effective December 1, 2020. He had previously been appointed as assistant secretary in August 2018. Prior to his appointment, Adkins had been leading Aramco's Corporate Secretariat function within Law since August 2017. He also serves as the secretary to the Audit Committee and the Risk and HSE Committee of the Board of Directors.

Adkins joined Aramco in October 2005 from the law firm of Baker Botts LLP. Since joining Aramco Law, he has held a number of positions of increasing scope and responsibility. This included serving as the practice leader of the General Corporate & Commercial Contracts Practice Area and leading the transformation of the Corporate Secretariat function to better support management and the Board of Directors in anticipation of the company's initial public offering and as the company's portfolio increases in size and complexity.

Adkins also served as the lead attorney for a number of significant projects such as the construction program for the Sadara Joint Venture, the Fujian Joint Ventures in China and the Johns Hopkins Aramco Healthcare Joint Venture. In addition, he has extensive corporate governance experience having served as the corporate secretary of several of the company's affiliates.

Adkins obtained his Juris Doctor degree in Law from the University of Houston in Texas, U.S. in 1999, after earning a bachelor's degree in Economics from the University of Northern Iowa in 1996. He is a member of the State Bar of Texas.

Adkins has completed several leadership programs during his career with Aramco, including the Foundations of Business Leadership with the International Institute for Management Development (or IMD) and the in-house programs, the Joint Venture Board of Directors, the Business Leadership Essentials, and the Aramco Leadership Forum.
Risk-free drive with Advance Journey Management System

by Ahmed Y. AlAmeer

The Southern Area Well Completion Operation Department (SAWCOD) recognizes that driving is one activity that presents the greatest exposure to risk. SAWCOD’s fleet has driven more than 5.4 million km to cover operations and meet business requirements. As it is very important and essential for SAWCOD to foster a high-level responsible driving culture, SAWCOD has developed an in-house Journey Management System (JMS), which includes a centralized real-time solution that ensures travel is done in a safe and managed environment.

Step change in our journeys:
“A simple yet very efficient journey management process is a key factor to have JMS part of our team’s everyday routine to assure their safety,” says Zareya AlBenSaad, SAWCOD manager (A). Trips and traveling within SAWCOD now are more systematic and planned. The step changes in the implemented JMS focuses on process, gears, and technology.

Process
JMS outlines the process for employees to plan their trip, identifying all possible hazards and any associated safety measures needed to reach their final destination safely.

Gears
As part of journey planning, the system considers the type of vehicle to be used for planned trips as well as minimum equipment required to ensure stress-free travel. For example, for off-road trips, employees are allowed to drive only 4x4 vehicles, with a mounted vehicle radio, and vehicle recovery kit.

In addition, now all SAWCOD vehicles are equipped with “SOS” key technology, which can send a request for rescue should the user require assistance in locations where radio or cellphone coverage is not available.

Technology
SAWCOD has developed an in-house application that logs, tracks, and monitors all trips in real time. Also, the application allows not only the JMS coordinator once a trip exceeds the planned estimated time, which is pre-set when the trip is generated. The application also triggers a notification to users when the vehicle moves out of the pre-defined zone via the Geo-Fence feature.

To run the system, SAWCOD has a dedicated center available 24/7 to monitor and track the journey of the organization’s fleet.

Simple steps for a safe journey
“The implemented JMS has provided a mechanism to make driving safer, risk-free, and most importantly, we can support our workforce in the field and deliver emergency responses in a rapid time,” said Ahmed N. AlDuajj, SAWCOD Operational Excellence and Compliance Group leader.

The developed JMS has set a standardized, clever and easy solution for SAWCOD to plan and complete their trips safely and efficiently.
Aramco announces expansion of its flagship localization program

**Dhahran —** Aramco announced the expansion of its flagship program to increase local content and boost domestic supply chains. It is a significant milestone in the company’s In-Kingdom Total Value Add (iktva) program, which marks its fifth anniversary on December 1. The expansion includes plans for new international partnerships and the establishment of companies through an Industrial Investment Program (IIP), which is linked to the development of Aramco’s business.

Aramco has signed MoUs with Shell & AMG Recycling BV (AMG) from the Netherlands; Chinese firms Suzhou XDM, Shen Gong, Xinfao, and SUPCON; and Posco from South Korea.

These strategic collaborations pave the way for the launch of new businesses across multiple innovative growth sectors, including steel plate manufacturing, industrial 3-D printing, digital equipment manufacturing, energy management and control; catalyst manufacturing and recycling, and advanced chip and smart sensor manufacturing.

These new collaborations reflect Aramco’s commitment to increasing the company’s reliability and operational efficiency, as well as its commitment to further enhancing the Kingdom’s commercial ecosystem, and increasing employment and development opportunities for talented Saudis. Since iktv's launch, Aramco’s local content index has increased from 35% at the end of 2015 to 56%.

Amin Nasser, Aramco’s president and Chief Executive Officer, said: “Today’s announcement is a step change in Aramco’s pioneering iktv program, which was launched in 2015. Despite the uncertainties surrounding the global economy, we have sustained our focus on our long-term goals to enable growth and development for a thriving ecosystem and a more diversified Saudi economy.

“These new partnerships will contribute to advancing innovation, sustainability and enhance the scale of reliability in our business ecosystem, and in addition, benefit companies operating in the Kingdom’s vast energy and chemicals sector. These partnerships will also have a strong focus on new technologies by maximizing our investments in nonmetallic materials and the circular carbon economy, as well as the development of talent in communities where we operate.”

Ahmad A. Al-Sa’adi, Aramco’s senior vice president of Technical Services, said: “Aramco has a long history of supporting the local business ecosystem. Our iktv program is a manifestation of our commitment to this and the resulting investments, either directly by Aramco or indirectly by suppliers, have promoted localization, contributed to Aramco’s supply chain resilience and enhanced Saudi Arabia’s economic growth. Our planned partnerships will continue this journey and advance the Kingdom’s economic progress. We intend to act as an enabler, supporting the growth of national champions. Today we are expanding our flagship program, and expect more partnerships in the future.”

Aramco has concluded MoUs with the following companies:

1. **POSCO** — An agreement to collaborate on evaluating the feasibility of constructing an integrated steel plate manufacturing plant in Saudi Arabia.
2. **Suzhou XDM 3D Printing Company Ltd.** — An agreement to collaborate on industrial 3-D printing technologies and development in Saudi Arabia.
3. **SHEN GONG New Materials (Guang Zhou) Co. Ltd.** — An agreement to focus on developing control systems technologies for LED lighting, energy management, and intelligent control.
4. **XINFOO Sensor Technology Co. Ltd.** — An agreement to explore opportunities in chip manufacturing and related technologies.
5. **Shell & AMG Recycling B.V.** — An agreement to explore the collaboration to develop plans for a state-of-the-art regional hub for the recycling of gasification ash and reclamation of spent catalyst, in addition to providing sustainable solutions.
6. **Zhejiang SUPCON Technology Co. Ltd.** — An agreement to explore potential joint investment opportunities in Saudi Arabia for the services and manufacturing value chain.

**Building a new skilled workforce for the future**

**Virtual In-Kingdom Total Value Add (iktva) Training Services Roadshow**

**Dhahran —** Building a trained and skilled local workforce equipped for Saudi Arabia’s changing economic landscape will allow suppliers and future investors to benefit from new technical talent pools, an iktv sponsored virtual roadshow was formed.

The iktv Supplier Training Services Roadshow brought together almost 100 suppliers and representatives from Aramco’s Local Workforce Development Department (LWDD).

Since its launch, the company’s iktv program has been recording steady localization success and is a cornerstone of Aramco’s strategic intent. Its goal is to localize 70% of Aramco’s supply chain content by 2023, while raising energy-related exports to 30% — in the process creating thousands of jobs for young Saudis.

**Technical programs**

In tandem with the iktv program, National Training Centers (NTCs) have been ramping up their technical programs with the goal of providing highly skilled and ready labor to the energy and other industrial sectors.

There are now 11 NTCs established in 10 cities across the Kingdom.

**Specialized training**

The NTCs, Al-Mogren added, had been built to develop specialized training programs to boost the technical skills of young Saudis.

He encouraged suppliers to engage and ask questions during a virtual panel discussion featuring the top representatives of the Kingdom’s NTCs.

“Let’s work together to find answers on how to improve the NTCs and their programs.”

**Saudization**

The LWDD’s Saudization Services Unit’s Dina M. Al-Ghassab, gave a presentation in which she explained the concept of Saudization. She described Saudization as a “national duty” with the goal of a significant increase in Saudi national participation in the private sector.

“We want to be the leader in building the vocational training capacity to qualify and develop a competitive Saudi workforce, and our mission is to promote Saudization with a focus on a sustainable training environment,” Al-Ghassab told attendees.

Dalia K. Alsawafir of LWDD’s Training Capacity Planning Unit, gave an overview of the NTCs. She said that the NTCs align with the Kingdom’s ambitious Vision 2030 economic roadmap and would accelerate job creation, support industrial growth, and increase local content.

**Pools of talent**

Closing the event, Saad M. Al-Shahrani, division head with the LWDD’s Training Capacity Development, said that the academies and training centers are ready to cater for suppliers needs, and are valuable sources of pools of young vocationally trained talent.

“We are reemphasizing that those NTCs are available for iktv suppliers and the whole public,” he said.

“A lot of effort has been exerted by all stakeholders to reach the levels they are at now. They are bringing a lot of value to industry and the economy.

“In addition to the top tier technical training, a lot of focus is placed on building the character of the trainees, including all extra curriculum activities targeting improving communication skills, safety, and voluntarism,” Al-Shahrani said.

He concluded by telling the suppliers and investors that the NTCs are flexibly set up and can adjust to the specific needs of the market.

Continued collaboration and engagement would result in a “win-win” for all parties, Al-Shahrani noted.
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One of Tozeur’s brickmakers uses simple tools to keep a kiln going for 2 hours at a heat of 1,000°C to 1,200°C required. Afterwards, the bricks cool for three or four days. Then he sets a simple bottomless wooden mold on the ground and works a handful of clay into one of the rectangular holes until there are no air bubbles. He then repeats the process to form more bricks. After filling a section of the courtyard he’s working on, he generously throws more ash over the top of the freshly molded bricks. Along with blotting up excess moisture, the protective layer of ash stops cracks from forming on the surface of the bricks as they dry.

Briquette-making in Tozeur begins with a mix of clay and sandy soil that sets for some 12 hours before being pressed into a rectangular mold. The ground surface of the mud bricks is then scored, allowing air to circulate below and the tops of the damp bricks are sprinkled with ash to absorb moisture, drying in the open air for hours to days depending on the weather. In

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A toread's window and the tall brick wall are framed by an opening in the wall, or the window may be a brickmaker's idyllic choice. The kiln is framed with a window,
Diversity and Inclusion

Resilience, inclusivity focus of LEWAS 2020

Resilience and inclusivity provided the main themes for the sixth annual Leadership Excellence for Women Awards and Symposium (LEWAS) sponsored and chaired by Aramco.

LEWAS serves as a platform where influential women in the energy industry share their thoughts and experiences on industry challenges and receive recognition for their many achievements.

LEWAS 2020 Award winners and finalists

The LEWAS 2020 Award Committee received over 100 nominations from across the region, and Aramco was pleased to have some of its employees, affiliates, and joint ventures among them. The Aramco finalists and winners were:

- Suzana Nunes, professor at King Abdullah University of Science and Technology, winner of the Academic Achievement award
- Elisabeth M. Crawford, petroleum engineer, winner of the Leading with Excellence award
- Dr. Salwa S. Sheikh, head of the Pathology and Laboratory Services Division, winner of the Women of Achievement award
- Johns Hopkins Aramco Healthcare, winner of the Corporate Excellence award
- Seba S. Al Maghlouth, petroleum engineer and finalist in Leading with Excellence
- Fatemah H. Abudeeb, petroleum engineer and finalist in Rising Star
- Fatimah M. Alkeyadi, petroleum engineer and finalist in Rising Star

This year's forum, held virtually, featured the theme "Resilience Remained: Leading People through Change," as it focused on the challenges of the ongoing pandemic through keynote speeches, interviews, and panel discussions addressing topics such as gender diversity, women in innovation, and women's future in the oil industry, as well as operational resilience, business continuity, and flexibility in responding to the new realities of a post-pandemic world.

"LEWAS 2020 has certainly elevated our hope for a brighter tomorrow. Now, it's time we all elevate our thinking of how we can continue to build inclusive ecosystems, and ensure we engage, empower, and elevate the advancement of women in our industries," said Reem A. Al Ghanim, head of Aramco Chemicals HR and Support Services, and co-chair of the LEWAS 2020 forum.

Marwa M. Al-Khuzaim, managing director of Aramco Asia Singapore, noted the importance of shifting gears and adapting through these difficult times, while also emphasizing the importance of diversity and the impact it has on an organizations' ability to adapt.

Aramco Chemicals vice president Olivier G. Thorel spoke about the importance of leaving no one behind, the significance of looking at different realities, taking local context into consideration, and how virtual connections place everyone on level playing fields.

Jennifer M. Shepard, a diversity and inclusion specialist at Aramco, spoke on the psychology of bias, saying, “Biases, especially unconscious ones, are the result of the way our brains sort and categorize information as a result of our socialization and life experiences.”

Shepard said such biases can't be unlearned but can be overcome through the REAL technique, which stands for remain, expand, accept, and live.

Aram Y. Alyahya, a business systems analyst, joined other young leaders discussing the need to push boundaries and demonstrate great examples in leadership.

Personal resilience

The "Untapped Reserves 2.0 Study," led by the World Petroleum Council and the Boston Consulting Group, was discussed in length at the forum, including:

- The consistent underrepresentation of women across geographies and types of companies
- The decreasing percentage of women in the workforce over time, which worsens at more senior levels
- Wide gaps in perception between men and women regarding the challenges
- The importance of CEO's value on gender balance, as organizations will follow their lead.

Using artificial intelligence to colorize old images

By Umair A. Cheema

Artificial intelligence (AI), by definition, is a field of computer science that allows machines to undertake tasks that would otherwise require human intelligence, but thanks to the computing power of the latest graphics processing units (GPUs) and the availability of data, some AI algorithms can even undertake tasks that are still challenging for human experts in terms of scale and/or complexity.

Colorizing black and white (B&W) or monochromatic pictures, as simple as it may sound, requires considerable time, effort, skill and specialized software.

Algorithms hold the key

A particular family of algorithms in AI titled Generative Adversarial Networks (GANs) employ a very intelligent approach in undertaking tasks such as colorization.

The best analogy to understand how GANs will color an old image is to imagine that there are two friends, one friend called “Generator” looks at the B&W or monochromatic image and tries to create a colorized version.

The other friend called “Discriminator” tries to guess if the image is colorized by Generator or is a genuinely colored image.

As Generator improves its ability to colorize B&W images, the Discriminator improves its ability to spot fake colored images. Together, this process helps the GANs learn how to colorize monochromatic or B&W images.

While going through some previous editions of The Arabian Sun on a weekend, this author thought of training a GAN using a GPU and approximately 150 published photos to colorize some monochromatic and B&W images.

The results after training the GANs based on work done by professor Philip Isola of MIT and his team are given in the following images. While the result is not perfect, it still shows the potential of AI and in particular GANs to undertake challenging computer vision tasks without requiring huge amounts of data to train the models.
F1 in Schools partners with Aramco to promote learning

F1 in Schools, the premier global education challenge, has announced a long-term partnership with Aramco, the world’s leading energy and chemicals company.

From 2021, Aramco will be title sponsor for the annual Formula 1 (F1) in Schools World Finals events. The Finals brings together the best of F1 in Schools teams to compete for the World Championship title. The partnership announcement follows on from Aramco signing its first global sponsorship deal with F1.

The COVID-19 pandemic has had a huge impact globally across education at all levels. As a result, the Aramco F1 in Schools World Finals 2020, scheduled to take place in September, will now be held in Melbourne, from March 12–19, 2021, to coincide with the F1 Australian Grand Prix.

Long history in inspiring the young

Aramco’s title sponsorship of the F1 in Schools World Finals events is an extension of its long history of investing in engaging programs that inspire young people to follow exciting career paths in Science, Technology, Engineering and Mathematics (STEM), recognizing the ever-increasing necessity to embed such skills and foster innovation and creativity.

It will introduce the company to some of the most talented STEM students from around the world and provide a platform for Aramco to share with them their innovations and ambitions for sustainability and cleaner energy.

F1 in Schools World Finals events are a celebration of outstanding STEM achievements marking the culmination of many years of work for these talented youngsters. Aramco’s support will help F1 in Schools continue to deliver inspiring events and the chance for students to compete against the best from around the world for coveted university scholarships and the F1 in Schools World Champions trophy.

Developing interest in STEM

Nabil A. Al-Nuaim, vice president of Corporate Affairs, said: “This partnership is another example of Aramco’s engagement to developing young people for STEM careers.

“From building technology-based classrooms to conducting STEM summer camps, we’re focused on accelerating human potential through the next generation of young talent — equipping them with the tools they need to turn their ideas into reality.

“At Aramco, we strive to accelerate the ability of young people to make a difference, enabling them to deliver solutions that help their communities make the next leap forward. Through our partnership with F1 in Schools, we hope to achieve new levels of engagement by connecting with young people around the globe.”

Andrew Denford, founder and chairman of F1 in Schools, said: “We are delighted to welcome Aramco to F1 in Schools, bringing a new title partner to our prestigious World Finals events. At this challenging time, positive news is a real boost for us and we’re excited to be partnering with a forward-thinking, innovative company to help us deliver our impressive World Finals.

“I know that Aramco will reap many rewards from partnering with us, from engaging with our amazing students and meeting future F1 engineers, to seeing new innovations that they develop in their quest to be champions.

“Introducing our students to a leader in the fuel and energy sector, with ambitions that fit well with our challenge, will offer huge learning and career opportunities. We look forward to introducing Aramco to our F1 in Schools global community at our World Finals in Melbourne.”

Ross Brawn, managing director of Motorsports at F1, added: “Encouraging students to pursue STEM careers is incredibly important to our sport and wider economies and as an engineer, it is something very close to my heart. It is vital that we continue to support STEM initiatives as we develop the future stars of our sport from an early age.

“F1 in Schools’ partnership with Aramco will open the door to new opportunities and help to connect children globally, ensuring we are offering the best opportunities to build a career in F1.”

Capturing the Full Value of Green Buildings as Drivers of Circular Carbon Economy

By Mohammad H. Al Wathaifi

The World Green Building Council defines a Green Building as a building that, in its design, construction or operation, reduces or eliminates negative impacts, and can create positive impacts on climate and environment.

LEED

Leadership in Energy & Environmental Design (LEED) is the Green Building Rating System™ developed by the U.S. Green Building Council for developing high performance and sustainable buildings worldwide. The development of this voluntary and consensus-based certification system engages hundreds of volunteers and thousands of stakeholders from around the world representing every sector of the building industry.

LEED references the industry’s most recognized standards and uses state-of-the-art strategies for energy and water efficiency, sustainable site development, materials selection and indoor environmental quality. The system strives to reverse contribution to global climate change, enhance individual health and well-being, protect and restore water resources, protect, enhance, and restore biodiversity and ecosystem services, promote sustainable and regenerative material resources cycles, build a greener economy, enhance social equity, environmental justice, and community quality of life.

First Kingdom projects

LEED is now the leading global standard for green buildings worldwide, used in more than 135 countries. Aramco played a notable role in developing some of the first certified flagship projects in the Kingdom. KAUST, KAPSARC, and Ithra stand out for the Kingdom and Al Midra is the largest Aramco office building certified so far.

The Aramco Innovation Center (LAB7), which broke ground this year, has already started to gain LEED credits attributed to sustainable design. It is on track to receive the certification when construction is completed. The lessons learned from past projects is that pursuing Green Building certification shouldn’t come as an afterthought, it should be part of the project scope and mandated as a target.

Green Building advantages

Green Building rating systems establish a solid framework for the de-carbonization of buildings and offer international recognition of excellence in this area.

There are numerous examples of environmental stewardship in Aramco’s core industrial operations in general. Although nonindustrial buildings comprise a small part of the company’s assets, Green Buildings offer a distinctive edge. Green Buildings are more easily understood outside the oil and gas industry, where Aramco’s achievements in this domain can be communicated through a wider spectrum of channels to a broader audience and testify to new strategic directives.

A careful look at where energy is consumed in the Kingdom shows that buildings are the largest consumer; projections of future trends show increased demand on natural resources with an accelerating increase in construction and a growing population.

This leads to the clear conclusion that Aramco’s efforts to show leadership in this area can go a long way.
Benefits of planting trees

The benefit of planting and maintaining trees are multifaceted. Not only do they beautify the landscape, they provide shade, fruits, flowers, and most importantly, fresh air (oxygen). They also form part of the food chain.

Planting more trees can help in reducing air pollution, specifically CO₂, by absorbing pollutant gases and particulates, and help reduce air temperatures in desert areas. They are also key in reducing soil erosion, slowing runoff.

According to a new study by ecologist Thomas Crowther and colleagues at ETH Zurich, a Swiss university, there is enough room in the world’s existing parks, forests, and unoccupied land, to plant 1.2 trillion additional trees, which would have the CO₂ storage capacity to terminate a decade of CO₂ emissions.

Ecologically, trees provide shelter to birds and animals, while also serving as a source of food and protection for them. Climatic changes can be curbed by planting more trees.

Safaniyah Area Producing plants 4,500 trees at Tanajib Sanctuary

By Zouhair A. Kaaki

Tanjib — A Chinese proverb says: “The best time to plant a tree was 20 years ago. The second-best time, is now.”

Safaniyah Area Producing recently sponsored the planting of 4,500 trees at the Tanajib Sanctuary, as part of its commitment to Aramco’s 1 Million Trees Initiative, which forms part of the corporate commitment to plant native trees across the Kingdom.

Plantation

Three types of trees were selected for the initiative — 2,500 Sidr trees, 1,000 Ghaf, and 1,000 Athel trees. All of which was provided by the Ministry of Environment, Water and Agriculture. Each type provides significant environmental and health benefits and are proven to consume low amounts of water, and can withstand the harsh desert climate.

Using treated water to sustain trees

An irrigation system was installed to make sure each tree is receiving the adequate quantity of water until it reaches maturity, and is able to survive on its own. Planted 10 meters apart, the trees cover an area of about 360,000 m².

Maintaining biodiversity in the increment

Northern Area Oil Operations (NAOO) vice president, Dawood M. Al-Dawood, said, “The company has always valued its responsibility to protect and enhance the surrounding natural environments of its operations.”

“These areas of biological diversity, NAOO’s ownership and initiatives are clear evidence of the company’s successful efforts in maintaining the environmental ecosystem while running its operations.”

Safaniyah Area Producing general manager, Ali S. Al-Ajmi, is the sponsor for planting various type of trees and mangroves in the area from Khursaniyah to Tanajib, in desert areas as well as along the shorelines.

“NAOO, with the help of the Environmental Protection organization, has set an ambitious plan to improve environmental biodiversity and accelerate rehabilitation of onshore and offshore areas where we operate,” Al-Ajmi said.

By Zouhair A. Kaaki

JHAH Flu Vaccination Campaign

Don’t forget to get your flu shot!

As part of the ongoing Flu Vaccination Campaign conducted by John Hopkins Aramco Healthcare (JHAH), we would like to inform you of several locations in which you and your family can go to receive your flu shot.

It is important for the safety and well-being of all Aramco employees that everyone stays vigilant by adhering to COVID-19 preventive measures.


JHAH Flu Vaccine Page

Dawood M. Al-Dawood plants a tree as part of the program.

December 2, 2020

Ziziphus Spina-Christi (Sidr trees)

These evergreen trees/plants are native to northern and tropical Africa, Southern and Western Asia, and are native to the Levant region of East Africa. Fruit and leaves from these trees were used in ancient Egyptian cuisine and medicine. Modern research has shown that compounds extracted from the trees’ leaves could be used to decrease severe inflammation.

Prosopis Koelziana (Ghaf)

Prosopis is a kind of flowering plant in the pea family, Fabaceae. It contains approximately 45 species of spiny shrubs and shrubs found in subtropical and tropical regions of the Americas, Africa, Western and Southern Asia.

Tamarix aphylla (Athel)

Tamarix aphylla is the largest known species of Tamarix (reaching a height of up to 18 meters). It is an evergreen tree, native across North, East, and Central Africa, throughout the Middle East, and into parts of Western and Southern Asia.

Prosopis Koelziana

Tamarix aphylla

Ziziphus Spina-Christi

Dawood M. Al-Dawood
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To learn more about installing company applications, go to: ShareK ✴ Mobility Enrollment Guide.

Photographic memory

Training in RT: Many Saudis received skills training at the Ras Tanura Refinery complex in the immediate postwar years, as shown in this photo from that period of time.
Keep a natural expression or a normal smile.

Look slightly above your phone to make your eyes pop.

Take the perfect selfie

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