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October 14, 2020 | Vol. LXXV, No. 40

a weekly Saudi Aramco publication for employees

in this issue

Aramco and SABIC Leadership Summit held

Close collaboration and alignment between Aramco and SABIC will help advance strategic plans that will unlock the full value creation potential for the group. Held virtually, the summit drew together key officials from both companies.

see page 2

Amin Nasser named Energy **Executive of Year 2020**

Aramco president and CEO Amin Nasser thanks his peers and colleagues after being named Energy Intelligence's Energy Executive of the Year, noting, "This award is a recognition of the entire Aramco family.

see page 3

Green Mosques projects generating positive energu

Throughout the region and around the world, more and more mosques are casting an eye toward sustainability and a practical environmentalism.

see page 8-9

acting and reacting to a changing COVID-19 landscape

Whether it's taking into consideration new practices when responding to emergency drills or helping those in need in the communities in which we do business, Aramco is agile in its response to the global pandemic.

see page 5



Do Your Part by
Wearing a Mask in Public

maintain physical distancing of 2 meters at all times



progress highlighted at Aramco, SABIC forum

Dhahran — Close collaboration and alignment between Saudi Aramco and SABIC will help advance strategic plans that will unlock the full value creation potential for the group, president and CEO Amin Nasser told an Aramco and SAB-IC Leadership Summit held recently in Dhahran.

Conducted virtually, the leadership summit drew together key senior management and professionals from both companies, including Nasser, Mohammed Y. Al Qahtani, senior vice president of Downstream, Khalid H. Al-Dabbagh, Saudi Aramco's senior vice president of Finance, Strategy and Development and SABIC chairman, and Yousef A. Al-Benyan, SABIC vice chairman and CEO.

In June, Aramco sealed the purchase of its 70% stake in the Saudi petrochemical giant in one of the largest ever deals in the chemical industry.

important milestone

Describing Aramco's acquisition of the SABIC stake as a very important milestone for our integration journey, Nasser said:

"There is no doubt that we have a lot of challenges, and at the same time, we have a lot of opportunities. I am confident that with the two teams working together at Aramco and SABIC, we can achieve a lot."

He noted that while the COVID-19 pandemic had impacted the oil and gas industry for most of 2020, improvement in the economic landscape is on the horizon.

"The completion of the SABIC transaction in June underlined Aramco's strategic commitment," Nasser said. "It was an important milestone for us. We were able to show the strength and resilience of the company under the current circumstances. SABIC is a very important part of our strategy.'



Collaboration, integration, and teamwork and the role they will have in providing a bright future for Aramco and SABIC were highlighted during a Aramco and SABIC Leadership Summit held in Dhahran last week. Conducted virtually, the leadership summit drew together key senior management and professionals from both companies. (Photo: Abdulaziz Al-Moaiweed/MPD)

Al-Benyan said: "For all of us, this is a historical moment, and I think that this will bring not only more accountability, but encourage us all to deliver. Yes, we are very excited to become Aramco's chemical arm, but at the same time we have an aspiration to grow and excel to become the national chemical champion.

"Therefore, alignment is going to be crucial. I think, for us to define success, we need to make sure that there is a clear alignment in our expectations."

energy mix

Al Qahtani told the summit: "If I were

to sum up our Downstream strategy in just a few words, I would say we strive to be fully integrated across the value chain — from the wellhead through chemicals and consumer fuel tanks — by leveraging Aramco's competitive advantage of extremely efficient, low-cost, secure, and reliable supply of crude oil and gas, as well as SABIC's outstanding capabilities, market presence, channels, and brand, among other strengths."

Al-Dabbagh, in his capacity as SABIC chairman, also briefed the summit in addition to Al-Benyan, both emphasizing the opportunities for collaboration, synergy and integration between the two companies.

Nasser, emphasizing that crude oil will continue to be critical to the energy mix for decades, said Aramco continues to proactively address the challenges posed by climate change. He highlighted that our upstream low carbon intensity production is a significant competitive advantage, as is "our low-cost structure and lower emissions, which we will continue to drive down.

He noted that the two teams working closely together would be crucial.

your voice

face mask style and health through history



By Salem A. AlTurky 'Udhailiyah

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Your Voice reflects the thoughts and opinions of the writer, and not necessarily those of the publication.

Face masks seem highly topical in of protection a user needs. 2020, but in truth, they have been around a long time.

stant state of development over the centuries, as covering the nose and mouth have long been part of traditional sanitary practices against contagious diseases since being introduced during the 17th century as the Black Death ravaged Europe. Doctors would wear a mask with glass eye openings and a beak shaped nose, with the protection largely designed to neutralize bad smells, as they were believed to be the principal cause of the disease.

The medical face mask has evolved along with modern medicine. Once simply a strip of cloth tied around the face, today they feature layers of nonwoven fabrics made from plastic to filter and protect, and are available in a variety of styles and grades depending on the level

There's the N95 mask, a disposable thereby protecting the wearer from breathing in small particles in the air. This type is especially relevant today as we continue to negotiate a global pandemic. As expected, manufacturing of the N95 mask has boomed, with even the mask inventor coming out of retirement to keep producing it.

Another mask is the FFP1 mask, which protects the wearer from inhaling infectious agents or pollutants in the form of aerosols, droplets, or small solid particles. Some masks come with an air purifier like those found on the N95, while others use activated charcoal to purify the air as it is inhaled through the mask into the user's

Of course, all of these masks are dis-

posable, unlike the full-face respirator gas mask that consists of a filter cartridge that contains a filtration aid, a flexible type that acts as a respirator and a safe- rubber face covering piece, transpar-Medical face masks have been in a conty device, covering the nose and mouth, ent eye lenses, and a series of straps to hold it in place. This is a mask made for heavy-duty protection against chemical gases that may destroy the respiratory

> The constant progression of the medical face mask is proof of human evolution in even the smallest factors of safety and protection. Medicine is a growing science that continues to advance every dav. And with that, the protection against disease will proceed to develop.

> In the coming years and centuries, we will observe and perhaps even take part in the evolution of it all. In the meantime. make sure to keep your mask on when vou are at work or in public places; you have the weight of history on your side.

a recognition for the Aramco family

Nasser named Energy Executive of Year 2020

Saudi Aramco president and CEO Amin Nasser has been named Energy Intelligence's Energy Executive of the Year for 2020 by a selection committee of global energy industry executives. He received the peer-selected award and delivered a speech at the inaugural Energy Intelligence Forum 2020, which is being held virtually Oct. 13-15.

In an address given virtually from Dhahran, Nasser said the award is a demonstration of Aramco's culture of team work and the result of hard work in meeting myriad challenges facing the industry, including addressing climate change and opportunities to reduce emissions, meeting global energy needs during a pandemic, and fueling the growth that brings prosperity.

"I want to thank my peers and col-



I am proud to be an Aramcon and enormously proud of my Aramco family and our achievements.

— Amin Nasser

leagues for this award," Nasser said. "This award is actually a recognition of the entire Aramco family. It's not just for the men and women around the world whom I have the privilege of working with today, but also all the employees who came before and who built the foundations for what our company stands for today, and what it will become in the future. This is their award

"I am proud to be an Aramcon and enormously proud of my Aramco family and our achievements."

pride in Aramco, its people, and its achievements

Nasser described a number of reasons why he feels pride in his company, its people, and its achievements, including its preparations for our IPO, its acquisition of SABIC, its restoration efforts after the attacks on Abgaig and Khurais, and its reaction to the global COVID-19 pandemic both here and abroad.

He also expressed pride in the role the energy industry plays on the global stage. "The energy industry continues to be the responsive and responsible motive force behind global economic activity as well as social development and progress," Nasser said.

"We are tackling issues related to carbon emissions and climate change from a proactive, leadership position, including through industrywide collaborations," Nasser said. "We are harnessing technological advances and a spirit



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of innovation to usher in an even more reliable and more efficient energy sector. And in recent months, we have successfully overcome the operational challenges posed by COVID-19, continuing to provide vital energy and indispensable products while safeguarding our workforces and our communities.

"Make no mistake, my friends and colleagues: The decisions we make and the steps we take now will have an impact for many years, indeed, many decades to come," Nasser added. "That is a great responsibility, and given the right resources, the right vision, the right spirit, and above all the right people, it is a responsibility I know our industry is capable of shouldering."

tackling the industry's tough topics

Participating in a discussion with Alex

Schindelar, president of Energy Intelligence, Nasser covered a range of topics such as the future strategies of the company, energy transition, investment in technology and infrastructure, the expansion of trading activity and the downstream sector, and the effects of the pandemic.

The Energy Intelligence Forum provides a platform for decision makers, thought leaders, and innovators from the worlds of energy, finance, politics, and business to debate, discuss, and develop sustainable solutions to the energy challenges of the 21st century.

This year, the forum examined the unprecedented impact of the pandemic on the energy industry and the continued search for new energy solutions, under the theme, "The Big Energy Reset: COVID, Climate, Consequences." The event was conducted online.

excerpts of a recent Energy Intelligence interview with president and CEO Amin Nasser

Q: What is your view on oil demand for the rest of this year and for 2021? And what are you doing to prepare the company for the consequences of the COVID-19 pandemic?

A: This year has been challenging. The entire energy industry has been impacted by COVID-19.

However, it is encouraging to see that the worst is over and demand has sharply recovered from those exceptionally low

What we see in Asia, especially China, which is our biggest market, is a strong recovery. At Aramco, we have intensified our cost discipline and are focusing on capital flexibility. We are being very prudent when it comes to capital spending, adhering to strict capital discipline. We are looking at all of our projects and stretching some discretionary ones out where necessary, while maintaining our maximum sustained capacity of 12 million barrels per day. Also, we are continuing to expand our gas portfolio in the Kingdom.

Q: This is a really critical inflection point for the oil industry in general, as companies are grappling with questions around the shape and speed of the energy transition. Recent forecasts suggest that oil demand may have already peaked or could peak soon. How does Aramco now see the guestion of peak demand?

A: First of all, we have a strong competitive position in oil due to our low costs and the low carbon intensity of our oil production. We believe that oil demand will continue to be healthy over the longer term. What will also help sustain this is the effort that is being made right now to reduce emissions. There's a lot of work being done to address this issue.

can help maintain the competitive advantage of oil over the long term. But it's not going to be the same kind of oil, there will be much lower emissions.

There is a lot of effort in this area by individual companies such as Aramco, as well as collective and collaborative work by organizations like the Oil and Gas Climate Initiative, whose member companies are jointly working on reducing emissions.

Q: Given Aramco's strategy of re-

maining the lowest cost producer while finding ways to reduce carbon emissions from your hydrocarbons to manage the energy transition, what will Aramco look like in 2030?

A: We will continue to be in the oil sec-We believe the growth of new sectors tor. We have a lot of reserves, and that offers us a major competitive advantage. If you look at the (industry forecast report from IHS Markit), under any scenario, the 2°C scenario, the 1.5°C scenario, and whether the world consumes 100 million bpd, or 120 million bpd, or 70 million bpd, the call on Aramco's production will continue, in part because of our competitive advantage. We are a low-cost producer, and our emissions are also one of the lowest. So, oil will remain a significant part of the company's portfolio over the long term.

Ithra launches third annual Tanween creativity festival

Dhahran — The King Abdulaziz Center for World Culture (Ithra) has launched its annual creativity festival, Tanween, now in its third season. Held under the theme "The New Next — Creativity is the Way Forward," it features high-profile speakers and a series of targeted workshops and master classes Oct. 28-31 to support and develop the region's creative industries.

Tanween 2020 expands the event by adding a virtual offering for the first time in response to the COVID-19 pandemic.

"Our creatives are the futurists able to imagine a world beyond the here and now," says Robert B. Frith, Tanween curator. "At this time, we need to think creatively to respond to the bigger change happening to all our lives. Now is the time to use our passion and skills to envision and create our future."

Abdullah Alrashid, Ithra Programs director, adds, "Ithra was built to prepare us all for the future by empowering the next generation to turn the ideas of today into the reality of tomorrow. Through developing creativity and innovation, we can bridge the gap to find 'The New Next.'"

futures imagined

Tanween 2020 brings together local and international creatives, artists, designers, entrepreneurs and creative leaders to share the futures they imagine. It looks to inspire, engage, and promote the creative industries and innovative thinking across sectors.

The creative industry is one of the fastest growing sectors of the world economy, transformative in generating income, jobs, and exports. According to UNESCO, it generates annual revenues of \$2.25 trillion and global exports of over \$250 billion, and is expected to grow to approximately 10% of the global gross domestic product.

The creative economy provides nearly 30 million jobs, and nearly half the people in it are women. Tanween highlights the opportunities across disciplines where creativity will make a tangible impact.

building on past successes

Tanween 2019 welcomed over 100,000 visitors. The 2020 season builds on Tanween's success by bringing together diverse talents and audiences to learn, build, promote, and engage with creative content. The first two days cater to people looking to enter the creative industries, and the final two days provide the latest insight to industry professionals.



Supported by Ithra's Idea Lab, this year's Tanween challenges encompassed Reimagining the Crafts of Saudi Arabia, Visualizing the Data of Culture, The Future of Creative Place Making, Creativity Needs You, Cardboard Furniture, and A New Outdoors.

Through a series of talks, workshops and master classes, business innovators, risk-taking creatives, entrepreneurial icons, social game changers, and world-class experts will share their knowledge. Tanween 2020 will also feature three-minute pitch sessions and 30-minute one-on-one Zoom consultations with specialists, as well as networking and team building.

Highlights include:

- Keynote addresses by Joanna Peña-Bickley (head of Research & Design for Alexa Devices at Amazon) and Sumaya Al-Sulaiman (CEO of Saudi Arabia's Architecture and Design Authority)
- Duncan Wardle (former head of Innovation and Creativity at Disney) discusses the "Theory of Creativity" with Mahmoud Abdelrahman (of innovation and design consultancy Hued)
- A talk by advertising maverick Sir Martin Sorrell, who in 33 years as CEO built WPP from a \$1 million "shell" company into the world's largest advertising and

marketing services firm.

Elsewhere, Alan Yau (of Wagamama fame) talks food, designer maker Gareth Neal talks craft, and multidisciplinary designer Mohamed Samir talks typography, while Zaha Hadid Architects Principal Patrik Schumacher discusses architecture with Sharqia Development Authority's Abdulrahman Madallah. Other sessions are presented by Karinna Nobbs (digital fashion), Giorgia Lupi (data visualization), Stefan Sagmeister (graphic design) and Marije Vogelzang (food design).

Ithra is committed to enabling creatives to succeed, and the Tanween program reflects this. An exploration of what it takes to be a successful freelancer sits alongside filmmaker Hakeem Jomah examining the dedication needed to turn professional. Then, marketing strategist Reem Bin Saddik presents an introduction to building a personal brand, Manal Alsadhan guides participants on how to find an authentic voice, serial entrepreneur Shahd AlShehai shares tips for starting a creative business in the local market, and social entrepreneur Sarah Ghaleb shows how to find your passion in life and work. Others in the lineup include artist Ftoon AlThaedi, artist and filmmaker Mohammed Al Faraj, author Tala Saleh, and product designer Tariq Sangorah.

Ithra also worked with local partners Qormoz, Product Care, Shorfaa and the Graphic Design and Multimedia Department at Imam Abdulrahman Bin Faisal University's College of Design on the Tanween Challenge Projects, an opportunity for participants to apply their innovation and creative skillset to a live project.

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Last season, Tanween highlighted "Play," a key ingredient to creativity. With "The New Next." Tanween 2020 takes that creativity into the future, while the 2021 theme, "Tools," will focus on the building aspect of creativity.

For more information on Ithra's regular programs and special Tanween offerings, visit www.ithra.com.



Ithra was built to prepare us all for the future by empowering the next generation to turn the ideas of today into the reality of tomorrow. Through developing creativity and innovation, we can bridge the gap to find 'The New Next.







- A beacon of excellence
- **Lunar Innovation**
- Access to technology
- A very special day



technology and collaboration: keeping COVID-19 in mind as we prepare for the unpredictable

Dhahran — The pandemic has not only changed the way we work, but also the way we plan to work in case of an emergency.

The Central Community Services Department (CCSD) recently conducted a Level 3 emergency drill plan for the Dhahran area to test emergency readiness, complying with COVID-19 precautionary measures.

Aramco has worked hard to comply with safety measures, providing a strong example of readiness and agility in responding to such situations even during a global pandemic.

technology and collaboration

"Despite these unprecedented times, Aramco works to ensure continuous agility and resilience in emergency preparedness, demonstrating readiness to any emergency situation," said CCSD manager Meshaal S. Al-Khaldi.

The drill demonstrated the utilization of recently deployed technologies such as the Virtual Emergency Control Centers (see associated story), long-range cameras, the Fire Protection Department (FrPD) mobile command center, and robotics to conduct search and rescue operations. Additionally, the drill gave CCSD an opportunity to test its newly established emergency control center (ECC) at the Al-Mujamma'.

The drill brought together organizations from across the company, including Fire Protection, Corporate Emergency Management and Continuity, Industrial Security Operations, Transportation and Equipment Services, Personnel, Utilities

SAVE LIVES & PROTECT ASSETS

The drill demonstrated the utilization of recently deployed technologies such as the Virtual Emergency Control Centers, longrange cameras, the Fire Protection Department mobile command center, and robotics. Firefighters carry dummies as part of the drill that brought together organizations from across the company and JHAH.

and Facilities Services, as well as Johns Hopkins Aramco Healthcare and other supporting functions in the Dhahran area.

The drill covered and implemented all COVID-19 precautionary measures such as physical distancing onsite, and also implemented a new Dhahran FrPD ECC, as well as distribution of specialized personal protective equipment to all participants.

Moreover, all supporting organizations practiced meeting COVID-19 precautionary measures, assigning dedicated individuals to measure

compliance at different locations. The drill covered an integrated emergency response between organizations using virtual rooms through the emergency message board system. Such integration allowed a smooth data communication between the supporting ECCs, incident manager Al-Khaldi, and the incident command

Other emergency resources utilized during the drill included mobilization of firefighting robotics, heavy equipment, vacuum trucks, hauling units, and emergency shelters.

by Khalaf AlGhamdi and Adnan Thaqafi

The COVID-19 pandemic has changed the way we live, work, and communicate. This has emphasized the importance of flexibility and resilience, forcing us to overcome business continuity challenges.

Digital transformation has played a key role in this, from remote meetings to employees working at home to virtually engaging with customers and business partners. COVID-19 has acted as an accelerator to an already accelerated change of pace in the digital realm.

Another way it has changed the way we do business is in the way we plan and respond to emergencies. Virtual Emergency Control Centers (VECC) move traditional ECCs into a digital environment where a variety of systems and collaborative tools can be deployed. Some of these tools are already enabled for remote access (videoconferencing and live stream), while others (such as radio and telephony) will take some time to be integrated into mobile phones and tablets for remote access, as IT infrastructure must be upgraded.

However, once that process is completed, the VECCs will enhance the efficiency of these centers while preserving their main functions of control, communications, and coordination.

The VECCs will enable members of executive management, incident commanders, and other concerned entities to access all essential communication and collaboration services through their mobiles, tablets, and workstations from any location inside or outside Aramco's premises.

Not only that, but their establishment enables an immediate response during emergency and disaster situations, which will ensure business operations continuity at the impacted critical locations.

Aramco's support across Asia reflects long-term commitment

Beijing, China — Aramco has extended humanitarian support to communities across Asia since the start of the COVID-19 outbreak, as the region not only remains a key part of its global strategy, but the company remains committed to serve the communities in which it operates.

With this in mind, the company has also provided economic assistance to communities across the continent, supporting government efforts to combat the COVID-19 pandemic.

"Our hearts are with those who are suffering from the pandemic," said Anwar Al Hejazi, Aramco Asia president. "As an international company that has great presence in the region, we have taken all the necessary measures to maintain business continuity while caring for local communities. We feel obliged to continue our longstanding support to promote regional growth, people's health and welfare."

Headquartered in Beijing, Aramco Asia integrates subsidiaries in China, Japan, the Republic of Korea, Singapore, and India. Corporate citizenship lies at the heart of Aramco's business and remains a driving force behind its efforts to support communities, including a donation to Malaysia's National Disaster Management Agency. Aramco's other COVID-19 response efforts across Asia include:

China

The company has partnered with the Red Cross Society of China (RCSC) to assist in COVID-19 relief efforts. A fund was established to procure critical medical supplies, such as infrared thermometers, ventilators, air compressor nebulizers, and ambulances.

India

Aramco has partnered with the Indian Red Cross Society to purchase personal protective equipment and other COVID-19 related supplies for first respondents and local communities across 16 states and Union Territories.

South Korea

Aramco has donated to the Hope Bridge Korea Disaster Relief Association to support its humanitarian efforts. The donation covered support for medical professionals, provided meal vouchers to affected individuals, and involved the



medical, sanitary, and household items to senior citizens in Singapore.

Aramco office

staff help pack

kits with food,

and deliver relief

distribution of sanitizer wipes to 20,000 school classes, as well as hand sanitizer to 2,000 welfare facilities.

Japan

Aramco is the country's largest crude oil supplier and worked with the Japanese Red Cross Society to provide critical medical devices for Japanese Red Cross hospitals and professionals, who are at the forefront of coronavirus prevention and response efforts in local communities.

Singapore

Under a cooperation deal with the Singapore Red Cross Society, 28 Aramco office staff volunteered to help pack and deliver 390 relief kits comprising food, medical, sanitary, and household items to senior citizens.







combating desertification

River rocks, thousands of years old and in all shades of white, gray, cream, and black, lie at the site of an environmental reawakening in Haradh, honoring the Kingdom's ancient, but now dry, Wadi Sahba.

inspirational replanting of desert biodiversity in Haradh

by Janet Pinheiro

Haradh — In the southern center of Saudi Arabia's ad-Dahna desert, river pebbles of all sizes, colors, and shapes crunch softly under your feet.

The ancient rocks, tangled in the creamy sands of a land where no permanent rivers run, silently tell the history of one of the Kingdom's longest wadis, Sah-

During the wet season, Wadi Sahba flowed for 380 kilometers (km) from Al Kharj to Al Hamar Sabkha, and since 2004, the Haradh gas plant (HdGP) has sat on her age-old open plains.

Haradh, emerging proudly from the desert sands about 270 km southeast of Riyadh, is a 32 km² remote site processing mostly nonassociated gas from the southern area fields.

Intriguingly, in the plant's distant shadow survives three crucial pockets of native Saudi Arabian biodiversity, collectively covering 8.3 km².

The surviving pockets, located between the gas plant and the residential community, testify to Haradh's management of its greenhouse gases.

Invaluably, seeds from the native biodiversity are aiding with Haradh's reestablishment of a new 250,000-m² environmental restoration area.



(Photos: Mohammed Al-Shaikh/MPD)

bringing back desert biodiversity

The delicate edges of a late September northern wind carries the promise of winter coolness as it curves across Wadi Sahba's age-old riverbed.

Swirling toward HdGP, the wind gusts around 3,000 flourishing native trees, whose roots were gently sunk 18 months ago into the desert sands of the site's new restoration area — named "Saudi Aramco Haradh Biodiversity Area" (SAH-BA) to honor Wadi Sahba.

Sixteen species of native and endangered shrubs grow alongside the area's trees, while the bold showpiece is a shining 700-m² wastewater pond whose underwater surface thrives with nutritious algae.

Gas Operations vice president Abdullah M. Ghamdi inaugurated the Haradh Biodiversity area in early 2019, and says Aramco is assisting Saudi Arabia to combat desertification, sequester carbon, and enhance biodiversity.

"Haradh gas plant's leading effort to restore nature in the desert is contributing toward the Kingdom's wider efforts to restore its biodiversity," said Ghamdi.

"The new trees and plants at Haradh Million Trees" program technical comalso bring business benefits, such as sequestering carbon, reduce sand blowing into the plant, and create an attractive area for our employees."

carefully planned restoration

Planning is critical to the successful restoration of biodiversity. To achieve sustainability, reintroduced fauna and flora needs to live in harmony with the natural balance of the area.

So Haradh planted the right trees and at the right time; the Kingdom's "1



make Saudi Arabia greener

- Plant a tree
- Do not over hunt
- Never cut down trees
- Don't drive off-road.

mittee advised on what trees to cultivate.

The selection of suitable trees was very carefully done, and included consulting with plantation specialists on the perfect choice of tree types that would survive to create the desired environmental system.

After a lengthy process of reviewing hundreds of trees types, 16 species of trees were carefully selected, including Acacia ehrenbergiana, Acaci nailotca ssp indica, Acacia tortilis, Acacia etbaica, Acacia gerrardii, Acacia raddiana, Acacia











Energy is the backbone of modern life, and Aramco works to reserve resources for future generations, With oil and gas, we take from the environment, but we also compensate, and give back. We save every drop of water."

— AbdulRahman O. Lashkar

teaming up to deliver 'A Gift for A Greener World'

Haradh gas plant (HdGP) collaborated with Environmental Protection (EP) to host a companywide two-hour virtual environmental workshop in the lead-up to Saudi National Day,

Addressing the opening of "A Gift for a Greener Saudi Arabia," HdGP manager Fahad S. Dossary said making an impact is about reducing your impact.

"For us as a company, it means pushing the frontier of knowledge and the boundaries of innovation and engineering solutions that enhance our energy efficiency while minimizing the environmental impact of our operations," he

"It means minimizing the amount of energy we use, the greenhouse gases and flaring emissions, the carbon footprint, managing the use of groundwater in our operations, implementing water conservation policies, and maximizing wastewater reuse," Dossary said.

"The Saudi Aramco Haradh Biodiversity Area is a place that we are proud of and the least initiative that we can do toward a greener Saudi Arabia part of the Kingdom's 1 Million Trees program," he said.

cost-effective, naturebased solutions

As one of the world's largest energy companies, Aramco carefully manages and offsets its emissions.

EP environmental consultant Ronald Loughland presented on the company's future and current nature-based environmental initiatives, such as reforestation.



National Day, Haradh gas plant distributed 6,000 native tree seedlings to its employees and Haradh village residents for planting in their environments.

"Nature-based solutions are one of the most cost-effective options to offset emissions, and have lots of co-benefits such as protecting biodiversity, saving water, creating green areas, and enhancing communities," said Loughland.

EP scientist Sarah A. Alsaidalani discussed the status of biodiversity crisis in Saudi Arabia and the company's terrestrial biodiversity initiatives. She highlighted the high-quality habitat that occurs on company land, the importance of biodiversity, and how to protect it.

"Biodiversity protection has gained greater momentum within the company," said Alsaidalani.

seyal, Balanites aegyptica, Ceratonia silique, Faidherbia albida, Maerua crassifolia, Tamarix aphylla, Tamarix passerinoides var Macrocarpa, Ziziphus spina-christi, Lawsonia inermis, and Salvadora persica.

biodiverse and eco-friendly

An eco-friendly approach was taken to SAHBA, with its car park and pathways created organically from the area's natural gravel surface.

Water is the heartbeat of life in the desert, and the restored area's wastewater pond has two 36-panel solar powered pumps, which sustain the flora through buried irrigation pipes.

To support night creatures, light pollution is minimized with solar powered lighting only on the perimeters.

Although only 18-months young, SAH-BA shows nature's talent to regenerate.

Habitat loss, disturbance and overgrazing have impacted many areas of Saudi Arabia. Aramco's biodiversity areas are considered some of the most biologically varied areas in the Kingdom.

Within the company areas, 10 have been formally designated "Aramco Biodiversity Protection Areas," and these total 977 km².

trees best for getting greener

The desert has a rich ecosystem, and Haradh's first step toward preservation was controlling off-road driving, and removing waste.

HdGP environmental coordinator Alawi Alsayed says there are easy ways individuals can contribute to a greener environment, noting, "Preserving the biodiversity and the animals surrounding us will enrich our lives with food and have a good balance in the life."

Advising against off-road driving, Alsaved said it harms biodiversity by "damaging the habitat for birds and insects that represent a complete ecosystem."

On greening our surroundings, Alsayed said. "The best way is to plant as many native trees as we can. We can start by planting our gardens, our streets when applicable, and inside our homes."

every drop saved

HdGP environmental coordinator AbdulRahman O. Lashkar is one of the team members working with Haradh's environmental restoration.

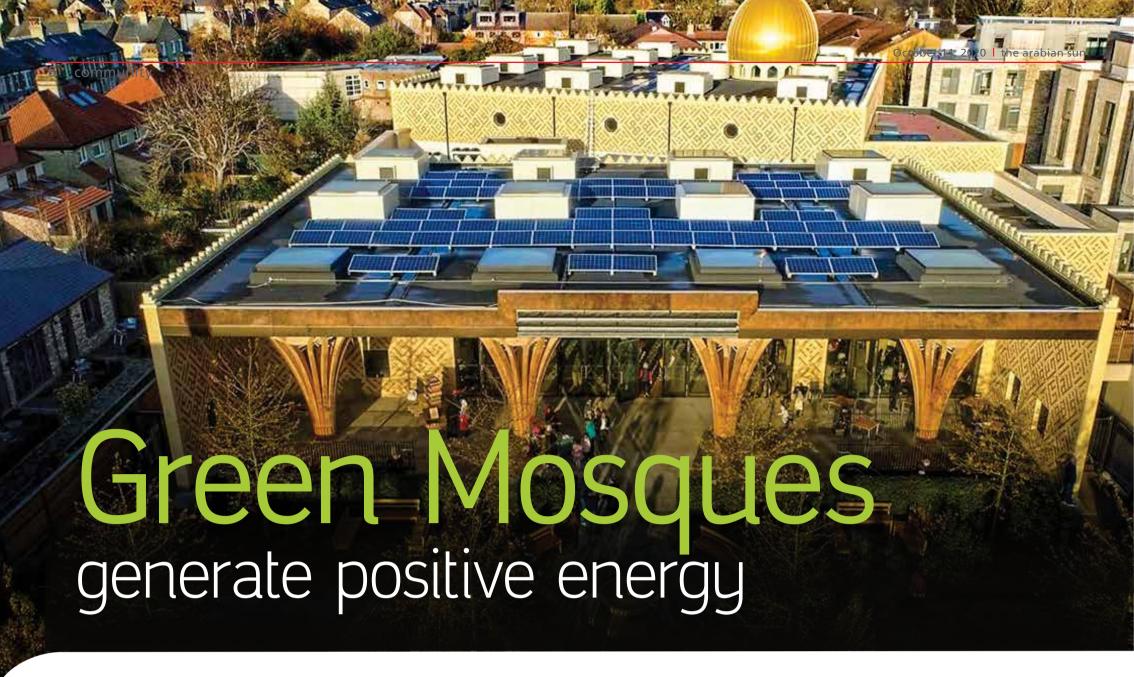
"It is deeply rewarding to see SAHBA come to life," says Lashkar, who studied at King Fahd University of Petroleum and Minerals, and joined Aramco in 1998. "My family will continue to live in the world, and it feels like I have contributed to a legacy of restoring a piece of the

"Imagine the impact if everyone planted two or three trees around their home," he adds.

Aramco sponsored Lashkar in 2013 to study environmental sciences in Scotland.

"Energy is the backbone of modern life, and Aramco works to reserve resources for future generations," Lashkar says. "With oil and gas, we take from the environment, but we also compensate, and give back.

"We save every drop of water."



by Matthew Teller

Up on the roof of Masjid Abu Ghuweileh, Yousef al-Shayeb looks around and smiles, gesturing to an array of solar panels tilted south toward the sun. The masjid, or mosque, is in Tlaa al-Ali, a thriving district in northwestern Amman, Jordan, where he heads the building's management committee.

"This was Stage 1 with 44 panels. Over there was Stage 2 with 64 panels. Now, we are all set, for the next 20 years at least," al-Shayeb says, mentioning the pride he feels for leading the project to install the solar panels.

a bright idea

Masjid Abu Ghuweileh is not a large building. A recent extension allows up to 650 worshipers for the Friday midday congregational prayer.

Until a few years ago, the mosque's monthly electricity bill ran upward of 1,000 Jordanian dinars (about \$1,400). Today, thanks to solar panels on the roof, the bill is zero, al-Shayeb says.

The upgrade forms part of a Jordanian government initiative to retrofit mosques across the country with solar photovoltaic (PV) panels. These convert sunlight — abundant hereabouts — into electricity. The initiative is administered through the Jordan Renewable Energy and Energy Efficiency Fund (JREEEF), established in 2012 as an office of the Ministry of Energy and Mineral Resources.

The project at Masjid Abu Ghuweileh is among a number of "green mosque" schemes in Jordan and elsewhere around the world intended to help meet conservation and climate challenges at a grassroots level.

"Electricity and energy consumption is a very big issue in Jordan," says Lina al-Mobaideen, an engineer who heads project development at JREEEF. "The heaviest worries are about how we can reduce demand, and thereby reduce the overall energy bill. This led the government to (formulate policy) encouraging individuals to reduce their consumption."

Al-Mobaideen highlights a partnership established in 2016 between JREEEF and Jordan's Ministry of Awqaf (religious endowments) to focus on places of worship as nodes of influence within every community.

"Energy consumption at mosques is very high," she says. Islam's five daily prayer times — at dawn, midday, afternoon, sunset, and evening — mean that worshipers tend to flow in and out of mosques all day long. Lighting, as well as equipment for cooling in summer and heating in winter, often stays on throughout.

"The mosque is the most appropriate place to encourage people to change their behavior and introduce them to renewable energy," al-Mobaideen adds.

In 2017, JREEEF began launching tenders, area by area, to install solar PV systems in many mosques throughout the nation. By 2019, about 500 mosques were running on solar power, with the intention of extending the project to most of Jordan's 6,500 mosques (the smallest have energy usage so low that conversion is often uneconomic), as well as Jordan's smaller number of churches.

conservation, modesty, and action

The switch to solar power for mosques in Jordan is running alongside programs to reduce water use — the Islamic requirement for ablution before each of the five daily prayers can create heavy demand — and replace incandescent lighting with LED bulbs, which use much less energy and last much longer.



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Conservation in spending and consumption — that's what we use to bring awareness to people," al-Mobaideen adds. "It is both a financial and a religious imperative

Such concerns are rooted in budgetary prudence but can be corroborated in religion — a vital connection the government is making to encourage mosque communities.

"One of the things Islam teaches is not to overspend or exceed our consumption," says al-Mobaideen. She points to verses in the Qur'an, including Sura vii:31, which is interpreted in English as, "But waste not by excess, for God loveth not the wasters," and Sura xxv:67, which names the righteous as "Those who, when they spend, are not extravagant ... but hold a just (balance) between those (extremes)."

"Conservation in spending and consumption — that's what we use to bring awareness to people," al-Mobaideen adds. "It is both a financial and a religious imperative."

In 2016, Morocco's Ministry of Awqaf



In Tlaa al-Ali, on the northwest side of Amman, Jordan, Yousef al-Shayeb proudly regards an array of PV panels that, since installation in 2013, have cut Masjid Abu Ghuwileh's electricity bill to zero. By 2019, about 500 mosques in Jordan were running on solar power, and the Jordanian government has plans to extend PV to all but the smallest of the country's 6,500 mosques.



The Central Mosque's garden leads to the front portico.

and Islamic Affairs launched a project to install solar PV, LED lighting and solar water heaters in the country's 15,000 government funded mosques. Government grants cover up to 70% of initial costs, and as part of the scheme, imams and other clerics are being trained in issues related to renewable energy and sustainable technology to pass the message to their congregations and communities.

"What we want to do is inform people," Said Mouline, director of Morocco's National Agency for the Development of Renewable Energy and Energy Efficiency, told CNN in 2016. "Energy efficiency is not only a matter of technology; it's also a matter of behavior."

In 2016, Marrakesh's 12th century Jami'a al-Kutubiyah became one of the first in Morocco to be fitted with PV, owing to its status as a symbol of the city.

Similar projects are sprouting up across the Islamic world. Analysis in 2019 of a PV test system installed at a large mosque in Riyadh, Saudi Arabia, calculated an annual energy bill reduction of more than

Indonesia, the country with the world's largest Muslim population, is also on board. In 2011, the Majelis Ulama Indonesia (MUI), or the Indonesian Council of Scholars, the country's top Muslim clerical body, launched the ecoMasjid initiative.

"It started with the understanding that

environmental degradation is not technical or technological, but a moral issue," says Hayu Prabowo, who heads MUI's environment unit in the Indonesian capital, Jakarta.

Prabowo, who devised and oversees the ecoMasjid program, sees mosques as nothing less than a vector for empowerment.

"Empowerment is not only about economics," he says. "It's about safeguarding people's health and livelihood. It is a very complex issue. We cannot manage it alone, but neither can the government. It's about translating the language of environmental activism into more practical aspects of people's lives."

a movement toward energy efficient mosques

One of the larger such examples opened last year in Cambridge, England, where the Central Mosque marks the first purpose-built eco-mosque in Europe. Constructed mostly from sustainably sourced Scandinavian spruce, it is one of the only buildings in the world to use cross-laminated timber on a scale more commonly achieved using steel. Its forest of 16 arcing, tree-like columns support a rooftop PV array that generates enough electricity to cover approximately one-third of the building's energy needs.

"We are showing that religion is part of the solution to the big problems of the Analysis in 2019 of a PV test system installed at a large mosque in Riyadh, Saudi Arabia, calculated an annual energy bill reduction of more than half.

world," said the dean of the Cambridge Muslim College, Abdal Hakim Murad, also known as Winter. The mosque "is making an important spiritual and humane statement that religion is here to counter waste, to encourage us to give thanks for the blessings of creation, to enable us to think collectively rather than selfishly about the problems that face us."

Other nations, too, are following. In 2014 and 2015, the British government funded its own Green Mosques project, supporting Muslim communities in London. In Toronto, Canada, a sustainability project dubbed "Khaleafa" — blending the Islamic principal of stewardship (khalifa) with the environmental symbol of a leaf — spearheads an awareness called "Green Khutbah" (khutbah means sermon). Many more mosque-based eco-projects continue to launch, from India to Tanzania, too many to list.

"The Qur'an is a book about nature," says Winter. "It challenges us to look around to see the order of nature; that's the basis of Muslim theology. Integration into the natural world is the essence of the Qur'anic summons to humanity."

That positive message can often contrast with how similar programs are promoted elsewhere.

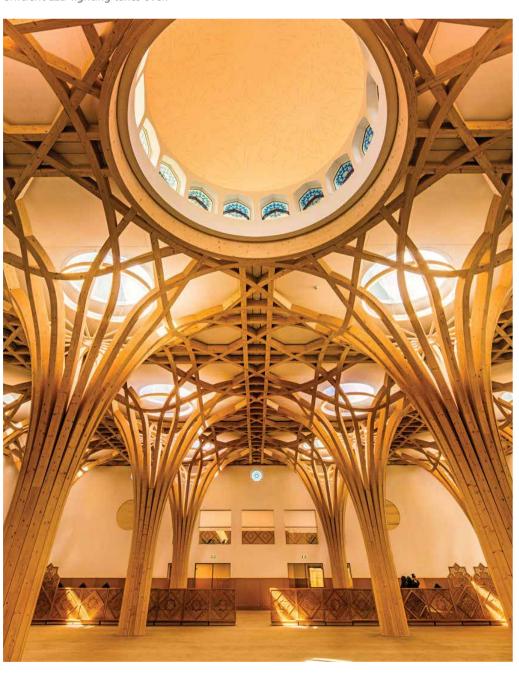
In many Western countries, conserving resources is still often seen as a technical issue linked to forecasts of global catastrophe.

Yet perhaps the path ahead can be as simple as these "green mosque" projects: Reduce consumption and invest in energy efficiency because it will save money and improve the quality of life for everyone.

A forest of gracefully arced and interlaced columns creates the vaulting in the main prayer hall at the Central Mosque in Cambridge, England. Skylights above each column let in natural light during the day, and for summer cooling, louvered vents create natural convection. At night, energy-efficient LED lighting takes over.



Besides coming here to learn about religion, we would like people to come to learn about the environment," says Khotib Kholil, who heads management of Az-Zikra Mosque in Sentul, Indonesia, the flagship eco mosque in the country.



Edge of the World a view unlike any other

by Chiara Ciampricotti Iacoangeli

Riyadh — About an hour's drive from Riyadh begins an off-road route of the same duration. The path is marked, but it is not the classic sandy desert. And as the car begins to vibrate and the wheels struggle to navigate the rocky rubble, you begin to notice all around you umbrella acacias, hedgehogs, dromedaries, bees, and apiaries — the fruits of an uncontaminated desert.

On this flat dirt road, nothing suggests the spectacle that will soon be revealing itself. Gradually, on the sides of the road, steep walls rise — immense canyons of flaky rock — as if they were so many overlapping ochre plates. It is time to leave the car and venture out on foot.

This will be an exciting hiking experience. The desert is dark, brownish, and sometimes crossed by lighter segments that seem to create colored trails. It draws you into it, urging you to go up and down some ridges to discover the scenic views beyond. Though the cliffs prove a bit challenging, you eventually reach points where the view takes your breath away.

An immense valley, which extends to the horizon, opens up in front of you, surrounded by high rocky walls and interspersed with high spikes of rock with the most extravagant shapes. This geological landscape panorama that can be enjoyed from the hills is among the most beautiful in the world.

From the ancient ocean floor, old cliffs rise up from the desert to the sky and in the midst of this boundless view, two "columns" stand out, the remains of a cliff eroded by time. From the top, you get the impression of literally being on the "edge of the world."

If you do the trekking in the afternoon,



ebel Fihrayn, some 300 meters above the valley oor, by taking his photo with the Kingdom's



Vehicles gather near one of the scenic overlook areas. While cars, trucks, and SUVs can get you part of the way there, the real excitement of Jebel Fihrayn is exploring the area on foot. Once the base of an ancient caravan trade route that would cross the peninsula from Yemen into the Levant and Persia, the area today is one of the Kingdom's most visited tourism sites. (Photos: Chiara Ciampricotti Iacoangeli)

you can enjoy the sunset when the colors become even more vivid, joining more visitors as the Kingdom opens up to tourism in locations such as this.

stunning views, stunning growth

The Edge of the World (whose real name is Jebel Fihrayn) in just a few years, has become one of the most popular destinations near Riyadh. This "nickname" was given because of its main attraction — the stunning viewpoints from the top of the 300-meter high cliffs overlooking the surrounding plain. This escarpment is part of the much longer Jibal Tuwaig, which is one of the most prominent natural features of Saudi Arabia spreading more than 1,000 kilometers (km) from the province of Najran in the south up to Qassim in the north.

It even played an important role in Arathe wonder by night bia's history, as along its base was one of the ancient caravan trade routes that used to cross the peninsula from Yemen into the Levant and Persia.

The cliffs are the result of the tectonic movement of the Arabian plate toward the northeast because of the spread of the Red Sea rift located 1,000 km to the west of Tuwaig. The clear cut it generated in the sedimentary grounds in the Riyadh area reveals the layers of sediments that accumulated there when the eastern part of the peninsula was a shallow tropical sea during the Jurassic Period 150 million years ago. This is why coral fossils are still visible today, both in the layers and scattered on the ground.

In recent times, some travelers have built trails along the cliffs, allowing access up and down the impressive escarpment. Some of those stone-made trails are still visible today like at the Khashm Zubaydah, 50 km southeast of the Edge of the World.

As the evening continues, we move to a desert camp in the dark of the night, some small torches marking the way to the caves. Only a small hole in the ground

can be seen, wide enough for just one person at a time to enter.

Accessed via a ladder and gradually descending into the deep, cramped cavern where you have to crouch over to visit, some walls are brilliant where the salt created crystallizations. In other places, stalactites of a vivid yellowish color have settled in the inhospitably hot and humid but certainly ideal habitat for the many bats that flit around — underground.

Back at camp, large tents and immense carpets are spread out on the ground. Fires lit, the intensity of their scents wafts through the air — mint tea and cardamom coffee, the smoke of the shisha, and the meat on the grills. The telescope is ready to visually explore the starry sky and the craters of the moon. There are those who play, those who love to chat, and those who savor the traditional kebab barbecue.

A boy takes an oud out of its case. He will soon be surrounded by other young guys, the sound of his music and the accompanying singing become the perfect soundtrack for this evening.







Rock formations in the caves that underly The Edge of the World's steep outcroppings are as unique as the topography.

Employee Share Purchase Plan: offering an opportunity for Aramcons to be 'owners'

Becoming a publicly traded company was a major milestone for Saudi Aramco. After many years of effort and hard work, the company made its debut on Tadawul in December 2019 — the Saudi Stock Exchange — and offered up shares for national and international investors.

In recognition of this milestone, the company gifted employees a one-time celebratory grant. The purpose of the grant was twofold — first, to celebrate, as the company wanted to extend a reward to employees for their dedication and many contributions.

Second, to make all eligible employees shareholders. In a sense, all employees who received the Celebratory Grant are now "owners" of the company, and as owners, they have even more interest in how the company performs. The better the company performs, the more their shares grow.

a new era

It has been almost a year since the company's initial public offering. Now, to strengthen the alignment between employee and shareholder interests, Human Resources is introducing the Employee Share Purchase Plan (ESPP).

As the name suggests, the plan will give employees an opportunity to purchase Saudi Aramco shares. And while employees can purchase shares on the Tadawul exchange today, the ESPP has advantages making the ability to purchase Saudi Aramco shares easier and more cost-effective than ever before.

Nabil K. Al-Dabal, Human Resources vice president, said: "We are very excited about the Employee Share Purchase Plan. The program will provide an opportunity for our employees to further leverage their contribution to the company by becoming direct shareholders. This opportunity recognizes the value our employees create for Aramco and enables them to unlock and own more of that value.

purchasing shares

The voluntary program allows employees to purchase shares of Saudi Aramco stock through payroll deductions. Employees may contribute up to 10% of their monthly base salary within cap limits. This allows employees to free up their monthly cashflow by evenly distributing purchases over time rather than all at once.

It also allows employees to better plan and budget their personal finances. While the opportunity to opt in for purchase periods will only be offered twice a year, an employee can opt out at any time.

ESPP is also cost-effective. The program offers shares at a discounted purchase price. All Saudi Aramco employees with at least one year of service are eligible to participate in the program and purchase shares at a 20% discount. Any shares purchased through the ESPP can be sold or transferred one year later.

Oct. 12-15

activation emails from Global Shares in your inbox

Oct.

complete account activation by this date to avoid delays in receiving your Celebratory Grant

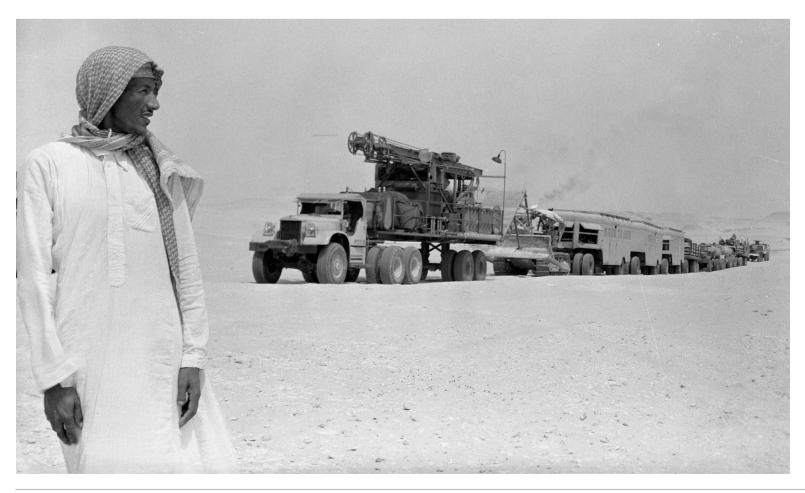
first open enrollment period for ESPP

Finally, monitoring and managing of shares is made easy with the recently announced EquityGateway portal, which can be accessed through a link posted on My-Home or directly at EquityGateway. All of the resources employees need are at their fingertips and simple to maintain.

more information

The decision to participate in a share purchase program can seem intimidating, so Human Resources will be conducting live informational sessions via Skype. The sessions will review the ins and outs of the program and answer questions employees may have concerning the program. Employees can also visit the Aramco Share Plans ShareK site or the EquityGateway portal for more information.

"The ESPP represents an opportunity for eligible employees to take ownership of the company's success and participate in the rewards of their contributions," said Abdullah Z. Al-Otaibi, director of the HR Policy and Planning Department. "It will also create a new level of employee engagement while simultaneously accelerating our transformation to a performance-driven culture."





photographic memory

An exploration and survey caravan heads for the open desert in this 1947 photo. The lead vehicle in this convoy is a water well drilling rig and the trailers following it are all airconditioned, serving as offices, homes, kitchen and laboratories for the technicians who sometimes stayed in the desert for weeks at a



The Arabian Sun is a weekly publication issued free of charge by the Corporate Communication Support Department for Saudi Aramco employees.

North Admin Building, Room AN-1080, C-05A, Dhahran, Saudi Arabia Telephone (013) 876-0374 Email: publishing@aramco.com ISSN: 1319-156X Articles may be reproduced provided The Arabian Sun is credited.

Publishing director: Meteb F. Al-Qahtani Editors: Jamsheed Din, Todd Williams, William Bradshaw Editorial staff: Musherf Alamri, Eamonn Houston, Scott Baldauf and Dalia Darweesh.

Designer: Joseph Antony

Articles and coverage can be requested through CRM. Correspondence may be addressed to the editor, North Admin Building, Room AN-1080, C-05A.







Saudi Arabian Oil Company (Saudi Aramco) is a joint stock company, with certificate of registration number 2052101105, having its principal office at P.O. Box 5000, Dhahran, Postal Code 31311, Kingdom of Saudi Arabia, and with fully paid capital of SAR 60,000,000,000.

#arabian



Friday is World Food Day: 'Food safety, everybody's business'

when shopping for eats, be smart, not stressed

by Fatimah Turki

The COVID-19 pandemic has changed the world around us, complicating even the most mundane tasks we previously took for granted. Take grocery shopping for example. This essential task is a necessity, but it presents us with anxiety raising concerns. Will I get sick if I eat food contaminated with coronavirus? Will I bring the coronavirus into my home if food or packaging is contaminated with the virus? Will other shoppers pass the virus onto me?

Despite the scale of the pandemic, to date there have been no reported COVID-19 transmissions via food consumption as studies have shown the virus cannot multiply in food and it needs a human host. We should still wash all fruits and vegetables as a generally important hygiene precaution, though.

rules for shopping safely

Two main routes of COVID-19 transmission are:

- Through exposure to droplets spread by a person coughing, sneezing, or talking.
- Touching a surface contaminated with the virus, and then touching your face.

So keep a few things in mind when you plan your grocery shopping. First, ask yourself if you are well enough to go shopping. If you have a continuous cough, a high temperature, a loss of or change in a sense of smell or taste, you should stay at home and contact your medical provider.

Should you go out?

Even when you are feeling well and go shopping, protect yourself and others by following the below tips:

- Spend as little time in the shop as pos-
- Reduce the frequency of shopping trips by planning and preparing a comprehensive shopping list for one to two weeks worth of groceries at a time. Although, buying more than you need can create unnecessary demand and temporary shortages.
- with longer expiration dates

• Consider buying nonperishable foods

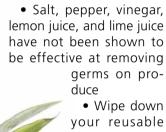
times to avoid crowds

• Ensure that the store implements prevention control measures such as limiting capacity, physical distancing, availability of gloves and hand sanitizer, etc.

after your outing

When you get home:

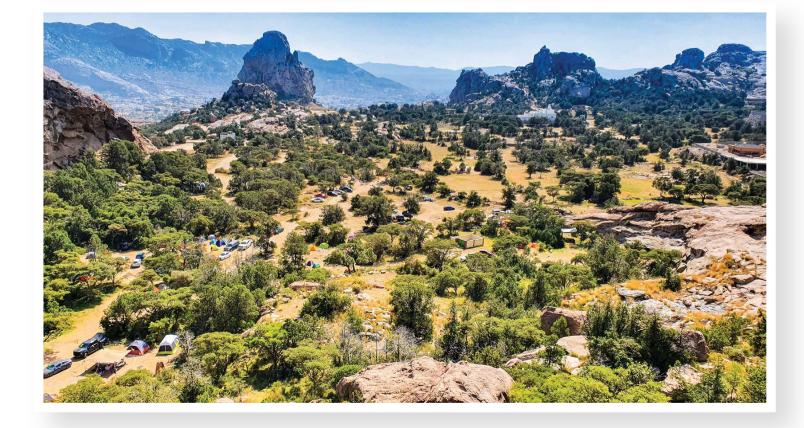
- Wash your hands immediately
- Ensure availability of a designated and cleared area in your home to organize the shopping
- Where possible, remove outer food packaging and dispose of safely
- Wipe the surfaces of all canned and packaged goods with disinfectant. Make sure to use food safe disinfectants.
- Gently rinse fresh fruits and vegetables under cold, running tap water. Avoid hot water, which can provide a pathway for microorganisms to get inside the item. Do not wash produce with soap, bleach, sanitizer, alcohol, disinfectant, or any other chemical.
- Scrub uncut firm produce (e.g., potatoes, cucumbers, melons) with a clean brush, even if you don't plan to eat the peel. This will prevent transfer of dirt and bacteria from the knife onto the fruit or vegetable.



- shopping bags, or clean according to the manufacturers label
- Disinfect the unpacking area
- Wash your hands with soap and water for 40 seconds.

Ultimately, food safety is a shared responsibility. Everybody has a role to play from farm to table to ensure the food surfaces and food packaging materials are not contaminated with the coronavirus virus.





the view from above

Abdulaziz N. Hamad captured this panoramic view from the top of the mountains in the Tanomah Valley last month with his Galaxy S10 phone. Hamad, who lives in Jiddah and works as a public relations representative in Government Affairs Western Province, visited the Asir region in the Kingdom's Southwest to take in the region's famous camping, hiking, and rock climbing activities. He has been with the company one year.