



energy.







opportunity.

energy is opportunity.

We connect people, ideas, and energy to realize the full potential of our resources, amplifying their benefits to power opportunities. In our communities, our schools, and our homes, we bring energy to life.

About This Report

This 2014 Citizenship Report is half of a two-volume corporate report; the companion volume is our 2014 Annual Review. Together, they represent our continued annual practice of reporting on our operational, organizational, social, and environmental achievements and goals. For past reports, please visit saudiaramco.com.

Disclaimer: Each company affiliated with The Saudi Arabian Oil Company ("Saudi Aramco"), and in particular, each subsidiary company including their associated research centers, is a separate entity that manages and controls its own affairs. The use of terms such as "company," "Saudi Aramco," "organization," "it(s)," "our(s)," "their(s)," "we" and "us" and of abbreviated job titles is only for convenience and is not intended as an accurate description of individual status and corporate relationship, or to indicate that Saudi Aramco is conducting commercial activities outside the Kingdom of Saudi Arabia.

A young visitor to our iThra Knowledge Program joins the conversation about improving energy efficiency in the Kingdom.

Table of Contents

13	Board of Directors
14	Chairman's Message
15	President's Foreword
16	Citizenship at Saudi Aramco
20	Economy
36	Community
50	Knowledge
64	Environment
78	Citizenship around the World
80	Awards





The Custodian of the Two Holy Mosques
King Salman ibn 'Abd Al-'Aziz Al Sa'ud



His Royal Highness Mohammed bin Naif ibn 'Abd Al-'Aziz Al Sa'ud
The Crown Prince, Deputy Premier, and Minister of the Interior

saudi aramco citizenship

We leverage our business activities and our unique expertise for the benefit of the Kingdom, its citizens, and the communities where we operate.



economy

- domestic energy sector
- economic diversification
- private sector job growth

≈500,000

direct and indirect jobs anticipated
in domestic energy sector

\$37.4B

value of contract procurement awarded
to domestic firms in 2014

\$1.2B

expected investment in Petro Rabigh
value park by 2015

85%

percentage of material procurement
spending awarded to local market in 2014



community

- health
- safety
- civic well-being

800,000

people reached by smoke detector
campaign in 2014

450,000

traffic safety school kits distributed
in 2014

306,000+

hours of service provided by more than
3,300 volunteers

15,000+

participants in sponsored
sporting programs in 2014



knowledge

- cultural enrichment
- innovation
- knowledge society

2M+

visitors to iThra Knowledge program, 2013–2014

13,000

tablet computers distributed to school children in 2014

5,809

youth participants in iExcel programs in 2014

1,000

school classrooms upgraded with smart technology in 2014



environment

- energy efficiency
- environmental stewardship
- sustainable operations and products

5B

cubic feet of gas recovered through zero discharge technology in 2014

30M

kilowatt hours of energy saved by installing ≈500,000 LED lights in 2014

1,400

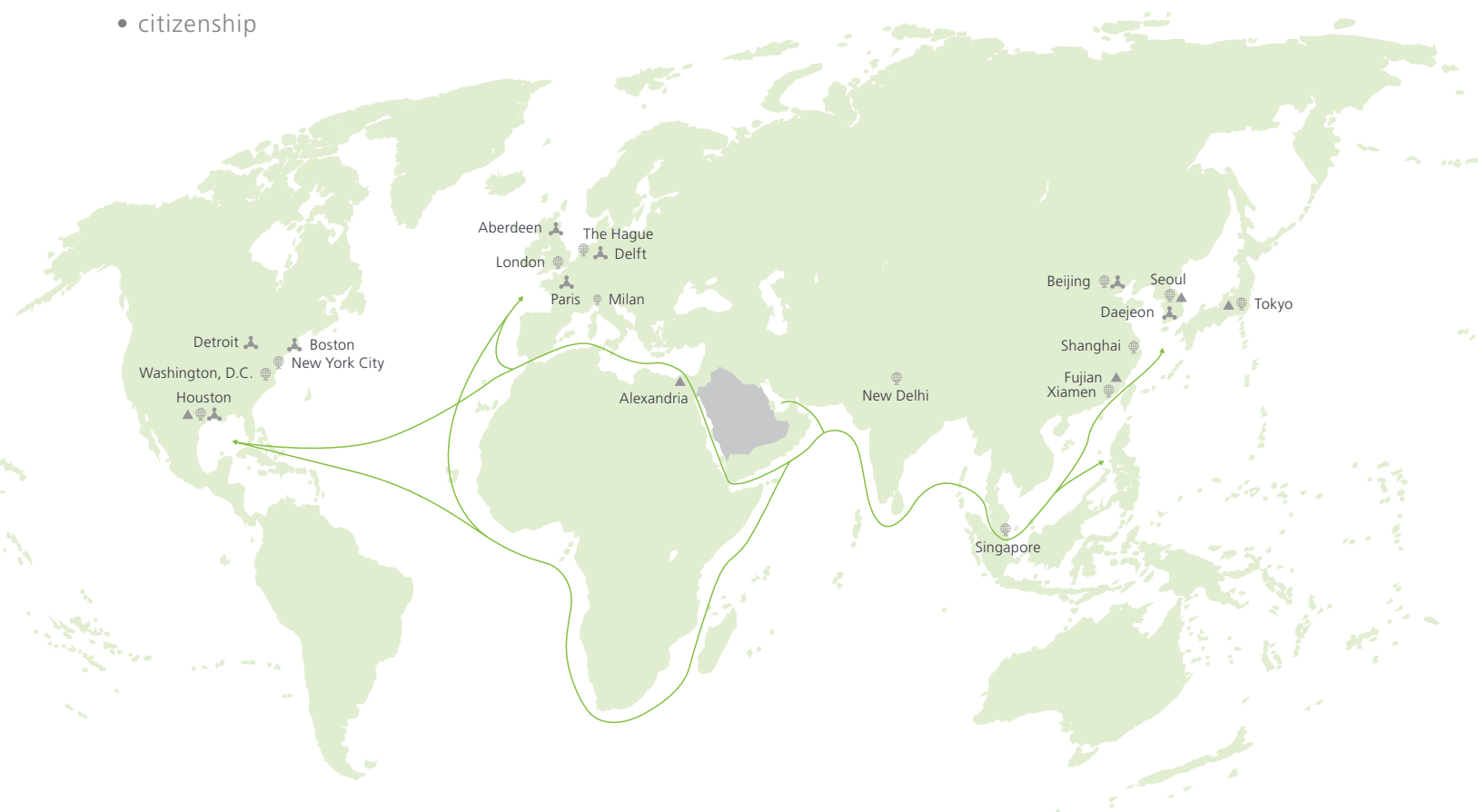
elementary schools received Environmental Education Program

383

high-efficiency AC units installed in 25 schools in 2014

our values

- integrity
- safety
- accountability
- excellence
- citizenship



 **Export Shipping Routes**

 **R&D Center/Technology Office**

 **Global Office**

 **Joint and Equity Ventures**

Houston
Motiva Enterprises LLC

Alexandria
The Arab Petroleum Pipeline Co. (SUMED)

Fujian
Fujian Refining and Petrochemical Company Ltd.
Sinopec SenMei Petroleum Company Ltd.

Seoul
S-OIL

Tokyo
Showa Shell

creating mutual value with our partners,
customers, and communities



★ Saudi Aramco Headquarters

⚙️ R&D Center/Technology Office

⬠ Saudi Aramco Refinery

■ Joint Venture Refinery

🚚 Terminal

🧪 Luberef

⚙️ Bulk Plant

💧 Marafiq



Our flagship cultural initiative, the King Abdulaziz Center for World Culture, is at the forefront of our efforts to help build a knowledge society.



Board of Directors

Saudi Aramco's Board of Directors is chaired by His Excellency Ali I. Al-Naimi, Minister of Petroleum and Mineral Resources. The Board of Directors, as steward of the company, steers Saudi Aramco's business affairs, provides management with guidance in determining the company's long-term strategy, and assesses company opportunities, risks, and controls for risk mitigation. The Board includes senior Saudi Government officials, heads of leading Saudi research and academic institutions, senior figures in the international oil, gas, and finance industries, as well as senior members of Saudi Aramco management.

front row (from left):

HE Dr. Majid Al-Moneef is the secretary of the Supreme Council of the Saudi Arabian Oil Company (Saudi Aramco)

HE Dr. Mohammed I. Al-Suwaiyel is the minister of Communications and Information Technology for Saudi Arabia

HE Dr. Ibrahim A. Al-Assaf is the minister of Finance for Saudi Arabia

HE Ali I. Al-Naimi is the minister of Petroleum and Mineral Resources for Saudi Arabia, and chairman of Saudi Aramco's Board of Directors

Khalid A. Al-Falih is the president and chief executive officer of Saudi Aramco

HE Dr. Khaled S. Al-Sultan is the rector of King Fahd University of Petroleum and Minerals

back row (from left):

Peter Woicke is a former managing director of the World Bank and chief executive officer of the International Finance Corporation

Sir Mark Moody-Stuart is a former chairman of Royal Dutch Shell

Andrew F. J. Gould is the chairman, BG Group plc

Amin H. Nasser is the senior vice president of Upstream at Saudi Aramco



Chairman's Message

All of these expressions of citizenship, plus innumerable others, clearly demonstrate that at Saudi Aramco, energy truly is opportunity.

The Kingdom of Saudi Arabia is developing rapidly. In a time of increasing industrialization, economic diversification, and a growing population — more than half of whom are under the age of 25 — there exist many challenges. More crucially, there are opportunities to be captured through greater economic output, the growth of a knowledge society, and the emergence of a generation that is deeply involved in sustainability issues.

Through its focus on enabling opportunity, Saudi Aramco is helping to advance the nation's interests by ensuring that citizens can contribute to, and benefit from, the transformative changes taking place across the Kingdom.

The company is a major force in driving the growth and diversification of the Kingdom's economy. Through its citizenship agenda, the company leverages its many commercial activities to generate greater economic benefits for the people of the Kingdom. Nowhere is this more evident than in the company's programs to create a fully realized domestic energy services sector and in the integration of their refining and chemicals facilities. The

conversion parks and industrial clusters allied with these facilities will foster high-quality jobs in industries new to the Kingdom.

The company's societal and environmental outreach programs build needed capability and capacity in our communities, directly contributing to their sustainable long-term growth. In 2014, the company forged a strategic partnership to improve the quality of health care for hundreds of thousands of people in the Eastern Province. Saudi Aramco completed numerous projects to make our public schools safer, technologically smarter, and more energy efficient. The men and women of the company passed on their enthusiasm for science and education through programs that instill a love of knowledge and promote an innovation mindset in the young people who will one day be the leaders of our communities and the drivers of the Kingdom's development.

All of these expressions of citizenship, plus innumerable others, clearly demonstrate that at Saudi Aramco, energy truly is opportunity.

Creating opportunities for the Kingdom's citizens was the hallmark of the late King 'Abd Allah ibn 'Abd Al-'Aziz Al Sa'ud. During his reign, Saudi Aramco was entrusted with many of the Kingdom's initiatives to support the development of a knowledge society and is honored to carry on this work under the guidance of the Custodian of the Two Holy Mosques, King Salman ibn 'Abd Al-'Aziz Al Sa'ud, and the Crown Prince, HRH Mohammed ibn Naif ibn 'Abd Al-'Aziz Al Sa'ud.

Ali I. Al-Naimi
Minister of Petroleum and Mineral Resources
Chairman of the Board of Directors



President's Foreword

Our people have once again brought our energy to life in ways that provided tangible opportunities for thousands of people in communities the world over.

At Saudi Aramco, citizenship is at the heart of everything we do. Whether it is contributing to the growth of global economies, promoting energy efficiency, or helping a young person discover an interest in science, we create opportunities that help people add value to their communities, their families, and their own lives. To us, that is being a good citizen.

To ensure our citizenship endeavors have the greatest possible impact, we focus on the four pillars of economy, community, knowledge, and environment. These pillars help us conduct our business in a way that leaves a legacy of shared benefit while enabling others to do more, create more, and become more.

In terms of the **economy**, we worked to amplify the benefits of our core business by localizing a significant and competitive energy goods and services sector. We also continued to promote the creation of value-adding industries downstream of our emerging petrochemical business, enhancing the prospects for a diverse array of small and medium-sized enterprises. We were also focused on the complex challenges of managing rapidly rising domestic

energy demand and the imperative of achieving energy efficiency enhancement in the Kingdom.

In terms of supporting local **communities**, we continued to focus on wellness and safety, particularly traffic safety. As part of our ongoing efforts to make the Kingdom's roads safer, innovative traffic safety villages taught a new generation of young Saudis the importance of responsible driving habits.

We also helped prepare young people for the **knowledge** economy that holds the key to the Kingdom's future. Through our award-winning iThra Youth programs, we inspired and stimulated young minds, attracted more than two million visitors to our iThra Knowledge program over the last two years, and made significant progress toward opening the landmark King Abdulaziz Center for World Culture.

The natural **environment** was another focus area, and not just in terms of continuing to reduce the footprint of our operations. For example, the next-generation engine and fuel systems we are researching hold the promise of more efficient engines and cleaner burning fuels to improve mileage and reduce emissions worldwide.

But perhaps the most memorable citizenship achievement of 2014 was the completion and spectacular inauguration of the world-class stadium at the King Abdullah Sports City in Jiddah.

The many accomplishments detailed in this report resulted from close collaboration with our stakeholders and partners, and the continuous efforts of the men and women of Saudi Aramco. I am proud that our people have once again brought our energy to life in ways that provided tangible opportunities for individuals and communities the world over.

Khalid A. Al-Falih

President and Chief Executive Officer

citizenship at Saudi Aramco



We believe in the power of energy to create opportunities. We believe in the power of ideas to make those opportunities accessible. And we believe in the power of people to amplify those ideas to generate even more opportunities with greater impact. By connecting energy, ideas, and people, we expand the possibilities created by our business to spur diversification and drive sustainable economic growth, add meaningful jobs to the labor market, invest in the educational development of our young people, and contribute to the health and well-being of our communities and the people who call them home.

For us, being a citizen means more than doing good. It means acting with purpose in mobilizing our energy, our extensive resources, and our unique expertise to generate opportunities that help others make a positive impact in their communities and in their own lives.

Our belief in the power of energy to create opportunity underlies our efforts to produce lasting impact and value where our business activities and the Kingdom's priorities intersect. It motivates us to examine our operations for potential scale, reach, and impact and then leverage those wherever possible to generate shared value for our stakeholders and our company. It impels us to extend our enthusiasm for science, creativity, and innovation into programs that contribute to the development of a knowledge society.

At Saudi Aramco, our citizenship strategy is integrated with our corporate business strategy and is based on the four pillars of Economy, Community, Knowledge, and Environment.

We chose these pillars because each one leverages an aspect of our business strategy and our expertise, resulting in citizenship activities that are more targeted and have long-term benefits. Combined, our four citizenship pillars form a holistic framework that allows us to create real and significant contributions to the issues that matter most to us and to our stakeholders.

Economy

We make important contributions to the growth and diversification of the local economy through our core business activities and by capitalizing on the resulting multiplier effects. Reliably delivering our products makes it possible for companies at home and abroad to invest with confidence in projects that grow their businesses and create jobs. Building integrated refining and chemicals facilities and their associated conversion parks advances the diversification of the domestic economy and creates additional business opportunities for service and materials suppliers in local supply chains. Investing venture capital in startup companies that are developing the cutting-edge energy technologies of

tomorrow promises to make petroleum more efficient and sustainable and create new job opportunities throughout Saudi Arabia. Providing financial and technical support for promising entrepreneurs fosters a culture of innovation and healthy risk taking.

Community

The well-being of our communities is strengthened through programs that encourage safety, healthy lifestyles, and civic engagement. By improving and upgrading the public schools we have built, we are creating a more advantageous learning environment for Saudi students who will be the future contributors to their communities. Our targeted charitable giving helps build capacity in local organizations to design, implement, and manage a broad array of health and educational outreach programs. Partnering with government entities to deploy a full suite of traffic safety improvements makes our roads safer for our employees, their families, and other residents of the Kingdom.

Strategic Intent. In 2020, Saudi Aramco is the world's leading integrated energy and chemicals company, focused on maximizing income, facilitating the sustainable and diversified expansion of the Kingdom's economy, and enabling a globally competitive and vibrant Saudi energy sector.



شجرة المائدة
Al-Qudus, Al-Qadiri,
The Abba, the Emir Abba, the

Knowledge

We enable the development of a knowledge society by supporting education in STEM (science, technology, engineering, and mathematics) skills and through initiatives that promote creativity and innovation. By acting as a catalyst for the localization of the Kingdom's energy services sector, we promote and advance the development of the Kingdom's research and development capabilities, leading to breakthrough technologies that contribute to the formation of the local knowledge economy.

Environment

We apply our creative and intellectual energy to find solutions to energy sustainability challenges of global significance. We develop and deploy innovative technologies that help minimize our environmental impact. Producing more natural gas provides a cleaner and more efficient energy source to meet the Kingdom's energy demand while also enhancing our ability to meet the global call on our crude oil. Championing energy efficiency and supporting the government's goals to

reduce the Kingdom's energy intensity will result in a more diversified and sustainable energy mix and help protect the environment. Establishing wildlife sanctuaries and eco-parks instills respect for our natural resources in the nation's youth and helps protect the Kingdom's biodiversity.

These four citizenship pillars drive us to continuously implement new ways of doing business that create shared value. An example of how we create shared value is through our global research and development network. In addition to our research centers in Saudi Arabia, we have established research centers and technology offices around the world with the goal of generating technological breakthroughs across the hydrocarbon value chain that will contribute to long-term energy sustainability. The results of our research will create shared value for energy consumers — and society as a whole — through more efficient internal combustion engines and more environmentally friendly fuel formulations that improve mileage efficiency and reduce emissions.

To leverage the power of collaboration in broadening the reach and influence of corporate citizenship in the Kingdom, we held our second annual Corporate Social Responsibility (CSR) Forum. The forum was attended by 250 of the region's CSR practitioners from academia, industry, and government. The event showcased 20 model CSR projects and four private/public partnerships while representatives from 24 leading CSR organizations and global foundations exchanged best practices covering a variety of topics.

Whether we helped foster a healthy, safe, and dynamic society, nurtured an ecosystem of innovation, or promoted energy efficiency, the programs and business activities detailed in this report demonstrate that we made a world of difference through our citizenship activities in 2014. We delivered on the promise inherent in each of our citizenship pillars and we are proud to say that the social, economic, and environmental health of our communities is better because we are engaged.



economy

Our business is the economic foundation for the Kingdom's prosperity. But at Saudi Aramco, we chart new territories to find ways to enhance our contributions to the national economy.

Our new YASREF joint venture refinery contributes to the domestic economy in ways beyond revenue by creating opportunities for local manufacturers and service providers.



creating sustainable economic benefits

This approach has empowered us to play a major role in the near 70-fold expansion of the Kingdom's GDP in just four decades.

For a more detailed overview of our core petroleum and chemicals business, please refer to our 2014 Annual Review.

We leverage our commercial activities to create multiplier effects that amplify added value and benefits for the people and communities where we operate. By acting strategically in the way we conduct and expand our business, we successfully uncover opportunities to enable more — more jobs, more investment opportunities, more localization, and more diversification.

One way we help drive the long-term economic growth of the Kingdom is through our investments in best-in-class oil, gas, refining, and chemicals facilities. These mega-projects are a powerful manifestation of our business strategy and provide direct economic benefit for the Kingdom. But looking at them through the lens of citizenship, we see them — and their associated construction and infrastructure projects — as vehicles for the transformation and growth of the regions where they are located. Our SATORP and YASREF joint venture projects, for example, not only add to the development of a knowledge-based economy in the Kingdom by providing technical job opportunities for thousands of Saudi technicians, engineers, and operators, they also incubate Saudi-owned small- and medium-sized manufacturers and service providers.

We are also laying the foundation for greater rewards for our industry and the Kingdom by acting as a catalyst for the development of a Saudi energy services sector. We support the development of local businesses that manufacture energy-related materials and provide engineering and oil field services. These initiatives will help establish the Kingdom as a strategic hub for energy service sector investment, both locally and internationally.

In the wider society, we focus on training, apprenticeship, and educating Saudis so they can fill the specialized jobs created by our efforts to grow and diversify the economy.

The following sections of this chapter — Maximizing Our Impact, Enabling the Domestic Energy Sector, Building a Competitive Workforce in the Kingdom, and Enabling Entrepreneurship — describe our focused approach toward strengthening the Kingdom's economy.

Maximizing our impact

The core of our business is oil, gas, refining, and chemicals. These are long-term and capital-intensive businesses that we develop through world-scale facilities. We apply our considerable project management experience to make certain these projects create sustainable economic benefits for the Kingdom and its growing workforce. Wherever possible, we capitalize on these projects to stimulate the development of adjacent manufacturing, supply, and conversion industries to drive even more economic growth and diversity.

Our **Sadara** joint venture with The Dow Chemical Company is currently being constructed in Jubail Industrial City. Sadara will be the world's largest integrated chemicals complex ever built in a single phase, with the production capacity for more than 3 million tons per year of diversified chemicals and plastics. It will be the first chemicals complex in the countries of the Gulf Cooperation Council (GCC) to use naphtha as part of its feedstock. Fourteen of Sadara's 26 world-scale manufacturing units are new to the Kingdom. Their differentiated product slates are the building blocks used in high-performance flexible packaging, hygiene and medical applications, chemicals and additives for the oil and gas industry, chemicals for water treatment, soaps, detergents, cosmetics and other personal care products, as well as adhesives, brake fluids, and car seats for the automotive industry.



oil reserves

261.1 billion barrels

Sadara is on track for an initial start up in the third quarter of 2015 and all process units will be on-stream within one year of start up. The project currently employs an estimated 2,500 staff (up from 1,500 in 2013). Over 250 apprentices and over 700 on-the-job trainees are undergoing comprehensive manufacturing and engineering training programs in state-of-the-art centers inside and outside Saudi Arabia. Ultimately, Sadara plans to employ more than 3,500 people while contributing to an additional 15,000 non-direct employment opportunities.

The impact of Sadara on the Kingdom's economy will be further industrial diversification built on the growth of businesses capable of manufacturing consumer products from these new chemical streams.

PlasChem Park, the industrial conversion park adjoining the Sadara complex, is currently being developed to house these manufacturers. Site development is anticipated to be completed in the first quarter of 2015. Work is also progressing on the structuring of Invesco, the investment vehicle that will support the development of conversion industries in PlasChem Park.

Sadara's integration with PlasChem Park is a prime example of how we are advancing Saudi Arabia's strategy to become a hub for future downstream industrialization of chemicals and plastics. PlasChem Park will create more than 20,000 high-quality jobs, either directly or indirectly, for Saudi nationals.

Our **Petro Rabigh** joint venture is another concrete expression of how we leverage our core business for the benefit of the domestic economy. By de-bottlenecking the existing steam cracker, we can now produce more higher value-added and specialty ethylene- and propylene-based products. The upgrades will enable the conversion of 4,000 kilotons per year of naphtha into higher value aromatic products. This naphtha, which otherwise would have been exported, will be processed by the new Rabigh Phase II facilities to provide feedstock for downstream units that manufacture specialty petrochemicals or delivered as feedstock for third-party projects.

Manufacturers who convert these chemicals into consumer products will be able to establish their businesses in the adjacent **Rabigh PlusTech Park**. At year-end 2014, agreements had been reached with tenants for 30 of the 34 sites in the park and potential tenants have been identified for the remaining sites. By 2015, it is expected that investments of up to \$1.2 billion will have been made in the PlusTech Park and 2,000 new direct jobs will have been created. Promotion, marketing, and construction of the park, for which Saudi Aramco and Sumitomo Chemical are jointly responsible, will continue until all of the park tenants begin construction of their plastic manufacturing facilities.



294 trillion standard cubic feet



The National Industrial Training Institute Empowering the Saudi workforce

In October 2014, the first class of 352 high school and technical college students from across the Kingdom arrived at the National Industrial Training Institute (NITI) campus in Al-Hasa. A nonprofit organization, NITI is a joint undertaking between Saudi Aramco and the Technical and Vocational Training Corporation. Managed by its own Board of Trustees, the goals of NITI are to transform vocational training in the Kingdom and help meet the growing demand for a national workforce in the oil and gas industry.

The institute's value proposition benefits young people and Saudi Arabia's hydrocarbon industry at the same time: NITI delivers quality technical training to young Saudis and creates new opportunities while also providing the Kingdom's oil, gas, and chemicals businesses with the skilled manpower they need in a time of expansion and greater market and technical complexity.

Saeed Al-Buwait, coordinator at NITI, said that the large number of students in the first class demonstrates a commitment on their part and a desire to achieve their dreams. "I saw them receiving their uniforms one by one, and I could see in their eyes a hope for the future," he said.



World-scale oil, gas, and refining facilities generate sustainable economic benefits for the Kingdom.

In April 2014, we began marketing Petro Rabigh products through our fully owned trading subsidiary, **Aramco Trading Company**. This development underscores our resolve to capture as much value from our resources as possible because every success we achieve in this area contributes to corresponding success for the Kingdom.

The **Saudi Aramco Total Refining and Petrochemical Company (SATORP)**, our joint venture with France's Total in Jubail, is one of the largest, most complex refineries in the world. In August 2014, SATORP's crude oil throughput reached the facility's full design capacity of 400,000 barrels per day (bpd). The refinery produces low-sulfur gasoline, diesel, and jet fuel that meet the highest standards and specifications in the United States, Europe, and Japan. This new venture will generate approximately 5,700 direct and indirect jobs and represents a major step in achieving our vision of being among the world's top three refiners and a world-leading manufacturer of chemicals.

A joint venture with Asia's largest refiner, Sinopec, the **Yanbu Aramco Sinopec Refining Company (YASREF)**, is a 400,000-bpd refinery designed to process Arabian Heavy crude oil from the Manifa field. YASREF, like all of our domestic downstream projects, provides multiple benefits to people in Saudi Arabia and in key markets. It will process Arabian Heavy crude oil, freeing lighter, more valuable grades for export; help meet domestic demand for refined products and export high-value products; provide feedstock for industry; generate direct and indirect jobs; and create opportunities for material and service providers.

YASREF began commissioning in late 2014 and delivered its first shipment of clean diesel fuel in mid-January 2015. Within a few years of operation, YASREF, like SATORP, is expected to generate about 6,000 direct and indirect jobs for the community. The joint venture also enrolled approximately 700 Saudi employees in its apprentice program to prepare them to

assume full jobs in operations, maintenance, industrial relations, and engineering positions.

In 2014, we began construction on a project to build a refinery and terminal in Jazan in the Kingdom's southwest. Our wholly owned and operated **Jazan Refinery and Terminal** will become an integral part of our refining and distribution network. The complex, which also includes an industrial city, will help meet the Kingdom's energy demand and also export high-value fuels to international markets.

The Jazan refinery, scheduled to begin commissioning in 2017, will have the capacity to process more than 400,000 bpd of crude oil to produce gasoline, ultra-low-sulfur diesel, benzene, and paraxylene.

We are creating more than 1,000 direct and 4,000 indirect jobs for Saudis through this project. An added benefit to the entire southwestern region is that the refinery



We act as a catalyst for the development of a Saudi energy services sector, supporting the creation of local firms to manufacture materials and provide services.

will be incorporated with the world's largest integrated gasification combined cycle complex. This will allow the refinery's own operations to economically and efficiently generate 4,000 megawatts of electricity — enough to cover the refinery's needs, enable the development of industries within the Jazan Economic City, and provide power for area communities.

We have been entrusted by the government to develop **Jazan Economic City**. Located in a coastal region known for its abundant natural resources and covering an area of 106 square km, the economic city will be a hub for a diverse platform of heavy, medium, and light industries.

Phase 1 of the project, which will be completed in 2017, focuses on building smart infrastructure that meets the energy, utilities, and transportation requirements of a wide array of industries. These infrastructure investments will be complemented by several large-scale national projects including a new Jazan airport and a 660-km Jazan-Jiddah coastal railway. The city's infrastructure development is designed to minimize investors' start up time so they can begin operations as quickly as possible.

The project is expected to substantially augment the economic output of the region and create 15,000 jobs in its first five years and rapidly scale up to generate

more than 70,000 new jobs over a 15-year period. The city will boast a high quality of life that attracts and retains competitive companies and a dynamic workforce. This private-public partnership will set the standard for local economic development and serve as a model for building economic cities in the Kingdom.

Natural gas is a critical component of our strategies to help reduce the Kingdom's reliance on liquid fuel for power generation and to provide the foundation for further economic growth. The year 2014 also witnessed major progress in our ability to expand natural gas production with the construction of our **Wasit Gas Plant**, one of the largest nonassociated gas plants we have ever built, and scheduled for start up in 2015.

At full capacity, Wasit's integrated facilities will process 2.5 billion standard cubic feet per day (scfd) of nonassociated gas from offshore fields. The cogeneration facility at the plant, also scheduled to start up in 2015, will have the capacity to generate 750 megawatts of electricity, making the plant self-sufficient in power with the excess delivered to other company facilities.

The **Midyan Gas Plant** in the Tabuk region is our first such project in the Kingdom's northwest. Work on the plant commenced in 2013 and the facility is scheduled to be fully operational by the end of 2016. The

facility is designed to produce and process 75 million scfd of nonassociated gas and 4,500 bpd of condensate. The Midyan project will deliver sales gas and stabilized hydrocarbon liquids to the Saudi Electricity Company's high-efficiency solar thermal power plant near Duba to generate electricity, displacing the use of high-value diesel.

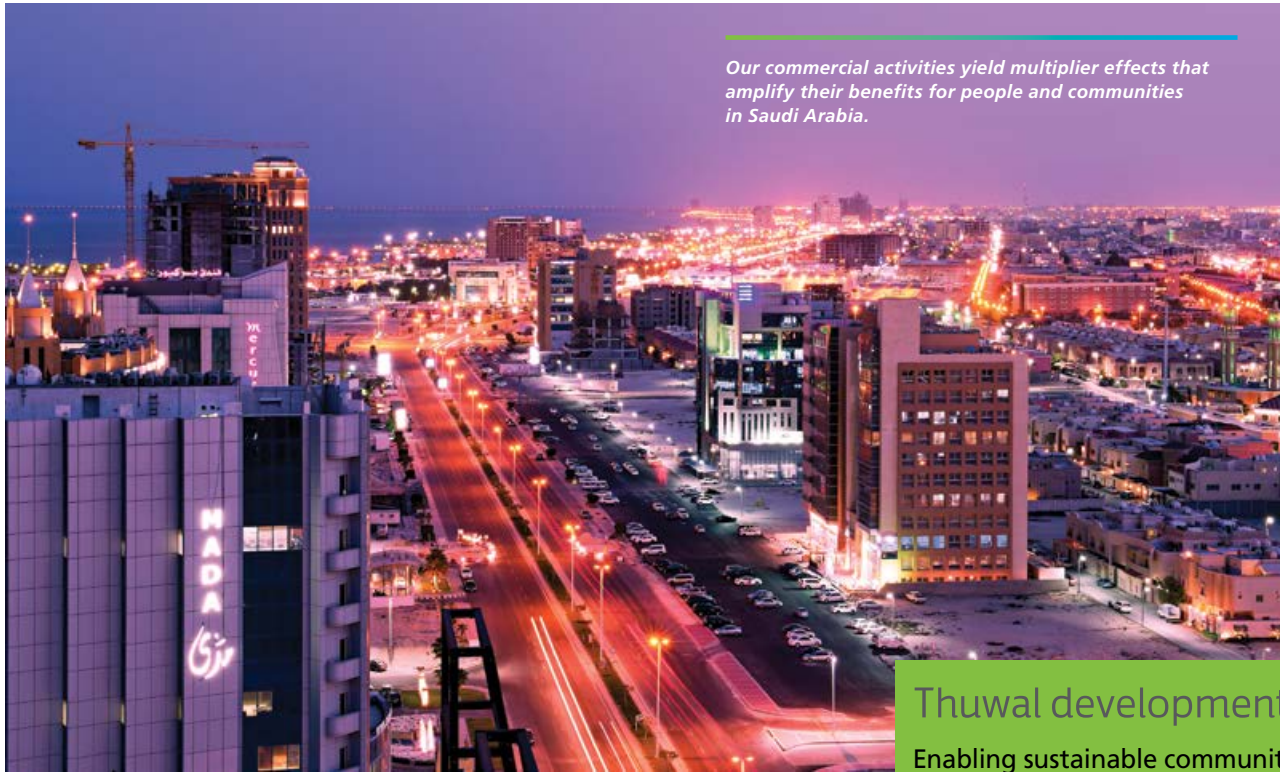
In its early phase, the **Fadhili Gas Plant** will process 2.5 billion scfd from onshore and offshore fields and is on track to come on-stream by 2019. Drilling for nonassociated gas to supply the plant commenced in 2014 and we issued the final project proposal in preparation for the detailed design phase during 2015.

Together, our Wasit, Midyan, and Fadhili gas plants will add more than 5 billion scfd of nonassociated gas processing capacity, further enabling opportunities in Saudi industries such as steel, aluminum, and petrochemicals; water desalination plants; electricity production; and downstream value-added industries to produce antifreeze, solvent, fuels, and other advanced materials.

Unconventional gas has transformed the petroleum industry landscape. Our own **unconventional gas program** continued to gain momentum in 2014. A sizeable investment in this alternative resource will help us assess, develop, and produce gas from shale and tight sand formations in three target areas: northern Saudi Arabia,



Skilled workers in aviation and other high-tech sectors created by the growing economy are supported by our investments in training.



Our commercial activities yield multiplier effects that amplify their benefits for people and communities in Saudi Arabia.

the greater Ghawar area, and the eastern Jafurah Basin. In northern Saudi Arabia, gas will be delivered to Ma'aden facilities at Wa'ad Al Shamaal by 2016 and by 2018 additional gas will be made available for local power generation. In the greater Ghawar area, work is progressing at the Harmaliyah development pilot to obtain technical and operational knowledge and exploration and appraisal work is also ongoing to extend the reservoir base. Fracture stimulation results in the Jafurah Basin have confirmed the presence of an unconventional hydrocarbon resource.

These unconventional gas resources have the potential to complement future in-Kingdom gas supply, support efforts to displace the use of liquid hydrocarbons for power generation, and increase available feedstock for the growing electric power and chemical industries.

By developing our unconventional gas program, we will help meet the Kingdom's energy needs with cleaner burning natural gas. Producing unconventional gas is resource-intensive, requiring specialized skills and training and will therefore stimulate demand for advanced support sectors and generate additional direct and indirect jobs.

We continued work on two major projects at the **Shaybah** field in 2014. First, we are raising oil production capacity by 250,000 bpd for the second time, bringing total oil production capacity to 1 million bpd of Arabian Extra Light crude oil by April 2016 — double its original capacity when it came online in 1998.

Second, during 2014, major construction of the new NGL (natural gas liquids) recovery plant was 96% complete. The NGL facilities are expected to help us meet increasing demand for petrochemical feedstock by recovering valuable NGL from produced gas. The project also includes a major upgrade to increase the plant's power generation capacity to more than 1 gigawatt.

Successfully put into initial production in April 2013, our **Manifa** crude oil increment was approaching its full production capacity of 900,000 bpd of Arabian Heavy crude oil at the end of 2014. Manifa will also produce associated gas as feedstock for industrial cities to help fuel economic diversification. A UNESCO Environmental Responsibility Award nominee, the Manifa project's innovative engineering design was created to optimize the field's production capacity while caring for the environment. We constructed 3 km of bridges,

Thuwal development

Enabling sustainable communities

- Seven new schools and an outpatient medical clinic
- Grand Mosque for 1,500 worshippers and four local mosques
- Cultural park of 100,000 square meters
- Potable and fire water, sanitary sewer, irrigation, and storm water networks



Domestic Economic Impact

Value of material procurement spending (in billions) awarded to local market	Percentage of material procurement spending awarded to local market	Value of contract procurement (in billions) awarded to local companies	Percentage value of contract procurement awarded to local companies
\$4.3	85%	\$37.4	87%
2013: \$6.3	2013: 75%	2013: \$30.4	2013: 92%
2012: \$4.5	2012: 89%	2012: \$21.7	2012: 85%
2011: \$4.0	2011: 87%	2011: \$19.5	2011: 75%
2010: \$2.9	2010: 86%	2010: \$12.0	2010: 77%

spanning the migration paths of various marine species to maintain natural water flow and preserve marine nurseries.

These capital investments in oil and gas production signal our commitment to remain the world's most reliable supplier of petroleum energy. We are the world's largest crude oil exporter, producing roughly one in every eight barrels of the world's oil supply. We also maintain the world's largest spare crude oil production capacity, ready to stabilize the global oil market in times of disruption.

Ultimately, all of us here at Saudi Aramco know it is not just about *how much* we produce; it is *how we do it* and *what we do with it* that matter the most. Inherent in our energy resources is the potential to create products and industries to diversify the Kingdom's economy and generate high-quality jobs. In our hands, energy is opportunity.

Enabling the domestic energy sector

Similar to the approaches to increase local content undertaken in global energy hubs such as the United States, Norway, and Brazil, we are working to facilitate the development within Saudi Arabia of an economic ecosystem that helps attract, establish, and promote domestic energy-related industries that are globally competitive and create employment opportunities for the citizens of Saudi Arabia. A significant part of this approach is further localizing the supply chains these companies require.

We expect to increase our proportion of domestic spending on energy-related supplies and materials from 35% to 70% over the next decade, potentially creating between 400,000 and 500,000 direct and indirect jobs in the Kingdom through this effort. We intend to leverage billions of dollars in spending toward meeting these goals. In 2014, we charted progress toward the creation of a Saudi energy services sector.

In 2014, we completed the transfer of the entire fleet of 20 tankers from Vela, our former shipping subsidiary, to the **National Shipping Company of Saudi Arabia (Bahri)**. In addition, all vessel-based crews, all shore-based personnel, and Vela's operation systems have been integrated under Bahri's new organizational structure. By divesting our shipping business, we are strengthening the capability of the Kingdom's domestic energy sector, creating efficiencies of scale, and enabling new opportunities for growth in the Kingdom's shipping industry.

The **Ras Al-Khair maritime yard** is a prime example of how we plan to energize the localization of energy sector industries through the creation of "anchor projects" around which entire supply chain ecosystems can develop and grow.

Our maritime yard initiative will result in a world-class shipyard and supporting ecosystem in Saudi Arabia. By leveraging our considerable spending on engineering, procurement, and construction, we anticipate attracting qualified partners and their supply chain of vendors and manufacturers.





Internships with global engineering firms help build the capacity of our people and spur the growth of a knowledge economy.

To support the development of a specialized workforce to support this new industry, we signed a Memorandum of Understanding with King Abdulaziz University to coordinate our efforts to promote the teaching of disciplines related to the marine industry.

We are evaluating other potential sectors, including drilling and oil field services, to localize production and create domestic supply chains. These new businesses, allied with technology centers to spur innovation and foster development of advanced materials and processes, will contribute to greater economic diversity and drive job creation.

Oil, gas, and chemicals companies require large quantities of materials, supplies, and services to conduct their operations. We believe that by raising our **purchase levels of domestically produced materials** we will also help support the Kingdom's drive for economic diversification and job creation.

Major manufacturing industries such as offshore structures, drilling equipment, instrumentation, and consumables — as well as services such as construction, storage, transportation, and facility

maintenance — are targeted by this strategy. Ultimately, we expect to source 70% of all material procurement needs with locally manufactured goods, doubling the current rate of 35%.

To meet this goal, we are taking proactive steps to build the capacity of local supply chains, providing technical support to improve new manufacturers' technical abilities and raising production standards and specifications to international levels. Helping build capabilities in this manner will enable domestic businesses to supply our needs and also export up to 30% of their products to the global market. We may also give priority to local manufacturers for certain bidding opportunities, provide premiums for new product lines that create jobs for Saudi nationals, and enter into extended purchase agreements to provide local suppliers with a business stream that fosters their long-term viability.


Creating the conditions that are attractive to local and international investors is a key element in achieving this strategy. To do so, we have established vehicles to explore taking equity with investors who are looking to establish a presence in Saudi Arabia.

Among the various investment subsidiaries are the **Aramco Entrepreneurship Center**, **Saudi Aramco Energy Ventures**, and the **Industrial Investment Company**, a joint venture between Saudi Aramco, SABIC, and the Public Investment Fund that focuses on larger business transactions within the energy sector.

Ultimately, these efforts will help diversify and expand the national economy and generate more career opportunities for the next generation.

Building a competitive workforce in the Kingdom

Approximately 500,000 direct and indirect jobs are expected to be created as a result of our efforts to spur growth in the Saudi energy services sector. Thousands more employment opportunities will become available in the conversion parks connected to our chemicals facilities and within their associated supply chains. Most of these jobs will be technical in nature and many will be in industries that are new in the Kingdom.



The creation of a domestic energy services sector will stimulate economic development in local communities.

New industries and jobs mean new specialized skill requirements. Local employers and new businesses generated by foreign direct investment will require a workforce with the skills to help their firms prosper. The key to building a competitive local workforce is to make sure that Saudi workers are ready — through access to the right knowledge and training — to fill the jobs created by these new types of economic activity. In 2014, we invested in numerous initiatives aimed at increasing the Kingdom's human capital, training employees and non-employees alike.

The **National Industrial Training Institute (NITI)**, a nonprofit organization, is a joint undertaking between Saudi Aramco and the Technical and Vocational Training

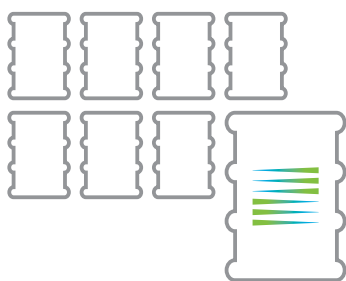
Corporation. The institute is comprised of two facilities. The first, in Al-Hasa, will host Saudi Arabia's largest and most ambitious vocational training institute with a capacity for 3,000 trainees. In October, the Al-Hasa branch commenced operations, welcoming 352 trainees: 252 from Saudi Aramco and 100 from Petro Rabigh.

The second facility, located in Abqaiq, can accommodate 400 trainees. The Abqaiq site opened in April, with 316 trainees in the initial class, including 275 from Saudi Aramco, 22 from YASREF and 19 from SATORP.

The new facilities represent our commitment to unlocking the technical potential of young Saudis in a sustainable way. NITI will train and develop Saudis from high schools

and technical colleges for in-demand technical occupations that are coming to the Kingdom in a time of both operational expansion and greater market and technical complexity. The main program is two years, followed by six to 12 months of on-the-job training. The program mix contains unique elements such as chemicals training, globally accredited training programs, blended interactive learning, and smart classrooms, as well as technology-based training solutions. NITI trainees will emerge competent and skilled in their specializations, proficient in English, literate in the latest computer and technological applications, and armed with safety awareness, discipline, and a strong work ethic.

The Jazan Refinery and Terminal project is one example of how we are amplifying



1 in 8 barrels

Saudi Aramco's share of world oil production



The new jobs engendered by our efforts to grow the Saudi energy services sector are supported by our initiatives to build science, technology, engineering, and math skills.



New training facilities in Al-Hasa, Abqaiq, and Jazan are designed to foster a competitive technical workforce in the Kingdom.

gas production

2014 average gas production: 11.3 billion standard cubic feet per day



the benefits of our business activities for the benefit of local communities. We formed a nonprofit organization, the **Jazan Contractors' Consortium for Training and Employment** or "**Maharat**," with our local and international engineering, procurement, and construction contractors to train qualified Jazan-area high school, technical, and industrial college graduates in specialized construction trades. These young people are then employed by the consortium to support the construction of the Jazan Refinery and Terminal, giving them an opportunity to start a career and make a tangible contribution to the economic development of their communities.

The consortium's training center builds skills in carpentry, rebar fixing, plumbing, scaffolding, pipefitting, and welding. We anticipate that the success of this initiative will lead to training in more advanced trades such as electrical, instrumentation, foreman, crane, and heavy equipment operation.

The Jazan Contractors' Consortium is a sustainable model that we intend to replicate and institutionalize for all future mega-projects.

We continually look for ways to amplify the benefits of our business activities. In a pioneering collaboration with General Electric (GE) and Tata Consultancy Services (TCS), we established a new **Business Process Service Center** designed to create nearly 3,000 jobs for Saudi women within the next three years. TCS, our partner and a world leader in business process services, will operate the center.

The center, located in Riyadh, is the first all-female business service center in the Kingdom. The center already has more than 400 full-time female employees providing business support to many of our company departments — and to GE — in the fields of finance and accounting, supply chain management, and human resources. The center is providing business services to GE customers in 39 countries throughout the Middle East, Africa, and



Europe. By outsourcing such services, companies are able to focus on their core activities while helping to create quality and sustainable employment opportunities for women in Saudi Arabia.

Not only does the center contribute to the Kingdom's strategy of diversifying the economy and creating employment opportunities for Saudi female graduates, it is also helping to meet three specific Kingdom development goals: Provide sustainable jobs that are not directly dependent on natural resources, develop skills needed in the local labor market, and establish a venue by which Saudi women can participate effectively in the labor market.

We signed a Memorandum of Understanding with Princess Nourah Bint Abdulrahman University to cooperate on the conceptualization of a **Women's Business Park** on the university's campus. The business park is envisioned as a bridge between academia and the workplace. Students and graduates of the university will have first choice to train and work in all-female services-based companies located in the business park. The Tata Consultancy Business Process Service Center

will be relocated to the Women's Business Park as an anchor tenant. The university has allocated a number of available dormitories as interim buildings for the business park in its conceptual stage and we are sponsoring a feasibility study and conceptual master plan. The Women's Business Park is anticipated to create 10,000 to 15,000 jobs for Saudi women.

Part of our strategy to build healthy communities involves partnering with non-profit agencies to buttress their work that advances our own social goals. In 2014, we signed a Memorandum of Understanding with the **Fatat Al-Qassim Development Center** in support of their Business Incubator program.

The mission of the business incubator is to help female Saudi entrepreneurs whose business ideas have the potential to spur economic growth in the Qassim region. Through more than 3,750 hours of training combined with 450 hours of consultation with a business specialist, 25 female entrepreneurs will receive training in areas such as market analysis and business plan development to help them successfully launch their businesses.



34,000+

direct and indirect jobs to be created by Sadara, SATORP, YASREF, and Jazan projects

We boosted the marketable skills of more than 500 Saudi women by partnering with local entities to create the **Mahara program**. The three-year program will train a total of 750 women, with each cohort receiving 724 hours of training. The curriculum focuses mainly on highly sought-after information technology, English language, and business communication skills. The goal of the program is to increase employment opportunities for Saudi women. Of the 2012–2014 graduates, approximately 250 were hired by various local companies, including 32 who found employment with Saudi Aramco.

Enabling entrepreneurship

Our **Aramco Entrepreneurship Center (AEC)** continued to focus on giving Saudi entrepreneurs access to the resources and expertise they need to allow great ideas to flourish.

In 2014, AEC screened 719 applications submitted by entrepreneurs and conducted 230 interviews with the authors of the most solid proposals. Training sessions on entrepreneurship development and business plan formulation were provided to more than 300 trainees in Dhahran, Riyadh, and Jiddah. Eighteen loans and four venture capital equity investments were approved.

Since its inception, AEC has approved 38 loans and 14 venture capital investments and more than 1,200 young men and women have been trained in entrepreneurship and business plan development.

By creating opportunities for Saudi entrepreneurs to build the leading companies of tomorrow, we foster healthy economic growth in our communities. Ventures funded by AEC are expected to create hundreds of high-caliber jobs in the Saudi market. Along with job creation and revenue generation, these ventures will provide lasting socio-economic benefits in the form of a culture with a commercial mindset that appreciates and understands the value of entrepreneurship and risk taking.

Complementing our in-house research and amplifying the potential benefits generated by our global research network, **Saudi Aramco Energy Ventures (SAEV)**, whose mission is to source and develop relationships with strategically significant and innovative energy technology companies, continued to invest globally in startup and high-growth companies with technologies of strategic importance to us. We provided meaningful support to promising companies in the form of strategic guidance, access to our global network, and

needed capital to accelerate development and deployment of technologies that are well positioned for growth in the Kingdom.

With a steady influx of new investments, the focus was on managing our growing venture capital portfolio, enhancing our technology strategy, strengthening SAEV's operations, and building the SAEV brand. By year-end, 11 investments in upstream oil and gas, downstream operations, chemicals, and energy efficiency were presented to the SAEV Investment Committee for approval. Since its inception in 2012, SAEV has made 13 capital investments.

In addition to the head office in Dhahran, SAEV has established corporate venturing teams in the energy hub cities of Houston, Aberdeen, and Oslo, with additional representatives in Seoul and Tokyo. SAEV is maturing into a world-class global corporate venturing organization that brings investment, economic growth, and new opportunities to our communities.

In addition to economic benefits, our support for entrepreneurs and startup companies helps build a culture of innovation in the Kingdom.

Supported by our entrepreneurship center, Shadin Al-Awami, left, started a factory to manufacture orthopedic tape and AbdulWahab AlAhmari opened a business to produce geophysical equipment.





community

For the majority of our employees, Saudi Arabia is home. It is home to roughly 30 million people who depend on us to create the greatest number of opportunities possible from the country's hydrocarbon resources. So we are committed to advancing the health, well-being, and economic development of communities across Saudi Arabia for the benefit of future generations.

The inauguration of the King Abdullah Sports City stadium in Jiddah reflects our efforts to inspire people to become more active and engaged members of their communities.



building a foundation for progress

Just as we enable opportunities for people at home and around the world through the energy of our petroleum resources, we also enable opportunities through the energy of our people. Safe, healthy, and vibrant communities are the foundation for future progress and development.





Sponsoring athletic events tied to charitable causes generates positive impacts for participants and recipients alike.

Our strategy of acting as a catalyst to generate multiplier effects guides us to undertake projects that empower organizations and inspire people to become more active and engaged members of their communities.

In 2014, we contributed to the well-being of our communities in a multitude of ways. We partnered with Johns Hopkins Medicine to improve the quality of health care for hundreds of thousands of people in the Eastern Province. We supported the Ministry of Health by building a Command and Control Center and by equipping medical clinics across the Kingdom to contain and reverse the spread of the MERS coronavirus. We completed numerous projects to make our company-built public schools safer, technologically smarter, and more energy efficient.

The late King Abdullah identified sports and athletic activity as crucial to the Saudi social fabric, now and for the future. In particular, he emphasized the role sport can play in promoting the welfare and well-being of young Saudis. In 2014, we helped achieve his vision by completing construction of the King Abdullah Sports City stadium in Jiddah and launching a program to build additional stadiums across the Kingdom.

We conducted numerous safety awareness campaigns and outreach programs throughout the country in schools, training institutes, shopping malls, and cultural festivals, reaching hundreds of thousands of people. We continued our work to improve safe driving habits through instilling knowledge, raising awareness, building emergency response capacity, and implementing technological solutions to discourage unsafe driving.

Our charitable giving in 2014 targeted the people who were most in need of support. We gave generously to orphanages, autism centers, and other agencies and institutions working with the least fortunate members of our communities.

Whether by harnessing the zeal of our employees to create engagements that lift people's abilities, improving schools, reducing traffic fatalities, or building state-of-the-art global research centers, we are helping communities across the Kingdom and the world become places their citizens are proud to call home.

Promoting community health & well-being

We formed a new company that will advance and apply new medical knowledge, health care delivery practices, and



1,200+

men and women trained in entrepreneurship and business plan development



5,126

contractor safety sessions
conducted

strategies for population health management in ways that are tailored to the needs of the local region. **Johns Hopkins Aramco Healthcare (JHAH)** is a first-of-its-kind health care company formed with our joint venture partner, Johns Hopkins Medicine. Inaugurated early in 2014, JHAH is expected to transform the practice of medicine and health care in the Kingdom.

In support of the efforts to prevent and control the spread of the MERS coronavirus, teams from Saudi Aramco and JHAH worked on site to make recommendations at hospitals in Jiddah, Riyadh, and Makkah. Members of a multidisciplinary group from Johns Hopkins Medicine traveled to the Kingdom and served in a scientific advisory capacity to the Ministry of Health to orchestrate MERS coronavirus research with the international scientific community.

The partnership with Johns Hopkins Medicine also brings with it the added benefit of being able to draw upon the expertise of its entities, including The Johns Hopkins University and The Johns Hopkins Hospital and Health System. This access will aid in providing clinical program development, research, training, safety, and health care administration expertise. The partnership provides medical personnel unparalleled opportunities to learn and grow, to serve patients and families, to share the latest research innovations, and to apply those innovations quickly to patient care.

Addressing the manpower challenge in the health care sector is a critical issue for the Kingdom and the region. As part of the inauguration, two Memoranda of Understanding were signed. The first explores the potential of establishing a School of Nursing under the auspices of Johns Hopkins School of Nursing within the Dhahran campus. The second assesses the possibility of founding a JHAH Institute for Patient Safety and Quality by partnering with Johns Hopkins Armstrong Institute.

Over the coming years, this collaboration will contribute significantly to the health and well-being of the people of Saudi Arabia. Johns Hopkins Aramco Healthcare will evolve into a health care system of excellence that provides enhanced specialty and subspecialty services, new lines of treatment, research, and education to address some of the most significant health care challenges in the region.

Supporting and financing the building of the **Shamah Autism Center** and funding its first five years of operating expenses illustrates our dedication to enhancing the well-being of all segments of our communities. The Shamah Autism Center will be the first dedicated autism treatment facility in the Eastern Province. The center will employ a world-class team of specialists who will provide high-quality programs for 100 boys and girls (ages three and older) affected with Autism Spectrum Disorder (ASD). In addition to working directly with young children, the center's staff will provide counseling to help



We collaborate with local organizations to offer athletic programs to thousands of young people.

Johns Hopkins Aramco Healthcare is designed to provide enhanced services and new lines of treatment in the Kingdom.



families understand ASD. Special training sessions will also be offered to build skills that will aid parents in dealing with ASD-affected children in the home environment. The Shamah Autism Center will be operational in 2015.

In coordination with the Ministry of Social Affairs, we also conducted an autism awareness campaign. The campaign took place on the International Day for Autism and was attended by 200 mothers representing four different autism associations. The event included presentations on topics intended to broaden awareness of the special needs of children and families affected by autism and to help parents manage behavioral issues.

During construction of the King Abdullah University of Science and Technology (KAUST), we recognized that the university would spur development and population growth in the surrounding area, with potentially negative impacts for the adjacent traditional village of Thuwal. A plan for the **sustainable growth of Thuwal** was created to develop the necessary infrastructure and public facilities to receive new residents and businesses. The plan also contained provisions to protect the traditional livelihoods of Thuwal's residents and improve the quality of life for all of the town's citizens. In 2014, we completed and commissioned most of the capital projects, including new schools equipped with the latest technology,

a medical clinic, mosques, a cultural park, roads, and sewage collection and treatment facilities.

Preparing our country's young people to be active and engaged participants in their communities starts with education. Beginning in the 1950s, we undertook a **program to build public schools**. The program ended in 2007, with a total of 74 boys schools and 65 girls schools completed. Since then, we have continued to provide maintenance services. Now, plans are underway to replace 51 of the public schools we built between 1964 and 1980.

The replacement program will progress in two phases. The first phase will target 24 schools while the second phase will focus on the remaining 27 schools. The schools will be equipped with technology classrooms and support facilities such as computer labs, resource centers, modern science labs, multipurpose rooms, and indoor gym facilities. The modern facilities and learning tools will give Saudi students the educational foundation necessary to excel in the burgeoning knowledge economy. Currently, all design elements are being finalized. Project scoping will begin in January 2016.

This work is part of broader efforts to enhance learning environments, improve school facilities and services, and upgrade safety features in schools around the Kingdom. For example, we have developed

a master plan to renovate the outdoor basketball courts of 69 company-built public schools by 2019. In 2014, new court surfaces for 20 shaded outdoor basketball courts in the Northern Area were completed and another 15 schools are planned for 2015. We also plan to renovate the indoor gymnasiums of 61 company-built public schools by 2023. In 2014, we renovated eight gyms and another five schools are planned for 2015.

We continued to make progress on an initiative begun in 2013 to replace all of the air conditioning units in company-built public schools. The units are being replaced with high-efficiency, energy-saving units. The total number of schools targeted by this program is 57, with a total of 752 air conditioning units targeted for replacement over the course of five years. By the end of 2014, 383 units had been replaced in 25 schools.

Another of our projects to improve the learning conditions of Saudi students includes replacing furniture and equipment in many of the Kingdom's schools. A comprehensive survey identified computer workstations, printers, copy machines, and scanners as equipment to be included in the replacement program. In addition, we replaced the furniture in administration offices, clinics, and libraries in a total of 59 schools, plus student chairs and desks in 19 schools.

We also identified 41 schools in the Central Province that needed their sport fields upgraded to safe and modern standards. A program was launched to install artificial turf, running tracks, field lighting, and shaded bleachers. Currently, 21 schools have received the upgraded sport facilities packages with the rest scheduled for completion by 2019. The upgraded facilities will help keep the nation's young people active, fit, and immersed in the sporting values of fairness, excellence, and teamwork.

Participating in sports also builds an ethos of self-respect and respect for others in young people and contributes to a lifetime of physical, emotional, and mental wellness. These qualities are important to the functioning of healthy communities. In support of these qualities, we partnered with several clubs in the Central Province to provide **educational and sporting opportunities** for nearly 2,400 boys from 12 to 16 years of age, many of whom were registered under Insan, the Charity Committee for Orphans' Care. The program promotes positive social behavior through such sports as soccer, volleyball, basketball, swimming, and self-defense. These activities were supplemented with educational lectures and an exhibition area designed to increase awareness in issues such as health, environment, traffic

safety, fire protection, energy efficiency, fire prevention, and defensive driving.

In cooperation with seven local sports clubs in the Eastern Province, our "Atabara" program promoted healthy lifestyles for 1,000 youths ages 7 to 14. The one-month program sharpened participants' skills in soccer, tennis, basketball, karate, and swimming. In Abqaiq and 'Udhailiyah, more than 700 people participated in fitness fairs designed to encourage community residents and employees to make a personal commitment to fitness.

The **Annual Charity Run**, held on the Dammam Corniche along the Gulf coast, has become one of the largest physical fitness events in the Kingdom. The 19th edition, held in November 2014, included three categories: people with special needs, seniors, and open. We were a platinum sponsor of the run in which roughly 11,000 people participated and 80 employees volunteered their time.

When King Abdullah made plans to have his vision of the transformative power of sport realized for the progress of the Kingdom's youth, he entrusted us with the mission. We applied our project management expertise to deliver a state-of-the-art stadium (one element of a larger sports city) on May 1. The stadium was

completed within the King's timeframe of one year. The overall **Sports City** complex promotes the health and well-being of our communities and will inspire individuals to reach their full potential.

We have been entrusted to provide the day-to-day operations and maintenance services for the stadium and have engaged a local contractor company to carry out the work. Future commercial opportunities are under consideration, expanding the potential economic impact of the stadium.

More than a sporting venue, the stadium represents a merging of best-in-class engineering ingenuity with an altruistic vision to create a facility that has captured the civic pride of a nation and strengthened the Saudi social fabric for the future.

Shortly after the successful opening of the Jiddah stadium, King Abdullah presented us with an even greater opportunity: Build additional sports stadiums around the country. At a briefing for potential contractors late in the year, we outlined the partnership possibilities for domestic engineering, construction, supply chain management, and other businesses — activities expected to generate 10,000 training and employment opportunities for Saudis.



Our efforts to foster a knowledge society include upgrading school classrooms and enhancing learning environments.

Fire safety education begins with the youngest members of our communities.



Enabling students

Strengthening the Kingdom's educational infrastructure

- Replace 752 air conditioners in 57 schools with energy-efficient models
- Improve athletic fields at 41 boys schools
- Renovate gymnasiums at 61 schools and outdoor basketball courts at 69 schools
- Provide 52 computer labs, equip 1,000 classrooms with modern technology



Promoting a culture of safety

Our focus on safety extends well beyond our operations and into our communities. Numerous campaigns and public events are conducted every year to further advance the value and practice of safety in the workplace and homes of our employees and their families. One such campaign is our **Safety House** program.

Safety houses are facilities that replicate a standard Saudi Aramco house in our employee communities. It features informative photographs, safety statistics, and examples of proper and improper furniture placement to demonstrate safety measures within the house. The safety house program covers fire safety for the entire house in an atmosphere designed to promote learning. Information on first aid procedures for burns is also available. Other safety topics addressed in the safety houses include household chemicals, electrical safety, gas exposure, medication safe practices, and CPR training. An estimated 3,200 people visited one of our seven safety houses during the year.

The new Mobile Safety House program in Abqaiq is based on the same concept as our community safety houses. The mobile safety house takes the message of home safety to boys and girls in elementary and intermediate schools in the Abqaiq area.

The information is similar to that provided in the stationary safety houses, teaching home, fire, environmental, and driving safety, and hand and dental hygiene. The program targets more than 3,000 students and teachers per year. The skills learned in these outreach programs help make our communities safer and healthier.

To help foster a culture of safety and amplify the impact of our safety knowledge and practices, we conducted several **safety awareness campaigns** at selected locations Kingdom-wide. Through our efforts, more than 2,000 employees, dependents, students, and orphans participated in the campaigns. Safety presentations were delivered on topics such as home fire safety, electrical safety, emergency procedures, hand hygiene, fire extinguisher use, and driving safety. To enhance safety awareness, demonstrations of first aid and CPR were conducted.

Special training sessions for our contractor employees covered subjects like safety and behavioral training, heart saver first aid and CPR, hazard communication, and other topics related to firefighting, evacuation, hydrogen sulfide (H₂S) prevention, basic life support, automated external defibrillator use, vehicle safety, and arc flash safety training. We completed a total of 5,126 **contractor safety sessions** this year.



*Improving traffic safety
in the Kingdom is a top
priority for us.*



Our safe driving mobile exhibit raises safety awareness for thousands of visitors each year.

Motor vehicle accidents are a major threat to the safety of our employees off the job: Saudi Arabia has one of the highest traffic fatality rates among developing countries. Our traffic safety initiatives date back more than 50 years when we recognized that to change driving habits in the Kingdom, we must lead by example. There is still much work to be done, and through our **Traffic Safety Signature Program**, we continued working with our stakeholders to increase the impact of our initiatives in the “four Es” of traffic safety: Education, Enforcement, Engineering, and Emergency Care.

Education: In 2014, we launched several new campaigns to increase awareness about the impacts of dangerous driving and to engage young Saudis on safe driving techniques.

- To instill the value of traffic safety in the youngest and most impressionable members of our population, we produced and distributed Traffic Safety School Kits to 450,000 kindergarten and first grade students.
- A unique approach to educating children on the importance of traffic safety is our program to construct traffic safety villages in select locations in the Eastern Province. The children who visit the villages are taught respect for

driving laws and shown safe driving habits. More than 25,000 children visited the Mini Traffic Garden in 2014.

- We produced a suite of traffic safety awareness videos that aired on local television channels during the holy month of Ramadan.

Enforcement: We partnered with relevant authorities to conduct a program that increased the skill level of local traffic police to help reduce vehicle accident rates.

- During a “train the trainer” event, senior local police officers were taught how to conduct a specialized, five-day traffic safety program. More than 200 traffic police and highway security force officers completed the program, which enhanced traffic safety knowledge and improved communication skills.

Engineering: We partnered with relevant authorities to improve the safety of the Kingdom’s roads and highways.

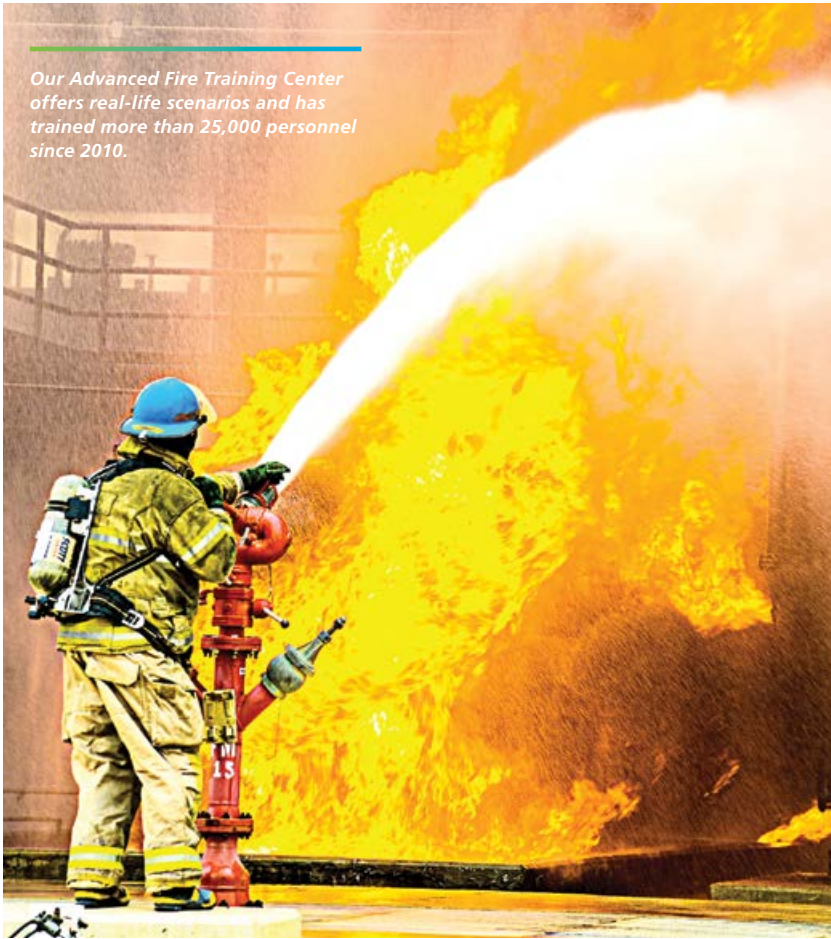
- We completed a major strategic study of trucking practices in the Eastern Province. A report was issued detailing short- and long-term action plans with recommendations on how to improve the safe transportation of goods within the province’s road network.



25,000+

children visited the Mini Traffic Garden safety awareness venues

Our Advanced Fire Training Center offers real-life scenarios and has trained more than 25,000 personnel since 2010.



12,000

smoke detectors distributed

- Through our Accident Data Center, we identified the 10 major problem intersections in the Dammam metropolitan area. Our findings and recommendations for implementing corrective actions were reported to the government. In addition, we launched a traffic safety study carried out by our Chair for Traffic Studies in Dammam University.

Emergency Care: We supported the improvement of medical training for local frontline care providers.

- Building on the work we began in 2013 to train 88 emergency medical staff from the Red Crescent and the Ministry of Health Hospitals in the Eastern Province, we coordinated with JHAH to train an additional 100 candidates.
- For the 30th consecutive year, we participated in the Gulf Cooperation Council Traffic Week, held Kingdom-wide in March. To reach people in remote areas, we distributed educational items to residents of 47 cities and towns across the Kingdom.

Our safety programs extend beyond our company and into the institutions that house our most precious treasure — our children. In an initiative to replace unsafe playground equipment, we identified 69 elementary schools that needed new equipment, shade coverings, and rubberized flooring in playgrounds. By the end of 2014, we had completed these upgrades in 16 schools, were working on 18 more and planning for 11 schools in 2015. The overall program is scheduled for completion in 2018. We also replaced the fire alarm systems in 89 company-built public schools, with 32 additional schools planned for 2015.

After a successful pilot to improve the traffic flow in the parking areas of four company-built public schools, we coordinated with local traffic police and concerned municipalities to improve a further 26 school parking areas and another 30 schools are planned for 2015. This initiative will improve safety as children arrive and depart from their schools.

Fire safety — in our operations and at home — requires constant vigilance. As a global industry leader, we maintain a clear perspective on the importance of fire safety through fire prevention and proper fire response. When it comes to our facilities, we apply comprehensive fire and safety standards in the design, construction, and operation of our facilities. Engineering standards, operating and maintenance procedures, and emergency response training and planning all play a critical role in the prevention and control of fires.

We conduct numerous fire protection outreach programs throughout the year to inspect facilities and buildings for fire hazards and to educate employees and the public about fire safety issues. In addition to a dedicated, annual Fire Protection Week campaign, our fire protection personnel participated in the company's Civil Defense Day and summer programs.

Our smoke detector campaign reached roughly 800,000 people in nine cities around the Kingdom. Visitors participated in activities related to smoke detector information and skill building and we also distributed 12,000 smoke detectors.

Targeting our charitable giving

There are members of our communities, and perhaps within our own families, who — due to a chronic illness, disability, or other limiting issue — are less fortunate. Many nonprofit organizations in the Kingdom are in need of assistance to continue and scale their important contributions to the communities they serve. We concentrate our efforts in four areas: Building the capacity of nonprofit organizations, developing productive families, supporting the development of orphans, and assisting people with special needs.

We engage in building the capacity of nonprofit organizations to amplify our impact on society. In 2014, we partnered

with the Association of Social Awareness and Rehabilitation in Dhahran to strengthen the skills of 780 people in five charitable organizations from across the Kingdom. The program engaged individuals from the staff to board level and focused on partnership building, managing volunteers, monitoring and evaluation, project management, marketing and branding, financial sustainability, and other topics.

We provided assistance to three organizations that support the **development of micro-businesses** for needy families: The Bena'a Productive Families Center in the Eastern Province, The Society of Majid Bin Abdulaziz for Development & Social Services, and Al-Faisaliah Women's Charitable Society in Jiddah. These organizations facilitate business training for 670 families and also offer skill enhancement courses in relevant fields such as interior design, baking, arts and crafts, and sewing. In addition, we collaborated with Fata Al-Ahsa Charitable Foundation to

launch a mobile training center designed to reach 1,000 families per year who face commuting challenges, enabling them to participate in exhibitions and public markets. Programs such as these enable people to better support their families and contribute to the local economy.

In an effort to raise awareness of the importance of integrated care for one particular disadvantaged population — our country's orphans — we hosted an event for more than 450 orphans on Arabian Orphans Day. The event hosted children in a fun-filled atmosphere that included entertainment, educational shows, and messages regarding safety and energy conservation. We also collaborated with the Charity Association for Orphans' Care (Bena'a) and Al-Birr Charity Society in the Eastern Province to provide vocational training for 400 orphans.

Our 2014 donation to the Charitable Society for Health Communication (Hayatona) provided medical equipment



We collaborate with the Red Crescent and the Ministry of Health to boost medical training for frontline care providers.



Our legacy of citizenship in the Kingdom is evolving to amplify the benefits and opportunities we create — especially for future generations.



306,000+

hours of service provided by more than
3,300 volunteers

to aid their efforts to care for people with special needs and also to support a series of campaigns intended to raise awareness of the impact of chronic diseases, the need for regular medical check-ups, preventive screening, and other medical examinations. We also provided assistance to the Al-Rahma Medical Charitable Society in the Eastern Province, Charitable Health Society for Patient Care (ENAYAH) in the Central Province, the Eastern Province Society for Disabled Persons, and the ZAMZAM Society for the Voluntary Health Services in the Western Province to support more than 1,400 people with special needs. The support ranges from procuring and distributing prosthetic limbs and medical devices to providing counseling.

To help instill social and life skills, we donated to the development of the Insan Social Club. The club provided 160 orphans with training in important areas such as character building, technology proficiency, talent discovery, accountability, social responsibility, dialogue skills, and other personal development activities. A foundation in these skills will help prepare our orphaned young people to fulfill their potential in society.

Our many outreach programs inspire and nourish **a spirit of volunteerism, citizenship, and service** to one's community. They provide opportunities for Saudi citizens to contribute as volunteers, instilling a sense of community pride and fostering cultural identity. Volunteer efforts are centralized and coordinated by one business unit, allowing for efficiencies of scale and agility in meeting the needs of the wider enterprise.

In 2014, more than 3,300 people devoted more than 306,000 hours of service, helping us educate and inspire the people in our communities. This measure of commitment, which accounts for more than half of all volunteer hours since 2012, is a reflection of our efforts to increase awareness of the benefits of volunteering and to engage the public's participation in the future of their communities.

Thriving communities and healthy and knowledgeable citizens: These characteristics form the basis of successful societies the world over. They are as important to us today as they were over 80 years ago and we are proud to play a role in securing them in the Kingdom for years to come.

knowledge





Our nation's prosperity and competitiveness depend in large part on the ability to acquire and apply knowledge in new and innovative ways. This effort begins with citizens who receive foundational skills in STEM disciplines and who possess the intellectual curiosity and creativity to uncover unique insights.

Offering interactive exhibits on history, science, and energy efficiency, plus live cultural performances, our iThra Knowledge Program is a catalyst for building a knowledge society.

inspiring intellectual curiosity

It takes a workforce with the abilities to conduct breakthrough research on the frontiers of science and technology. It requires the industrial know-how to commercialize the products and technologies that generate economic and social benefits and provide a sustainable competitive advantage.





As the King Abdulaziz Center, seen here and at left, takes shape, outreach programs help inspire a culture of intellectual curiosity.

Through the King Abdulaziz Center for World Culture, we deliver a suite of community programs designed to promote skill building in subjects as varied as art, science, technology, engineering, mathematics, innovation, and entrepreneurship. Through these activities, we help inspire a culture of intellectual curiosity in our young people. We also support learning through targeted engagements that strengthen the Kingdom's educational infrastructure, arm teachers with the latest thinking in curriculum design, and sponsor postdoctoral research opportunities. By helping to form a knowledge society here at home, we are helping our citizens lead richer lives and enabling them to contribute to the nation's future global economic competitiveness.

Our own efforts to advance critical research areas will one day form the basis of new industries and businesses that are an integral part of the knowledge economy. We champion the quest for original intellectual property that will position Saudi Arabia as a hub of excellence in energy R&D, technology, and innovation.

We also contribute to the global discourse on knowledge and innovation by continuing our leading sponsorship of the Science and Technology in Society Forum. Held annually in Kyoto, Japan, the forum is considered one of the world's most respected scientific conventions, bringing together business leaders, scientists, educators, and officials from more than 100 countries to discuss global issues and the role of science and technology.

Inspiring intellectual curiosity and creativity

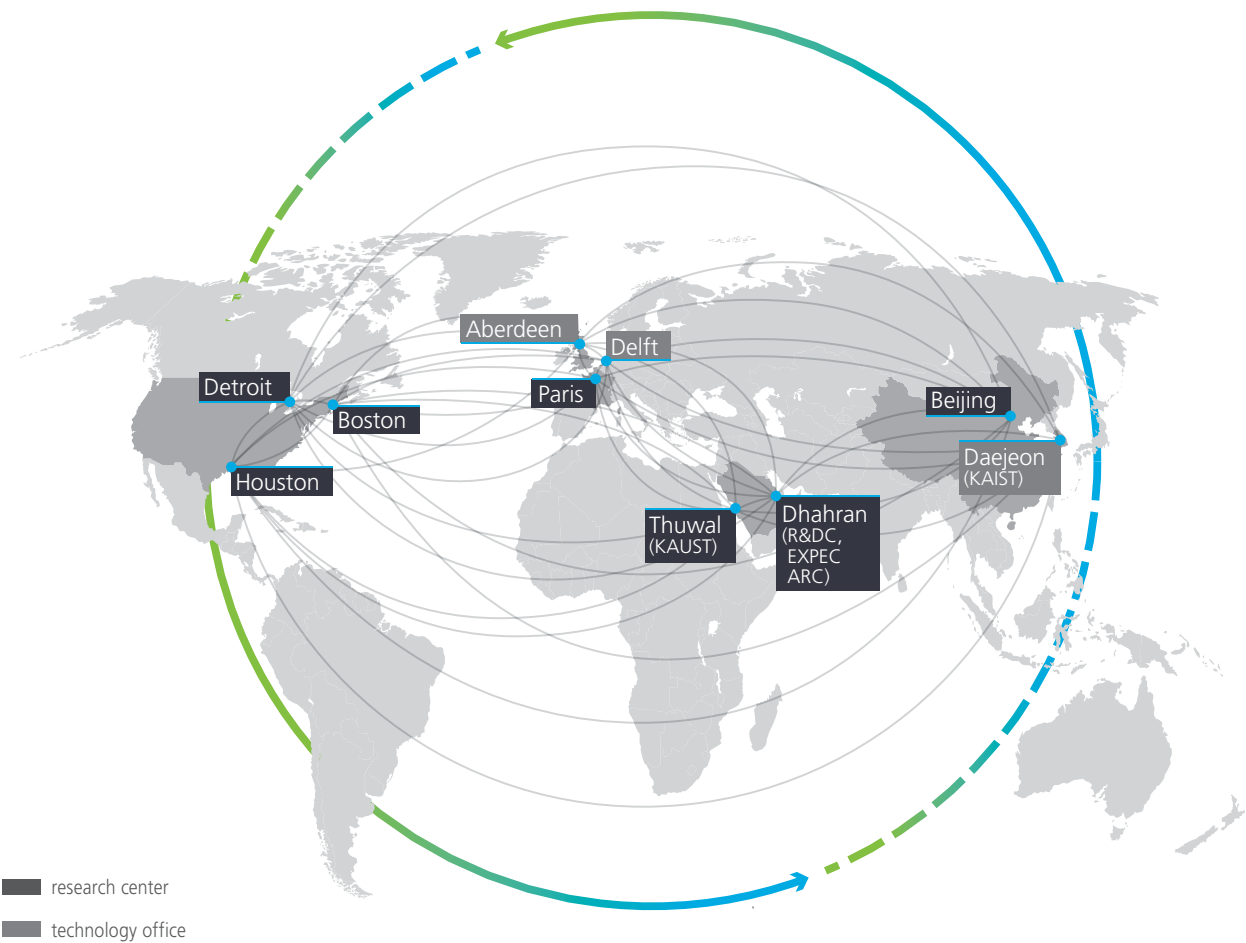
Building a knowledge-based economy requires creativity, cultural awareness, and intellectual curiosity. With the building and grounds nearly 75% complete, our

flagship cultural initiative, the **King Abdulaziz Center for World Culture** (the Center), continued to generate excitement in advance of its opening in 2016 by piloting new programs and expanding the reach of existing programs across the Kingdom. As a result, the Center's highly popular and innovative educational programs were warmly welcomed by communities in Jiddah, Al-Hasa, Taif, Al-Jawf, Riyadh, Abha, and Tabuk, with demand growing from other parts of the country.

While its increasingly well-received public outreach programs toured the country, we continued to make significant progress on the Center's physical building, programs, staffing, and associated Knowledge Park in collaboration with key national and international institutions, organizations, and stakeholders. Considerable progress was also made in the renovation of the **Energy Science Center** (formerly the Saudi Aramco Oil Exhibit), due to open in 2015 in advance of the Center.

global research network

achieving global leadership in energy-related technologies and supporting the creation of a knowledge economy in the Kingdom



research strategy

business segments	focus areas		goals
upstream	<ul style="list-style-type: none">• reservoir engineering• computational modeling• production	<ul style="list-style-type: none">• drilling• geophysics• geology	Increase discovery and recovery of oil
downstream	<ul style="list-style-type: none">• oil and gas treatment• oil upgrading• advanced materials	<ul style="list-style-type: none">• chemicals• network integrity	Develop processes and improve production and refining efficiencies to maximize the value of hydrocarbon resources
strategic	<ul style="list-style-type: none">• fuels/engine technology• carbon management		Support the long-term sustainability of oil.

The Center will offer visitors a foundation source of strength and inspiration from Saudi Arabia's rich heritage and culture and from other world cultures to build the Kingdom's future through imagination and innovation. Aimed at showcasing and increasing the capacity of local talent, as well as establishing a standard of excellence in youth development programming, in 2014 the Center continued to work in partnership with local universities, the Ministry of Education, Tatweer Education Holding Company, the King Abdulaziz and His Companions Foundation for Giftedness and Creativity (Mawhiba), and the Saudi Art and Culture Societies to create and expand programs that build technical, STEM-based, and soft skills in the areas of learning, creativity, and fabrication.

We believe learning is not just an activity inside a building: It is a catalyst for building a knowledge society and a commitment to a brighter future for Saudi Arabia. The Center's **iThra Knowledge Program** embodies this commitment. This multifaceted, interactive national touring event has become one of the most successful outreach initiatives in our history.

The 2014 iThra Knowledge Program built on past successes and advanced efforts to enhance the cultural enrichment of the country for future generations. The program was significantly enhanced in both quality and reach in 2014, visiting Riyadh for the first time. Attendance at the four cities of Dhahran (November 2013), Jiddah, Al-Hasa, and Riyadh topped

2 million visitors, well on the way to the 2020 target of 10 million people. Designed to foster a spirit of volunteerism in communities, volunteer participation reached new heights in 2014, with more than 3,100 volunteers donating nearly 425,000 hours of their time to making a positive impact in their community.

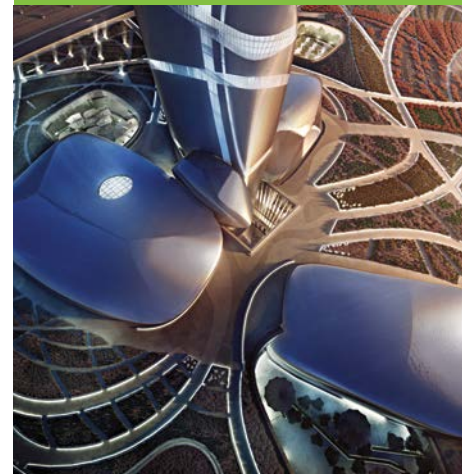
iThra Youth, one of the Center's two major educational outreach programs, completed its third year of operations in 2014. This award-winning initiative provides inspirational experiences through its suite of **i-programs: iSpark, iDiscover, iRead**, and the newly launched **iThra New Media Award**. Offering a variety of exciting, hands-on learning experiences, in 2014 iThra Youth made significant strides toward achieving its goal of inspiring Saudi youth in the STEM disciplines through creative learning and character-building exercises that to date have reached 45,000 male and female students and provided training from leading international institutions to nearly 2,000 teachers.

iThra Youth's flagship initiative, **iSpark**, is a mobile outreach program staffed by trained facilitators and educators who visit schools across the Kingdom, providing experiences designed to transport ninth- and 10th-grade students on interactive journeys to discover science and math knowledge. In 2014, iSpark reached 10,000 students in 180 schools. Since the program was launched in 2012, it has enriched a total of 40,000 students.

The Center

Fostering a culture of intellectual curiosity

- Designed by world-famous firm Snøhetta, inspired by Saudi Arabia's geology
- Will offer a children's museum, art galleries, performance and multimedia theaters, a library, archives, lifelong learning courses, and daily activities
- 3,100+ volunteers contributed nearly 425,000 hours to various programs in 2013–2014
- Scheduled to open in 2016



Energy Efficiency Pavilion

Promoting positive change in everyday energy usage

Demand for energy is growing rapidly in Saudi Arabia. A key factor to help ensure future prosperity is to reduce energy demand. This can be achieved by helping people realize the positive impacts they can make as individuals. In 2014, the Energy Efficiency Pavilion — part of the iThra Knowledge program — toured the Kingdom, raising awareness about energy efficiency and wise energy choices. The pavilion is a joint initiative between Saudi Aramco and the Saudi Energy Efficiency Center.

More than 2 million people visited the iThra Knowledge program in four cities in 2013–2014 and at least 70% of them visited the Energy Efficiency Pavilion. The effectiveness of the pavilion's impact on behavior change is under study. In the meantime, Saudi Aramco is making significant progress to lower its energy demand. Our goal is to reduce total energy use in our buildings, transportation, and communities by 35% by 2020. This will be achieved through more energy efficient cooling systems and LED lighting, among other improvements. The energy savings are huge:

- 2,700 barrels of oil equivalent per day — nearly 1 million barrels per year
- 440 million kilowatt hours — enough to power a city of 4,400 homes for one year
- 330,000 metric tons of CO₂ per year — equivalent to removing 60,000 cars from the roads for one year



Our support for the Kingdom's efforts to transition to a knowledge society focuses on science, technology, and innovation.

Launched in 2013, **iDiscover** consists of a series of rigorous and creative math and science classes that, in 2014, expanded across the Kingdom to serve five major cities. The program consists of three training stages for master trainers, teachers, and students, beginning with a ground-breaking three-week teacher-training course designed and delivered by professionals from the Lawrence Hall of Science at the University of California at Berkeley and Math Zoom Academy of Irvine, California.

In 2014, 1,000 teachers were trained on new teaching techniques by the iDiscover master trainers, the top 100 of whom were selected to assist in teaching students. A total of 2,000 students participated in the program, each of whom received 120 certified hours of training in science and math workshops that included character building, communications, problem solving, leadership, and social skills activities. The Center also added knowledge incubators to the program. Designed to increase the program's impact, these week-long training sessions delivered dynamic, interactive math and science content to 900 students and 200 teachers by the end of the 2014 academic year.

Based on its successful pilot launch in the Eastern Province in 2013, the **iRead** competition was officially introduced to the nation at the 2014 Riyadh International Book Fair. iRead uses creative expression

to encourage a love for reading among middle school, high school, and university students. The competition attracted widespread attention as witnessed by the 4 million hits received by its website over the course of the year.

Previously focused on writing and amateur and professional photography, the competition was expanded in 2014 to accept animated videos and short film entries. Eighteen iRead finalists were provided with training and honored at the iRead Awards Ceremony where their work was presented to the public. A regional panel of judges selected individuals from each age category as the Kingdom's 2014 Readers of the Year.

Aimed at increasing Arabic digital content, in 2014 the Center unveiled the **iBroadcast** competition that focused on the areas of science, technology, volunteerism, creativity, art, reading, and culture. In November, three **iThra New Media Award** winners were awarded funding, inclusive of production costs, to turn their pilot into a 10-episode video series in 2015.

In February, the Center opened the doors of **FABLAB**, a digital fabrication laboratory located on the campus of King Fahd University of Petroleum and Minerals (KFUPM). A collaborative effort between the Massachusetts Institute of Technology (MIT), KFUPM, and the Center, the laboratory provides the public with access to

Catalyst for knowledge

Enhanced learning opportunities

- iDiscover: Inspired 1,000 teachers and 2,000 students in nine cities
- iSpark: Enriched science education for 40,000 students Kingdom-wide since 2012
- iRead: Registered 4 million website hits
- iSubscribe: Nurtured interest in science and art for more than 2.1 million TV and online viewers per episode



fabrication technologies such as 3-D printing, laser cutting, electronics, and robotics. One of 250 such labs around the world, FABLAB-Dhahran offers daily workshops for males and females, qualified mentors, and regular competitions to encourage the production of prototypes. The objective of FABLAB-Dhahran is to foster and nurture a “maker culture” in Saudi Arabia.

The Dhahran laboratory is open to students from age 15 to college level, to small- and medium-sized businesses, and to industrial and research institutes that wish to use the laboratory as an incubator for innovation. To date, 814 workshops have been conducted, attracting more than 4,300 participants and numerous inquiries from businesses and institutions about collaborative opportunities.

FABLAB-Dhahran’s first **Prototyping Week** event saw 30 males and 30 females from the Eastern Province compete for top place. The participants received assistance from national and international mentors. The competition concluded with three monetary prizes awarded.

The two-day FABLAB-Dhahran **Mini Maker Faire** celebrated local and regional makers and innovators. The event was open to the public and included exhibits, hands-on workshops, and educational talks promoting a culture of making and innovation in the community.

Adapting lessons learned from its pilot in 2013, the Center’s **Performing Arts Academy** entered its second year by offering beginning, intermediate, and advanced level workshops in theater skills to area students in collaboration with the National Youth Theatre of Great Britain and the Saudi Arts and Cultural Societies of Dammam and Al-Hasa. The Center and the National Youth Theatre co-produced their second community play, “5,” showcasing the students’ achievements at three sold-out performances.

Our efforts to prepare our nation’s young people to participate in the knowledge economy are also pursued through other organizations and initiatives outside of the Center. For example, our **iExcel** programs, designed to improve cognitive skills, build character, and hone creative skills, are delivered by company specialists and trainers grounded in our knowledge, built over our more than 80 years of experience, of what skills are needed to succeed in today’s labor market.

Students from 15 to 18 years of age from 28 government schools in the Eastern Province received training in critical life skills through our **iExcel Summer Program**. The program’s 5,600 participants learned English language skills, safety, fire protection, health awareness, painting, and photography. This year we introduced “Passport to Success,” a

proven life skills program supplied by the International Youth Foundation.

Our **iExcel Gifted Summer Program** transforms the lives of gifted youth by equipping them with the necessary competencies and skills (particularly STEM skills) to become valuable contributors to the Kingdom’s knowledge society. In collaboration with Mawhiba, this unique residential program targeted 209 gifted male and female students. In 2014, for the first time, we partnered with Johns Hopkins Center for Talented Youth to deliver STEM content in English. This content was translated into Arabic by Mawhiba and delivered by a local training provider to gifted students whose English skills did not meet language requirements.

Building a knowledge economy: education

Science, technology, and innovation are the answers to a wide spectrum of the global issues that we all face, including energy availability and sustainability. Developing the capability to meet these challenges requires high quality education, capacity building, research, technology, and an entrepreneurial mindset — all hallmarks of knowledge economies and societies. At Saudi Aramco, we are supporting the Kingdom’s efforts to transition from an economy and society based on energy to one based on knowledge, science, and innovation.

A collaborative effort between KFUPM, MIT, and the King Abdulaziz Center, FABLAB-Dhahran is an incubator for innovation.





Our Gift of Knowledge campaign, supported by employee contributions, empowers Saudi school children to learn.

In a major transformation of our long-running School Kit Donation program, we partnered with the Ministry of Education, the Saudi Telecom Company, Huawei Middle East, Takaful Charity Foundation, and DHL to create the **Gift of Knowledge** campaign. More than 9,700 employees contributed to the program, providing tablet computers to 13,000 children — half boys, half girls — in 31 locations across the Kingdom. The tablets, pre-loaded with learning materials and equipped with pre-paid SIM cards for two years of Internet access, will give the next generation of students the ability to access information using the latest available technology — the foundation of success in a knowledge society.

Our support of knowledge and education begins with the youngest learners in society. One example of this is our **Mobile Library** program, which has been inspiring school children around the Kingdom since 1982. In 2014, 36 schools in the Central Province were reached and more than 2,100 students received the gift of reading.

As part of our six-year master plan to introduce information technology to our company-built public schools, we worked with the Ministry of Education to add

smart classroom technology (computer labs, resource centers, and modern science labs). Phase I included building 52 computer labs, complete with furniture, in all of our intermediate schools. For Phase II of the program, we converted 1,000 elementary and secondary school classrooms to smart classrooms using the latest technology. This enhancement will help the Kingdom's young people acquire the technical proficiency that will prepare them for a role in the knowledge economy of tomorrow.

We conduct a variety of programs to build the academic skills of young people. For example, our six-week residential **Mentorship Program** developed the STEM skills of 26 male and 19 female Saudi high school students in 2014.

Our annual **Saudi Research Science Institute Program** is a summer program on the KAUST campus aimed at male and female students completing the 11th grade. Conducted in partnership with KAUST and modeled after the Research Science Institute at MIT, the program enables eligible gifted students from across the Kingdom to conduct university-level research under the mentorship of KAUST professors. In 2014, 45 students (26 males and 19 females) completed the six-week

program. Collaborative programs such as these help foster a culture of academic research and a love of science, vital components in the creation of a knowledge economy.

Our commitment to education and learning is also manifest in our support of academic opportunities for our professional workforce and for Saudi graduate students and professionals. In 2014, we continued our tradition of bringing the latest knowledge and technologies to the Kingdom through our **Hosted University Program**. Through collaborative agreements with international universities, we offered three specialized, custom master's degree programs, raising the total number of local programs to 11.

The Graduate Institute Geneva offered a master's degree program in advanced investment analysis while the Georgia Institute of Technology was selected as our strategic partner to deliver a professional master's degree program in information security. The course curriculum is intended to equip participants with the knowledge and skills to help secure the cyber infrastructure of Saudi Aramco and the Kingdom at large while developing effective mitigation and containment



strategies. Thirty-five participants are enrolled in the program.

A Master of Science in human resources management is also available through our Hosted University Program in coordination with Texas A&M University. This program emphasizes recruiting, selection, retention, organizational behavior, staffing, compensation, research methods, and human resource information systems, among many other subjects. A total of 27 employees from across the company are participating. These programs are part of our long-term commitment to our people, enabling them to improve their skills and advance their careers.

In 2014, we continued our prestigious **Ibn Khaldun Fellowship for Saudi Women program** in partnership with MIT. The program is designed to nurture the knowledge and skills of Saudi female university faculty members majoring in science or engineering. This MIT postdoctoral fellowship program is a one-year, merit-based research program held at the MIT

campus in the United States. It provides an opportunity for participating Saudi women to conduct advanced research under the supervision of an MIT senior faculty member. This collaboration with one of the world's leading research universities enables ambitious talent to do the best work of their lives. In 2014, we were proud to sponsor 10 female faculty members from in-Kingdom universities.

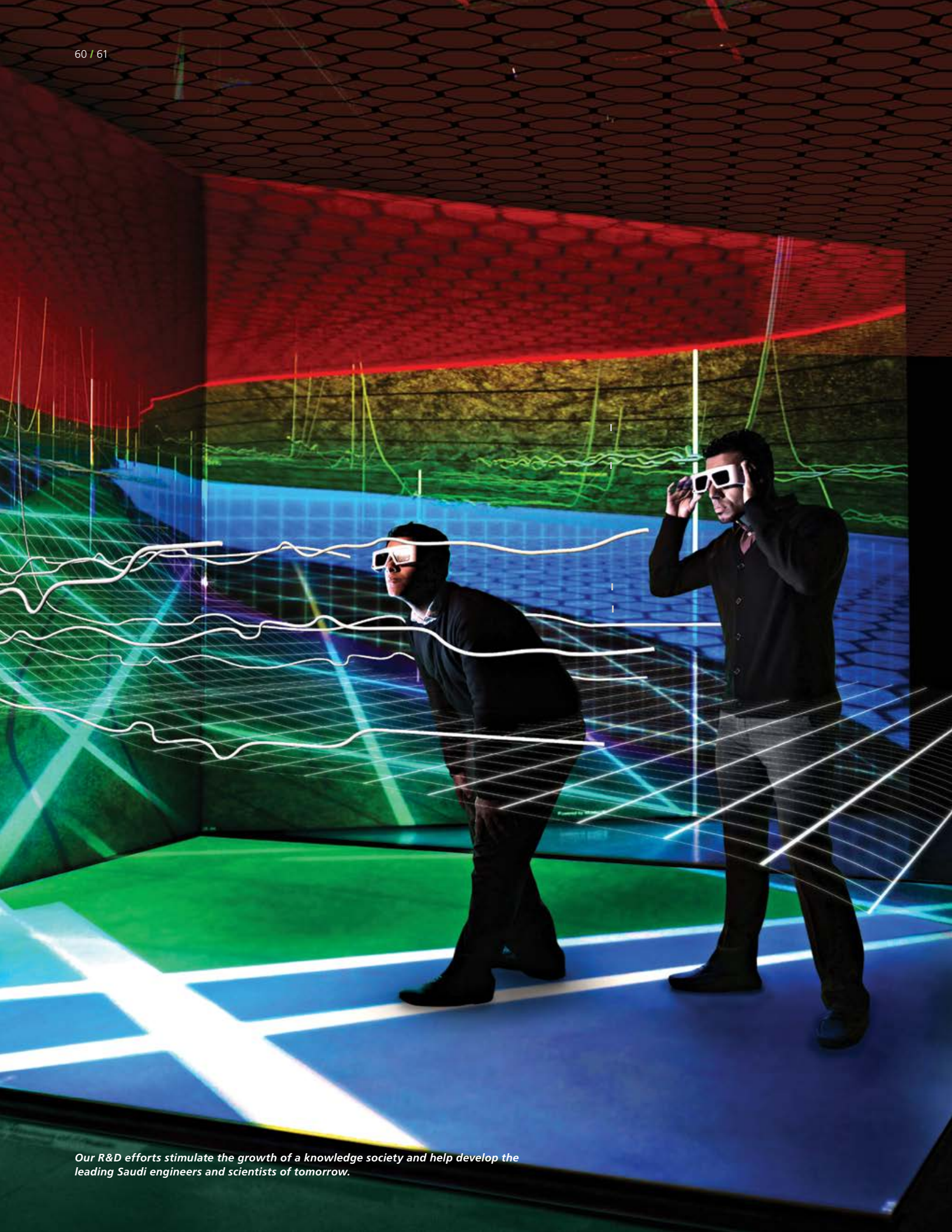
We support the **development of higher education** in the Kingdom through strategic partnerships that help build capacity in scientific research and teaching. Our support includes the sponsorship of more than 15 academic and research chairs. In 2014, we created a corporate finance chair at KFUPM to promote research and support educational programs at the undergraduate and graduate levels.

We signed a Memorandum of Understanding with the University of Dammam to establish a strategic, institutional-wide partnership in areas related to academics, research, entrepreneurship, and social



2 million+

visitors to the iThra Knowledge Program, 2013–2014



Our R&D efforts stimulate the growth of a knowledge society and help develop the leading Saudi engineers and scientists of tomorrow.



Members of the Intelligent Systems team from our R&D Center at KAUST show off their award-winning robotic inspection crawler.

responsibility programs. A Memorandum of Understanding was also signed with King Abdulaziz University to address the needs of our Marine organization. The collaborative partnership covers training, curriculum development, college continuation opportunities, technical exchanges, and other areas to help build local capacity and competency. We were proud to sponsor, for the fifth time, the International Exhibition and Conference on Higher Education, organized by the Ministry of Higher Education.

We facilitated a **geology field seminar** in Texas and New Mexico in the United States for 25 geoscientists, including students and faculty from KFUPM and Stanford University, together with geologists from Saudi Aramco and our Houston office. The field seminar is part of a strategic alliance established in 2009 between Saudi Aramco, KFUPM, and Stanford University to collaborate in geosciences and petroleum engineering education and scientific research.

Building a knowledge economy: R&D

At Saudi Aramco, we believe technology leadership drives continued and future success in the energy sector and is essential to achieving our aspirations to help solve global energy challenges and stimulate the local knowledge economy. A vital enabler of our drive to achieve technology leadership across our technology portfolio is establishing and sustaining a global research

and technology presence. Collaborating on a global scale with world-class partners in research domains of strategic importance to us significantly enhances the quality and scope of our research and validates our research directions. This approach provides access to the diverse pools of research talent around the world and allows us to build upon the experience and knowledge of others.

Our global network of research centers and technology offices forms strategic hubs of innovation and research talent in targeted locations worldwide. The “open innovation” character of our research network is designed to achieve breakthroughs in energy technology by providing access to the best ideas, people, and partners around the world. Our R&D efforts, in the Kingdom and around the world, will help develop the leading Saudi engineers and scientists of tomorrow and also stimulate the growth of the local technology and research economy. Where possible, we intend to transfer to the Kingdom the commercialization and production of technologies developed by our research network so that we add to a thriving knowledge economy at home.

All of our R&D centers in the Kingdom and abroad are allied to foster the local innovation ecosystem within the Kingdom. We see a future where our nation is a leading exporter of technological solutions and a valued contributor to the global pool of knowledge and innovation.



13,000

tablet computers provided to school children in the Gift of Knowledge campaign



We are a strategic partner in Dhahran Techno Valley Company, the research park of KFUPM and home to leading energy service companies.

One example of the potential synergies sparked by collaborative innovation is a recent achievement by the Intelligent Systems team at the **Saudi Aramco Research and Development Center at KAUST**: The development and production of a “Robotic Inspection Crawler” to inspect the integrity of steel operational assets — without the cost and risk of scaffolding. Pursuing rapid technology development, the diverse team — all of them recent KAUST graduates — took a pencil drawing of a robotic crawler capable of visual and ultrasonic inspection and gas sensing and developed it from concept to a fully working prototype in just 14 months. Compact, self-contained, capable of maneuvering on curved surfaces, and operated wirelessly, the robotic inspection crawler was an industry first: An intelligent system that can detect steel thinning due to corrosion in pipes, tanks, vessels, and other hard-to-reach steel structural assets.

Their invention won the Industry Glory Medal of the International Federation of Inventors Association, and the potential for in-Kingdom commercialization of the technology is being pursued.

Developing innovative and original intellectual property (IP) is not only vital to achieving technology competitiveness — it also forms the foundation of the global knowledge economy. At Saudi Aramco, we help the Kingdom contribute to the knowledge economy through an IP strategy that supports research designed to address specific energy challenges. We target areas where IP protection provides a competitive advantage, global recognition, strategic positioning, and product differentiation. Every year, our new patents add to the growing body of scientific advances we have made in the energy industry and they help us operate and produce our products in a more efficient and sustainable way. In 2014, we were granted 99 patents — the most in our history. We also filed applications for 154 patents.

Commercializing IP is essential to creating the leading businesses of tomorrow. Ranking first among Arab countries in globally registered patents and holding some 45% of the total, Saudi Arabia is poised to become a hub of excellence in R&D. Our role in forming the **Saudi Arabia Advanced Research Alliance (SAARA)** marks a pivotal turning point in this aspiration. The alliance brings together six

entities — Saudi Aramco, KAUST, KFUPM, the Saudi Technology Development and Investment Company (TAQNIA), the King Abdulaziz City for Science and Technology (KACST), and The Research Triangle Institute from North Carolina in the United States — to work toward transforming the numerous ideas generated in the Kingdom into technologies, commercial products, and applications that can be adopted by industry. As a result of the alliance, a new company called Technovia is being formed to bridge the gap between the discovery of ideas and their practical adoption and commercialization.

Construction continued in 2014 on the **King Abdullah Petroleum Studies and Research Center (KAPSARC)**, an international research and policy center focused on energy, environmental research, and policy studies. We completed the residential campus and a 3.5 megawatt solar energy field in 2013 and work was underway in 2014 on the research and office complex. The staffing level reached 86 personnel at year-end, and to date, 11 research papers have been published on a range of issues relevant to the domestic and global energy dialogue.

Our collaborative relationship with KAPSARC is part of our effort to forge alliances with world-class research institutions to pursue innovative approaches in support of sustainable energy solutions. By applying the best research in efficient and sustainable energy production and consumption, we can extract even more value from our resources and advance an energy efficient society.

One example of how we are encouraging collaboration at the nexus of both academia and industry is through our involvement with **Dhahran Techno Valley Company (DTVC)**, a research and innovation park located adjacent to KFUPM and our headquarters in Dhahran. At DTVC, we are working with KFUPM and leading energy companies to address a number of shared challenges in areas such as advanced materials, geophysics and petroleum engineering, refining and petrochemical processes, water management, energy efficiency, renewable energy, and advanced computing.

In cooperation with GE's Ecomagination program, our **Aramco Entrepreneurship Center (AEC)** launched a global competition to improve seawater desalination production technology, with a particular focus on using renewable energy. The Kingdom is the world's largest producer of desalinated water, which meets more than 70% of current drinking water needs. Saudi Arabia is projected to spend about \$50 billion on seawater desalination technologies in the coming decade and roughly \$100 billion on solar energy, creating significant opportunities for entrepreneurs and innovators.

The competition received more than 100 technical proposals, with Saudi Arabia accounting for the second most country-based submissions. A critical review of the proposals is underway to identify solutions that can be deployed by domestic businesses, thus helping Saudi Arabia meet its needs for potable water and also fostering a culture of technology-based entrepreneurship.



4,300+

participants in 814 workshops
conducted at FABLAB-Dhahran



The open innovation character of our global research network provides access to the best ideas, people, and partners worldwide.

environment

Sometimes making an impact is about reducing your impact. We create prosperity by using our energy to enable more opportunities for people here in the Kingdom and around the globe.

Safeguarding and restoring coastal mangrove habitats are part of our broader efforts to protect biodiversity in the Kingdom.



protecting biodiversity, using energy wisely

Part of that prosperity is the legacy of an environment that is better because of our efforts to make it so. In 2014, we continued to invest considerable effort and resources in activities that help protect and renew our natural environment and improve the energy efficiency of our operations and communities.





Our efforts to foster a more environmentally responsible culture include engendering a spirit of volunteerism.



We employ a multifaceted environmental strategy to address how we produce petroleum and how its end products are consumed. As a result, our own initiatives in this area have culminated in reducing our carbon dioxide (CO₂) footprint sixfold over the last four decades, reducing gas flaring to below 1% of annual gas production, and progressing sufficiently in our CO₂ capture research to conduct a sizeable demonstration project. We are also working with the automotive industry to investigate ground-breaking advancements in integrated engine-fuel systems that will one day dramatically improve mileage efficiency and reduce emissions. Our R&D in this area has advanced to the point of prototyping vehicles that capture CO₂ on board.

From creating a wildlife sanctuary in the Rub' al-Khali, to establishing artificial reefs and developing a mangrove eco-park, we conducted initiatives that protected the biodiversity of our land, seas, and coastlines. We initiated programs to replace all of our community and office lighting with energy efficient LED bulbs and launched awareness campaigns across the Kingdom to inspire others to take similar actions.

We pursued ways to reduce our water usage across all aspects of our operations.

At the 2014 UN Climate Summit in New York City, we announced our support of — and participation in — the **Oil and Gas Climate Initiative**. This initiative is built on a bottom-up, voluntary, technology-enabled, industry-driven, and collaborative approach to finding effective solutions to global energy and environmental challenges. It provides a platform for us and many of our industry peers to join forces in addressing key climate challenges, share industry best practices, and catalyze meaningful action and coordination on climate change.

Initial efforts are already underway in a number of areas, including energy access; the reduction of gas flaring and methane emissions; enhancement of energy efficiency in both production of energy and major end-use sectors; carbon capture and storage; and an expanded role for natural gas and renewable energy. More focus areas will be added in the future with the aim of building a sector-wide, industry-led coalition.



≈ 500,000

LED Light bulbs installed in 2014

From pioneering enhancements to our core processes and technologies to strategically investing in energy efficiency and renewable technology, in 2014 we made a big impact on the environment by reducing our impact.

Promoting energy efficiency

As energy demand continues to rise in the Kingdom, we are playing a leading role in encouraging the adoption of energy efficient technologies and practices through partnerships and dialogue with government and other Kingdom industries and business groups. Through our Energy Conservation Policy, we have committed to:

- Support national energy policies
- Develop and coordinate energy conservation and optimization strategies with government agencies and utility companies
- Foster initiatives and programs that seek to meet the Kingdom's energy demands in an economical and environmentally acceptable manner
- Utilize innovative and efficient technologies that are economically justifiable

Energy efficiency is a key component in our strategy to improve our environmental performance. Per capita energy consumption in Saudi Arabia is roughly double the world average. Left unchecked, rising demand for energy has the potential to

negatively impact domestic economic growth. We are committed to the **energy efficiency** drive pioneered by the Saudi Energy Efficiency Program, a subcommittee of the Saudi Energy Efficiency Center (SEEC), which has been tasked with the establishment of a comprehensive national program to rationalize energy consumption.

We take a comprehensive approach to promoting change, partnering with both the public and private sector to optimize the Kingdom's energy efficiency. Together, we are changing how the Kingdom consumes energy to help ensure continued prosperity for future generations.

A leading example of this stakeholder-based approach is our key role in the **Power & Water Integrated National Plan** that provides for a comprehensive assessment of the Kingdom's water and energy infrastructure and a long-range demand forecast to enhance future utility planning. The plan is guided by an integrated coalition of government ministries and leading Kingdom businesses for whom judicious energy and water use are of the utmost importance. The study will, for the first time in the Kingdom, include a human behavior analysis of domestic water and power consumption.

At Saudi Aramco, we continuously work to improve our energy efficiency. We conduct ongoing measurement and calibration of our own energy usage, implement

energy-saving technologies, promote education and awareness, and seek innovative solutions.

The first annual insulation forum, held in Riyadh in October 2014 and hosted by SEEC, was a landmark event in the Kingdom's energy efficiency efforts. The forum marked the activation of new standards related to thermal insulation for residential buildings in 23 major cities in Saudi Arabia. As a lead sponsor of the forum, we announced our **goal of saving 35% of our total energy use** in buildings, transportation, and communities by 2020.

Our goal is to reduce the energy use per square meter in our existing buildings from 500 to 310 EUI (energy use intensity) and from 425 to 250 EUI in new buildings. For existing community homes, we plan to reduce energy use per square meter from 300 to 160 EUI and from 240 to 120 EUI in new home builds.

We are also working to make our facilities more energy efficient. Self-sufficiency in generating electricity to power our operating plants through **cogeneration** is an important component of our energy efficiency strategy. Cogeneration allows us to produce electricity as a natural by-product of our operations, enables us to work without drawing on the national grid, and ensures business continuation in the event of utility grid interruptions.



Mangrove eco-park

Protecting our environment

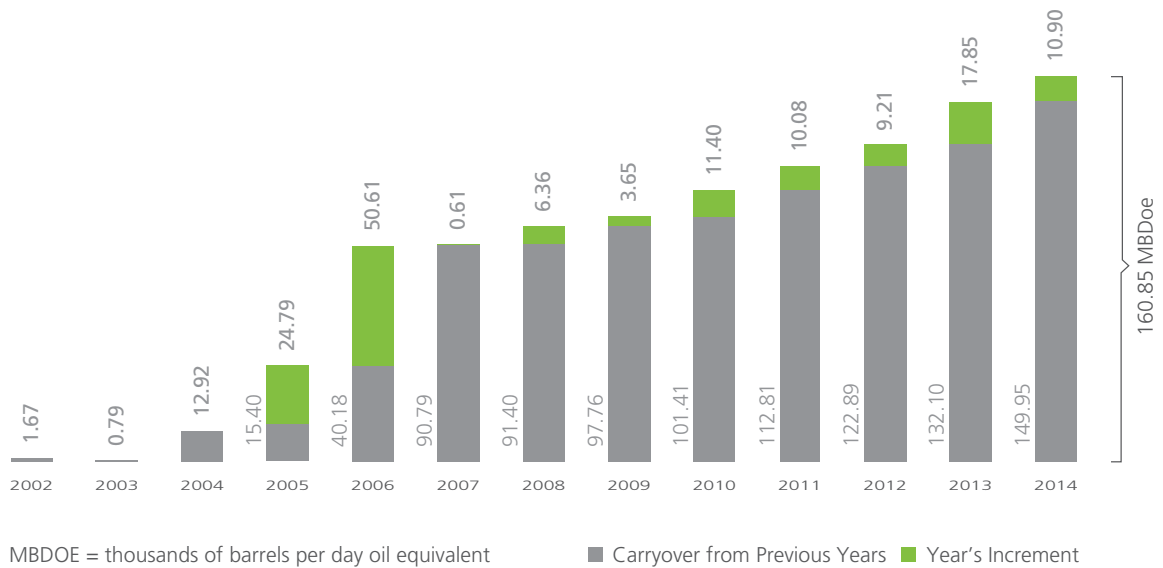
The Arabian Gulf coastline features many inlets and bays, fringed by mangrove trees that provide critical habitat for birds and marine life. This ecosystem is under pressure from development. We are working to preserve and protect this natural resource for future generations.

Tarut Bay will be home to a mangrove eco-park, featuring floating boardwalks, observation towers, and a canoe trail. A visitor center and research lab will foster knowledge and appreciation of this unique environment. The 63-square-km park will protect sea turtle nests and also serve as a bird sanctuary.

The mangrove eco-park is just one example of our efforts to protect biodiversity in the Kingdom. Other examples include:

- Deployment of more than 700 modular artificial reefs in 25 locations in the Arabian Gulf
- Planting 1.5 million mangrove seedlings
- Creation of a Manifa coastal reserve and a bird sanctuary to protect flamingos and ospreys
- Development of a wildlife sanctuary in the Rub' al-Khali

ENERGY CONSERVATION SAVINGS ACHIEVED IN COMPANY OPERATIONS (2002–2014) (MBDOE)



Reducing energy demand is a key component in any energy efficiency drive. In Saudi Arabia, air conditioning consumes a high percentage of electricity. Lowering demand in this one area will create significant energy savings. Part of our approach is to encourage change in everyday energy usage by helping citizens realize the positive impact they can make.

For example, in 2014, the **Energy Efficiency Pavilion** — part of our iThra Knowledge program — toured the Kingdom, raising awareness about energy efficiency and wise energy choices. The pavilion is a joint initiative between Saudi Aramco and the SEEC. More than 2 million people visited the iThra Knowledge program in four cities in 2013–2014 and at least 70% of them visited the Energy Efficiency Pavilion. The effectiveness of the pavilion's impact on behavior change is under study.

We are examining all areas of our operations for occasions to use energy more efficiently. Since 2000, we have had an

Energy Management Program with four key objectives:

- Reduce the energy key performance indicators of existing Saudi Aramco facilities by 2% per year
- Design all new Saudi Aramco facilities to be energy efficient
- Increase overall energy efficiency
- Promote efficiency at the national level

As a result of careful implementation of this program, we again experienced an improvement in our overall energy performance, as 2014 energy intensity (expressed in MBtu of energy required to produce one barrel of oil equivalent) decreased by 5.4% compared to 2013.

Since 2000, our energy assessments have identified over 700 energy savings opportunities requiring capital investments or operational improvements. In 2014, 161 energy savings opportunities were implemented, more than a twofold increase over the previous year.

Conservation highlights

Leading by example to conserve resources

- 6,454: Tons of paper and carton recycled through office and residential programs since 2009
- 381: Tons of plastic, glass, and aluminum recycled through office and residential programs since 2009
- 46%: Percentage of irrigation needs met by recycled sanitary wastewater
- 453,500: Mangrove seedlings planted along the Saudi coast since 2011





Research in carbon management and new fuels holds the promise of cleaner, more sustainable energy.

Through initiatives like these, we achieved a reduction in our total energy consumption by nearly 2% compared to 2013. As a result, our cumulative reduction in energy consumption since the inception of the Energy Management Program in 2000 has now reached more than 160,000 barrels of oil equivalent per day.

Another initiative that will lead to significantly increased energy efficiency is our LED light replacement campaign. We replaced approximately 500,000 traditional incandescent light bulbs with LED lighting fixtures in our residential and office facilities in 2014, saving 30 million kilowatt hours per year.

We have also targeted the replacement of roughly 14,500 streetlight fixtures in our communities with LED fixtures. By year-end, we replaced 6,000 streetlight fixtures with the remainder to be replaced over the next three years. This project alone will reap a 50% savings in electricity

usage in our outdoor lighting, representing over 12,700 megawatts per year.

Since 2006, we have conducted an annual energy conservation campaign for our employees. Through informative displays and presentations, we raise awareness of the importance of energy conservation as well as provide information on the latest technologies that help people conserve energy. For 2015, we plan to take the campaign to the general public to amplify the significant energy saving benefits that can be achieved on the individual and household level.

Reducing our environmental impact

As our operational footprint continues to grow, so does our commitment to minimizing the impact we have on the environment. Through innovative thinking, creative application of technology, and inspirational leadership, we work to go beyond environmental compliance and achieve best-in-class performance.

At our annual CEO Environmental Awards ceremony, we honor and recognize organizations within the company that exhibit exceptional environmental protection. In addition, we continue to build on the five-decade-old foundations of our Environmental Protection Policy and remain dedicated to demonstrating that resource-based economic development and preservation of the natural environment can go hand-in-hand.

Our approach is based on robust management and effective monitoring of environmental performance throughout our operations. Our **Environmental Performance Assessment** program is an effective management tool for assessing facility compliance with company and government environmental standards. The performance of different facilities is measured on 21 environmental indicators — including air quality, wastewater discharges, management of solid and hazardous waste, groundwater quality, and spill prevention control — as well as employee-related factors such as environmental

promoting energy efficiency

2020 goal: reduce total energy use in company buildings, transportation, and communities by 35%

energy savings in lighting

LED lighting saves up to 80% of the energy required by conventional lighting.

actions

18,000

homes upgraded with ≈500,000 LED light bulbs in 2014

60,000

fluorescent light fixtures replaced with LED fixtures by 2016

200

office buildings upgraded with ≈25,000 LED light bulbs in 2014

14,500

streetlights to be upgraded to LED lights by 2016

energy savings in air conditioning

Cooling and heating systems account for 70% of the total energy consumption in houses and buildings.

actions

250+

homes upgraded per year with exterior insulation finishing systems

8,000

homes fitted with Smart Meters by 2016

600+

homes upgraded per year to high efficiency air conditioning systems

450

offices fitted with Smart Meters by 2016

savings



2,700 barrels of oil equivalent per day — nearly 1 million barrels per year



440 million kilowatt hours — enough to power a city of 4,400 homes for one year



330,000 metric tons of CO₂ per year — equivalent to removing 60,000 cars from the roads for one year



The Rub' al-Khali, or Empty Quarter, is the future site of a wildlife sanctuary project and one of five areas of exceptional biodiversity we are working to preserve.



7.6 billion

cubic feet of gas and more than 415,000 barrels of oil recovered via zero discharge technology at well sites, 2013–2014



Our program to install modular artificial reef habitats is designed to help restore coral reefs in the northwestern Gulf.

awareness and training. During 2014, we conducted 107 environmental compliance assessments and worked to resolve open findings.

In addition to our robust internal performance standards, we also adhere to — and in many cases exceed — leading international practices in environmental management. One way we do this is through our commitment to zero discharge. We implemented zero discharge technology at 432 well sites, a 4% increase compared to 2013. Implementation of zero discharge technology made possible the recovery of 2.6 billion scf of gas and more than 215,000 barrels of crude oil in 2014.

Another example of how we go beyond environmental compliance to national or international standards in our efforts to protect the environment is our work on CO₂ management. One of our global

offices, located at the **Korean Advanced Institute of Science and Technology (KAIST)**, is dedicated to addressing issues related to carbon management. The collaboration follows an interdisciplinary approach to innovative and cost-effective CO₂ capture, storage, and conversion from fixed and mobile sources.

Our continuing work to reduce flaring to only absolutely necessary situations has resulted in the implementation of flare minimization plans in most of our upstream and downstream facilities. An additional project is underway to install flare gas recovery systems at four of our major gas plants with an expected completion in 2017. We are also developing an updated flaring protocol to streamline flaring decision making company-wide and to include environmental aspects in the decision making process.

We continuously strive to improve our stewardship of **water resources** by enhancing the efficiency of our operations through water treatment and reuse strategies. For example, in 2014 we upgraded the wastewater treatment systems in three of our Northern Area onshore oil facilities to remove and recycle oil from industrial wastewater and provide treated sanitary wastewater for irrigation. We also expanded the treatment capacity of the Rahima sewage treatment plant to meet projected population growth, and via a new pipeline, connected the facility to our south terminal at nearby Ras Tanura to achieve synergies of energy efficiency and operation and maintenance costs. Company-wide, we are implementing our Water Conservation Policy, which mandates water conservation roadmaps for each operating facility.

We provide beautiful and sustainable communities for our employees. Always conscious of our water usage, approximately 46% of our irrigation needs for the landscaping in our communities is met by recycled sanitary wastewater. We continuously look for ways to effectively and efficiently increase water conservation in our landscaping. In 2014, we evaluated "green mat" technology in which rolls of treated coconut fiber underlie 10 centimeters of sand prior to planting grass or laying sod. Deploying this technology is calculated to reduce water use by 56% or more. This landscaping material will be used in all new landscaping projects, including the green spaces that will be created during the construction of more than 1,500 family and bachelor units in our Dhahran community.

Waste management is an important part of our environmental protection efforts. We have had a waste recycling program in place since 1992 and recycling continues to form a key part of our approach to implementing environmentally sound waste disposal methods.

Our recycling strategy includes awareness raising efforts to enable all the vendors of goods and services established in the community to practice "reduce, reuse, and recycle" principles in their operations. Through a variety of activities including awareness campaigns and competitions, the residential recycling participation rate in our Dhahran community was increased 8% in 2014 to reach 32%. Residents in our Ar-Rakah community have embraced our recycling program with a participation rate of 100%.

Recycling programs are in place in every Saudi Aramco community and in most of our plants. For example, our 'Uthmaniyah Gas Plant has an arrangement with a local paper recycling company to collect waste paper on a monthly basis. In 2014, the plant recycled more than 4,500 kilograms of paper. Our reverse vending machines allow people to deposit various materials for recycling. The pilot program, launched in 2013 to assess the effectiveness of the machines, resulted in 1,225 registered users with more than 320,000 containers recycled. A new long-term program based



12,700

megawatts saved per year by replacing 14,500 community streetlights with LED fixtures



Raising awareness about energy consumption and efficiency in the young generation is a focus for our outreach programs.



To help instill respect for the natural environment, we engage volunteers and deliver educational programs to thousands of school children.

on a similar concept is being developed to implement the lessons learned during the pilot program. Our Jiddah area recycling competition has resulted in the collection of nearly 30,000 kilograms of paper.

To raise awareness of recycling and spread recycling behaviors within communities throughout the Kingdom, we took our Environment and Recycling Awareness Program to 119 female public schools. The program included presentations and a film about the benefits of recycling as well as other activities.

Nurturing an understanding of and appreciation for the natural environment in our young people is of paramount importance to the future of Saudi Arabia. In cooperation with the Ministry of Education, we established the Saudi Aramco **Environmental Education Program** to reach out to school children across the Kingdom. To date, the program has been introduced to more than 1,400 elementary schools and over 1,000 Friends of the Environment groups have been established.

Protecting biodiversity

Our environmental stewardship activities are not limited to within the perimeters of our operational areas. The Kingdom is home to a wide variety of unique and ecologically sensitive habitats that require careful stewardship. We have an extensive history of promoting environmental awareness, protecting ecologically sensitive areas, and leveraging our environmental capabilities and resources to enhance environmental knowledge that engenders a more environmentally responsible culture.

Guided by our Corporate Biodiversity Plan, we are working to preserve and enhance five areas of exceptional biodiversity in the Eastern Province. For example, we completed the project proposal and detailed engineering documents and commenced construction of the 637-square-km **Shaybah Wildlife Sanctuary**. The sanctuary will protect, preserve, and promote the vulnerable wildlife and biodiversity in the Shaybah reservation area in the Rub' al-Khali. In addition, we are exploring the establishment of a Manifa coastal reserve and bird sanctuary to protect flamingos and ospreys.

Our commitment to rehabilitate mangrove habitats dates back over two decades when we teamed up with KFUPM to

transplant mangrove seedlings as part of a joint rehabilitation study. These habitats are among the most productive ecosystems in the marine environment, providing important nursing grounds for many commercial fish, shrimp, and crab — the lifeblood of the Kingdom's fishing industry. They also provide a vital natural greenbelt for communities in the Eastern Province, and mangroves sequester CO₂, filter dust and other particulates, and provide an important refuge for migratory birds.

The importance of our efforts in this area was validated by a research study we carried out in 2013 that examined changes in local mangrove habitats over the past 50 years. The study revealed that more than 90% of the original mangrove trees in the Eastern Province have been lost, mostly as a result of municipal coastal development. The study also indicated that the remaining old areas of mangrove forest are situated in or adjacent to our operating areas, as this has prevented land use practices such as land filling and dumping.

With the help of local schools, charities, students, and volunteers, we have planted more than 450,000 mangrove seedlings to help restore this vital coastal habitat lost to urban development. Our goal is to plant an additional 1.5 million mangrove trees over the coming years.



Solar panel sunshades at our Al-Midra office tower provide up to 10 megawatts of power.

In a further indication of our determination to protect and renew the Kingdom's sensitive mangrove habitat and promote biodiversity, we are making plans to develop a **mangrove eco-park** in Rahima Bay on the Gulf coast. This proposal would protect a critical mangrove area of over 63 square kilometers. The project is scheduled for completion in late 2017.

The public will have direct access to the park, allowing them to learn firsthand about the importance and fragility of this important natural resource. We will plant approximately 150,000 mangrove seedlings in the park over the next two years to restore habitat for turtle nests and birds. The eco-park will feature a visitor's center with an informative seating area and observation tower for close-up views of mangroves and associated wildlife, a floating boardwalk that meanders through the mangroves, a bird hide, a canoe route, and a walking trail. A portion of the park will be dedicated to research activities.

Along with protecting mangrove habitat, we also worked to preserve our coastlines from trash that pollutes our waters and harms land and marine life. We were supported by 400 of our contractor employees, students from local schools, and citizen volunteers from communities during our beach cleanup and awareness campaigns in Tanajib and Ras Tanura. With their help, we removed 3,000 kg of trash from the beaches and surrounding areas.

In conjunction with World Environmental Day, we organized the **Port Shoreline Cleanup Day** at Jiddah, Jazan, Yanbu', and Doha to remove trash and build environmental awareness. A total of 650 employees and contractors from various company organizations participated in the event, which included awareness presentations on the environment.

The Arabian Gulf is a productive marine ecosystem and its coral reefs provide a rich habitat for marine life. Through our ongoing research partnership with

KFUPM, we have been monitoring the health of corals in the Gulf over many decades. Our research has shown that rising sea surface water temperatures have killed many corals throughout the region, seriously impacting reef structure and biodiversity. In response to this challenge, we have embarked on a major **reef restoration program** throughout the northwestern Arabian Gulf. With 60 sites already identified, we are planning to submerge 728 modular artificial reef habitats that will act as nurseries for corals and associated marine life. By creating the right environment and conditions, we can help many of the organisms that once thrived on the reefs to return.

Protecting biodiversity can also provide positive economic benefits. We are in the final stages of constructing **fish hatcheries** on the Abu Ali peninsula on the Gulf coast. Designed to release 10 million juvenile fish each year to replenish fish stocks, the hatcheries will help preserve the traditional fishing industry in the area. The



Protecting targeted coastal areas and building fishing ports and fish hatcheries help ensure sustainable development.

hatcheries are one element in an integrated ecosystem that includes an artificial lagoon surrounded by transplanted mangrove trees. An artificial reef near the hatcheries will serve as habitat for the released fish.

We maintain a vigilant state of readiness to respond to unintended petroleum releases and conduct periodic field drills to retain our response capability. In 2014, we conducted our first joint oil spill response drill with the Petroleum Association of Japan. The objective of the drill was to improve the collaboration between our two oil spill response associations and to share knowledge and experience.

Targeting renewable energy

We view energy produced from renewable sources as a viable addition to the Kingdom's energy mix that will help meet the nation's energy demand and also serve as a means to help replace the liquid fuel component currently used in the production of electricity.

To support these needs, we conducted several studies to promote a national renewables agenda with a focus on wind and solar, proposing the introduction of 300 megawatts of solar photovoltaic and wind power projects at 10 remote locations across the Kingdom. The 300-megawatt portfolio of projects is estimated to displace 3,300 bpd of hydrocarbon fuel — more than 1 million barrels per year — now used to generate power for industrial and other uses.

We are exploring upgrades to our Dhahran solar test field to improve data collection systems. We also plan on conducting accelerated degradation and temperature performance testing in third-party laboratories and collaborating with KAUST on module and electronics testing. Our feasibility study of wind power development continued to progress in 2014. We plan to install a 3.3 megawatt wind turbine at our Turaif bulk plant. The objectives of this demonstration project are to reduce fuel

consumption at the bulk plant and build operational capabilities in preparation for additional wind turbines.

We are introducing solar power capabilities to the streetlights in several of our communities to reap the energy savings rewards afforded by combining the use of solar energy with the efficiency and effectiveness of LED light bulbs. Approximately 130 solar powered lighting bollards have been installed thus far. This initiative will deliver major capital cost savings and reduced maintenance and power consumption costs while also raising awareness of energy efficiency in our communities.

citizenship around the world

The world is increasingly interconnected. As a global enterprise, we value making connections with international cultures and communities.



This principle is manifest in our workforce, which is made up of people from more than 60 nationalities. And through our many international affiliates, joint venture partnerships, and research offices, we are interconnected with major energy markets around the globe.

We benefit from interconnectedness. This means we also have a duty to give back to the communities that host and support our various business activities. In many cases, these activities bring economic benefits in the form of employment opportunities and increased business for suppliers and manufacturers. But as a global enterprise, we are also a global citizen. As such, we take an interest in — and contribute to — the health and well-being of the communities that help make our international operations successful, wherever they are in the world.

Asia

We operate a crude oil storage facility on the island of Okinawa that supplies Japan and other nations in the region. The coral reefs of Okinawa are a precious natural resource and we support the efforts of the Coral Reef Conservation Council, the Okinawa Institute of Science and Technology, and the University of Ryukyu to protect this important ecosystem.

In Japan, we sponsored the Kansai University Middle Eastern Economy course for the fifth year in a row to facilitate awareness and understanding of the Middle East region. We also offered support through the Save the Children Japan organization to renovate a park that was devastated during the earthquake and tsunami of March 2011.

Since the opening of our Aramco office in Beijing in 2012, we have worked to promote sustainable social and economic development in the areas where we have a presence, with a focus on supporting education, culture and the arts, environmental protection, and poverty alleviation. Our Beijing office has partnered with China's National Center for the Performing Arts and the King Abdulaziz Center for World Culture to promote the exchange of cultural programs between China and Saudi Arabia.

The King Abdulaziz Center has also partnered with the Chinese Academy of Social Science's Institute of Philosophy to enhance social science research of China and Saudi Arabia and to promote cultural exchange. These partnerships mark the first Sino-Saudi cultural exchange projects launched by the King Abdulaziz Center and are aligned with its mission to foster knowledge, creativity, and cross-cultural engagement.

In Fujian and Yunnan, we renovated two primary school student dormitories, providing 200 students with safer, improved accommodation to support their academic aspirations. In Yunnan, we constructed a new bridge, benefitting roughly 300 villagers with safe and efficient access to schools and markets. In partnership with the University of International Business and Economics in Beijing, and with help from our 12 students who are studying there, we provided support to the 5th International Cultural Festival. The student-run event attracts almost 4,000 international students from 129 countries and provides a platform for cross-cultural exchange.

In South Korea, we supported activities to promote cross-cultural community engagement and goodwill, such as the Saudi Cultural Mission International Students football tournament.

Europe

Our Aramco office in Holland sponsored approximately 1,500 Netherlands-based college students in the 40th anniversary of the City-Pier-City Marathon held in The Hague in support of UNICEF. Our London office sponsored community events such as the May Festival in Aberdeen, Scotland. Company-sponsored students studying at universities in the United Kingdom and Europe volunteered in a number of charitable events such as marathons, walks, and science and engineering fairs, efforts that embody our ethos of making positive impacts in our communities.

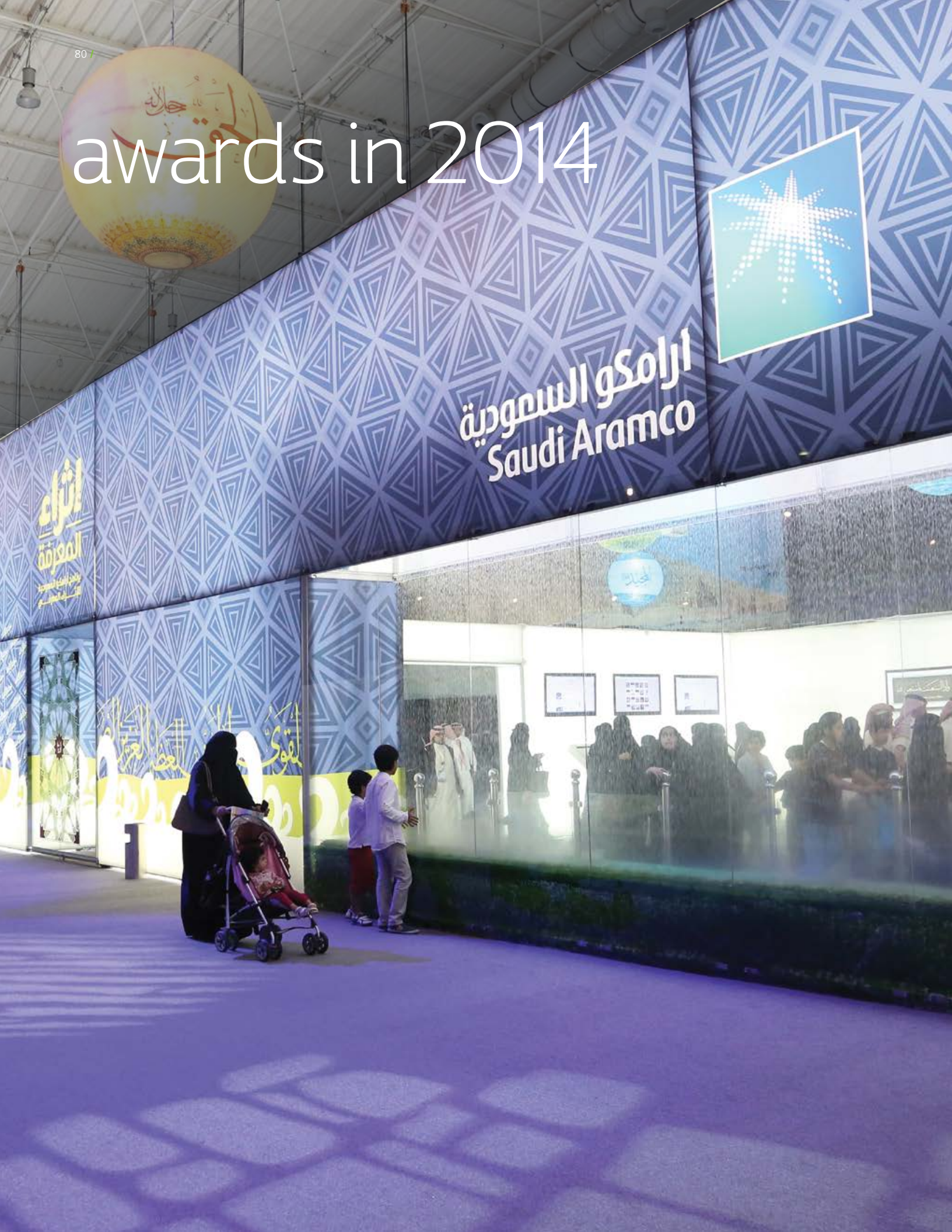
United States

Through our Publications Pipeline program, we supported the American Association of Petroleum Geologists in helping to improve geoscience education in developing countries. This is achieved by collecting geoscience books and journals from those who no longer need them and sending these resources to overseas universities and libraries. Our Houston office inventoried and packed 55 pallets of geosciences literature donated from corporate libraries. The materials were donated to various universities in Myanmar.

We marked our 10th anniversary as the title sponsor of the Aramco Houston Half Marathon in 2014. The annual event has become one of the nation's premier running events and a cornerstone of the city's charitable fundraising, benefiting 60 different organizations. The Houston Marathon three-day weekend draws more than 250,000 participants, volunteers, and spectators. Runners came from all 50 U.S. states and 26 countries. Volunteers from our Houston office numbered 200, including employees, families, and friends, and 60 employees were among the nearly 30,000 runners.

Our petroleum marketing office in New York City has a legacy of community outreach. In 2014, the office gave generously to a range of charitable organizations in the New York City area that focus on education, health care research, and children's health and advocacy programs.

awards in 2014



Environment

We were honored with three **environmental excellence awards** during the Offshore Arabia Conference and Exhibition in March. The award for Excellence in Environmental Technology was bestowed because of our efforts to protect the marine environment during the construction of our Manifa project. Our Community Services organization received the award for Excellence in Environmental Projects and Products for its pursuit of renewable energy solutions. We were also presented with the award for Excellence in Environmental Applications, which recognized our deployment of best practices in health, safety, environmental, and quality.

Our Shedgum Gas Plant received the **International Environmental Excellence Award** from the U.S.-based Gas Processing Association. The Shedgum plant was recognized for its outstanding environmental performance, particularly for the introduction of a flare gas recovery system. This award highlights the national and global attention we are attracting for our work in environmental protection and the efficient use of energy resources.

Knowledge & creativity

Children of the World, a film co-produced by our King Abdulaziz Center for World Culture, won two World Gold Medals in the Society and Social Issues and Cinematography categories and one World Silver Medal in the Instruction and Education category at the 2014 **New York Festival's International TV and Film Awards**.

Our **iThra Youth** initiative was shortlisted as one the 20 most important innovations to promote STEM learning globally by the Telefonica Foundation of Spain.

Aramco iExplore, an educational program centered on a toolkit that makes learning about science fun for fifth-grade students, was a finalist in the **Best Outreach Program** category in the 13th Annual World Oil Awards. Created by our Houston office in partnership with the Houston Museum of Natural Science, the program focuses on the STEM skills to spark student interest in the energy industry, particularly in engineering and geoscience careers.

People & teams

At the 2014 Annual Technical Conference and Exhibition of the Society of Petroleum Engineers (SPE), Ali Dogru from our Advanced Research Center was named an **Honorary Member of SPE** for his contributions and technical leadership in developing large-scale mega- and gigacells reservoir simulation technology and pioneering work related to uncertainty analysis for reservoir performance prediction. Honorary Membership is the highest honor SPE confers upon an individual, limited to 0.1% of SPE's total membership body. Dogru is also our first Saudi Aramco Fellow, an honor initiated to recognize our scientists who have made groundbreaking contributions.

At Saudi Aramco, we foster a culture that thrives on the **pursuit of excellence**. The ingenuity and creative energy of our

people — individually or as members of collaborative teams — is what ultimately helps us develop the ideas that lead to innovative solutions to some of the most pressing energy-related issues. Every year, we celebrate the people and teams whose achievements demonstrate the highest degree of excellence in areas such as innovation, safety, citizenship, and the efficient and sustainable production of energy.

During our 2014 **Excellence Awards** ceremony, we recognized the standout achievements of 11 individuals and five teams. The honors for excellence in individual contributions went to people representing a wide range of disciplines from across our operations and included recognition for new patents, innovative systems, advanced computing, and enhanced training methods. Excellence awards went to the teams responsible for the development of the **National Industrial Training Institute (NITI)**, a model of training and manpower development excellence; for the creation of **Saudi Aramco Energy Ventures (SAEV)**, a new approach to leveraging the global ecosystem of innovation in the energy industry; for construction of a new sanitary treatment facility at our **Shedgum Gas Plant**, which delivered environmental and capital benefits; and for the development of an innovative solution at our **Ras Tanura Refinery** to divert excess hydrogen to the refinery's fuel gas system, realizing significant cost avoidance and reducing hydrogen flaring to near zero.

Ethics and integrity

As our business activities and operations grow in scale and complexity, we continue to adhere to the legal and ethical standards that are the bedrock of our reputation for integrity. At Saudi Aramco, we go beyond simple compliance by setting a higher standard of behavior for our employees and our partners that we wish to inspire in our communities. For us, corporate integrity is born out of personal integrity. Our standards and models of integrity flow from our fully engaged Board of Directors whose members possess a wealth of diverse experiences and future-oriented mindsets. Our board challenges management to adhere to the highest personal and professional standards and through the corporate audit process, set in place and monitored by the board, ensures an independent, confidential, and robust review and reporting channel.

Our Business Conduct Handbook summarizes the standards that enable employees to preserve and build on our proud ethical legacy by outlining the company's policies on conflict of interest, financial integrity, intellectual property management, workplace harassment, fair practices, safety, health, and the environment. It reaffirms the guiding principles by which we have achieved our success.

Every employee reviews our Conflict of Interest and Business Ethics Policies on a regular basis. This ensures our ethics policies are continuously reinforced for use in real-life applications. Any ethics concerns from our employees or third parties can be clarified through our established communication and reporting channels. In addition, a General Auditor Hotline is available to provide a secure and confidential venue for people inside and outside the company to report suspected fraud, unethical conduct, or irregularities. We conduct our business according to the highest legal and ethical standards and expect the same from our suppliers.

Our Supplier Code of Conduct outlines mandatory policies on environmental, health and safety issues, fair trade practices, ethical sourcing, conflicts of interest, bribery, kickbacks, gifts and fraud, monitoring, and compliance. Saudi Aramco's Supplier Code of Conduct helps promote ethics across the Kingdom's private sector and assures our suppliers that we hold ourselves to those same standards.

