Abdul Latif Jameel

Opening doors

The Abdul Latif Jameel Magazine

Spring 2017

In this month's issue we talk about

Leading Saudi Arabia's renewable energy revolution

Featured Articles

Abdul Latif Jameel has been investing from the heart of Arabia across the promising MENAT region and beyond for over seventy years – shining a light on new opportunities for investment and growth. Trusted to open new doors; now, we are opening more.

Helping people who strive for better, to have better: better means; better lives; better prospects. Helping businesses who look further, to reach further. Into new markets, new homes, and new considerations.

We can do this because we are determined in our quest for new potential; and we succeed because we never lose sight of why this matters. In this magazine, we showcase our investment in the development of the economies and the quality of life of people in the region.

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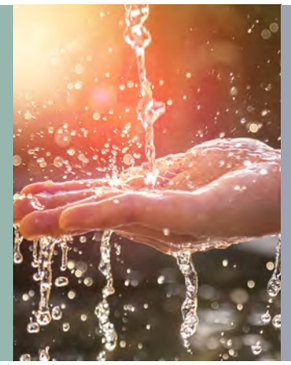

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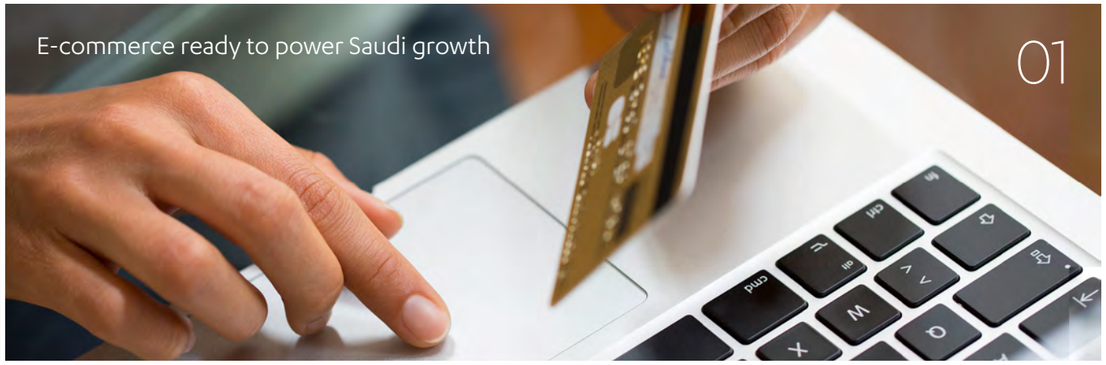
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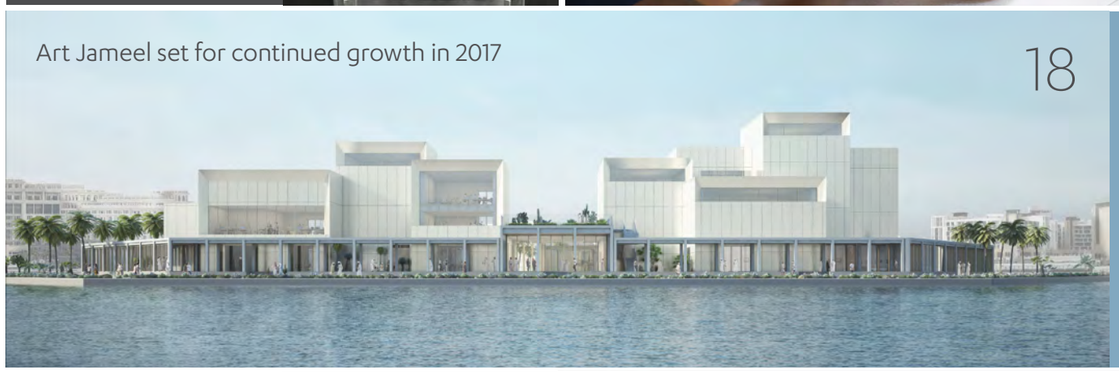

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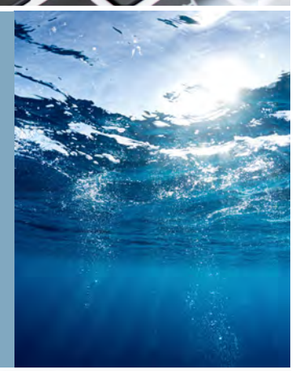

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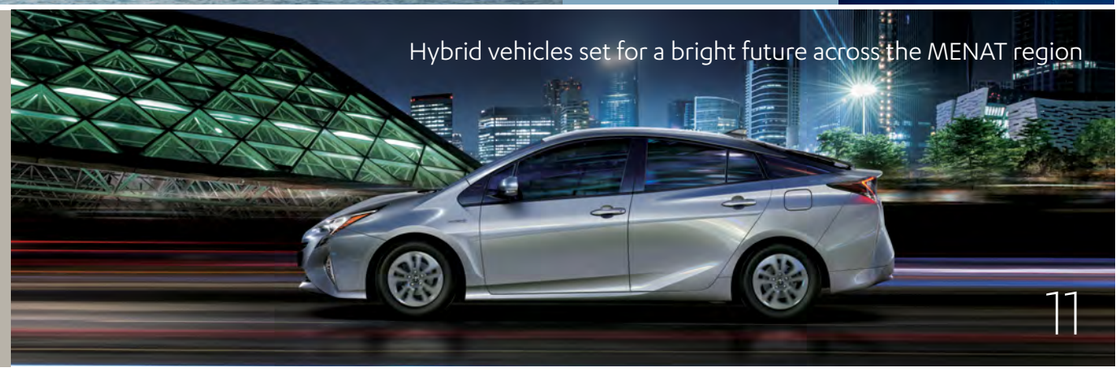
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Editorial Team – You can contact the editorial team by sending an email to **editor@aljmagazine.com**
The term "Abdul Latif Jameel" refers broadly to several distinct, separate and independent legal entities. Abdul Latif Jameel is not itself a corporate entity, association or conglomerate run by an overarching parent company but merely refers to a group of distinct and wholly separate legal entities that are collectively referred to as Abdul Latif Jameel. Abdul Latif Jameel is not a corporate group as defined in section 1161(5) of the Companies Act 2006.

E-commerce ready to power Saudi growth

Research released last year valued e-commerce transactions across Gulf Cooperation Council (GCC) countries at US$ 5.3 billion in 2015[1]. That figure is expected to exceed US$ 20 billion by 2020, with the rise of urban, educated, and younger populations driving increased online activity.

In Saudi Arabia, the outlook is particularly dynamic. Saudi millennials tend to be higher spenders than their global peers, and technology is an essential part of their lives: they spend an average of 4.5 hours online every day[2].

As new security technologies enhance online consumer confidence and more of the country's population is given access to payment cards (67 percent of all payments in Saudi Arabia remain cash-based), many retailers are preparing for a major shift in consumer attitudes and behaviours.

With this changing landscape comes a raft of new commercial opportunities for retailers who can adapt. Currently, cash-on-delivery forms 85 percent of online payments in Saudi Arabia. However, this inefficient business model could soon be vastly reduced and replaced with more advanced methods – particularly in a region where smartphone penetration is already at 65 percent[3].

Abdul Latif Jameel has acknowledged the opportunities ahead, and has invested in and launched a trio of businesses ready to shape the next generation of retail.

E-commerce is changing how retail operates around the world. Now, it is Saudi Arabia's turn to take centre stage – and Abdul Latif Jameel will be there to help shape this exciting transition for the benefit of its partners, and of Saudi society.

"The internet has opened up the country. People in this part of the world are very tech savvy... I can see Saudi Arabia going through the same evolution in e-commerce as countries like the UK did a decade ago."

P. Venkat, Managing Director of Abdul Latif Jameel Electronics

redsea ردسي

Redsea.com is aiming to be one of Saudi Arabia's leading electronics retailers. Launched in March 2017, it will combine global brands with affordable prices across electronics, appliances and air-conditioning units.

It will use Abdul Latif Jameel Electronics' expertise and experience of more than 35 years to help it provide a convenient, warm, and straight-forward customer experience.

MY SAUDI STORE.COM

Abdul Latif Jameel the global service partner for FedEx in Saudi Arabia - is also bringing innovation to the country's e-commerce scene by offering users the chance to shop in the U.S. market. When a customer registers with MySaudiStore.com, the site automatically provides the user with a personal U.S. postage address.

All goods are then delivered to that U.S. address before being shipped to the user's nearest FedEx branch in Saudi Arabia – meaning deliveries from sites like Amazon, Sears, Best Buy, eBay and Target are all now conveniently accessible to the Saudi population.

alaslia.com

Abdul Latif Jameel continues to innovate in the industry where it started. Alaslia.com provides next-day delivery of genuine parts, accessories and motor oil for Toyota and Lexus vehicles. 'Al aslia' is the Arabic for the 'original' and signifies the genuine manufacturer provenance of the products available to keep the customer's vehicle as the manufacturer intended. Orders can be placed 24/7, with all parts sourced direct from Abdul Latif Jameel Motors.

Alaslia.com was launched by the Abdul Latif Jameel Aftermarket Operations team and Abdul Latif Jameel Motors Toyota Saudi Arabia. It provides an outstanding service to busy, price or safety-conscious motorists, as well as repairers and retail outlets.

By offering the widest range of Toyota and Lexus parts in Saudi Arabia, Alaslia.com hopes to become the first thought for customers in need anywhere in the country. As many car accidents are caused each day by fake or counterfeit spare parts all over the world, Alaslia.com is also ideally positioned to help make a genuinely positive impact to the country's road safety, tying into other initiatives in this area by Community Jameel.

[1] Getting In On The GCC E-Commerce Game, A.T. Kearney, August 2016
[2] Understanding The Millennial Mind-Set – And What It Means For Payments In The GCC, Visa Performance Solutions CEMEA, July 2016
[3] Getting In On The GCC E-Commerce Game, A.T. Kearney, August 2016

Ford Trucks drive into Egypt

Senior representatives from Ford Motor Company and Abdul Latif Jameel attended the launch of Ford Trucks in Egypt, for the appointment of the country's official dealer for the brand.

Tufan Altug, Regional Director of Ford Trucks, Africa, and Tarek Abdul Latif, Regional Director of Egypt Operations, Abdul Latif Jameel, were among those present at the event in Cairo, Egypt.

Tarek Abdul Latif revealed that Abdul Latif Jameel intended to continue investing and expanding its business in Egypt.

The newly appointed distributor will offer comprehensive sales, service and maintenance, as well as spare parts to all Ford Trucks customers in Egypt through its centers and showrooms in Cairo and Alexandria, and El Mobasher, will provide financing solutions for commercial vehicles.

Tufan Altug predicted the MENA region would eventually be responsible for 25 percent of Ford's global sales, with the Egyptian market being key to reaching that target. Ford Trucks currently operates in three continents. It aims to be active in 50 countries by 2020.

From right to left: Mr. Otman Tebbane - Marketing Specialist, Ford Trucks; Mr. Tufan Altug - Africa Region Manager, Ford Trucks; Ms. Dina Kamal - PR & Corp. Comms. Manager, Abdul Latif Jameel; Mr. Mohamed Moussa, Industrial Project Advisor, Abdul Latif Jameel; Mr. Fatih Ceken - Regional Representative/ Export, Ford Trucks; Mr. Tarek Abdul Latif - Regional Director, Abdul Latif Jameel; and Mr. Korhan Dündar - MarComms, Ford Trucks.

Ford's history in MENA goes back more than 60 years, and local importer-dealers operate more than 155 facilities in the region and directly employ more than 7,000 people, the majority of whom are Arab nationals.

Redsea ready to make an impact

Abdul Latif Jameel Electronics is aiming to transform Saudi Arabia's electronics sector with the launch of Redsea stores and Redsea.com, an all-new retail and e-commerce experience that puts customer service at its core.

Redsea will combine convenience with affordable prices as it looks to become one of Saudi Arabia's leading electronics retailers.

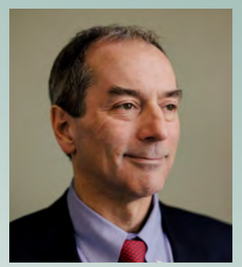
P. Venkat, Managing Director of Abdul Latif Jameel Electronics said "Redsea is a one-stop shop for electronics, appliances and air-conditioning that provides premium and quality global brands at affordable prices."

"We empower you to shop in a way that suits you, anywhere, anytime and anyhow. You'll experience a new standard of service, giving you the assurance that you made the best choice and received the best value possible," he concluded.

Redsea will focus on electronics, home appliances and air-conditioning products, combining the experience and knowledge of Abdul Latif Jameel Electronics to ensure it delivers a simple and memorable experience to customers across the country.

Simply Inspiring Experiences

J-WAFS: How smart investment is forging answers to one of mankind's biggest challenges



Dr. John H. Lienhard V, PhD, PE Director,
Abdul Latif Jameel World Water and Food Security Lab at Massachusetts Institute of Technology

J-WAFS Abdul Latif Jameel World Water and Food Security Lab

Over the next 80 years, the world's population is set to grow at an unprecedented rate. By 2030, the United Nations predicts the global population will reach 8.5 billion – a rise of 1.2 billion in just 15 years from 2015. Forecasts go on to predict a population of 9.7 billion by 2050, and then 11.2 billion by 2100[1].

These figures are startling, not only because the rate of population growth is so high, but also because much of this growth is expected to take place in the parts of the world that are already struggling to meet the food and water needs of the current population. The inevitable pressures on our planet, including dramatic changes in land use and impact on the environment, only magnify the food and water security challenges, as they are integrally connected.

Securing access to clean water is already one of the biggest challenges faced by governments around the world. Although 70 percent of the world is covered by water, only 0.007 percent of that is readily available as useable freshwater for human consumption[2]. Approximately 20 percent of the world's current population live in areas where water is scarce[3]. Increasing pressures on already limited resources mean another 500 million people are approaching this situation.

Worryingly, the outlook could get worse. Almost a quarter of the world's population live in countries that have adequate natural water supplies, but do not have the infrastructure needed to purify and distribute water from rivers and aquifers.

As populations in these countries grow, the combined effects of water scarcity and economic water shortages mean that by 2025, two-thirds of the world could be living under conditions of 'water stress'.[4]

Alongside this, World Bank data[5] suggest that at least 50 percent more food production will be needed by 2050, at a time when climate change is expected to have significant impacts on water availability and crop yields in the many of the most vulnerable parts of the world.

The current situation is clearly not sustainable.

The Middle East Impact

It is not hard to imagine that the Middle East, North Africa and Turkey (MENAT) region – already the world's driest region and home to 12 of the world's most water-scarce countries – could be at the forefront of any impending food and water crisis. Such a scenario would likely result in profound societal and economic impacts.

The World Bank believes that water scarcity could be a major driving force behind migration, possible conflict, and increased food prices over the next 30 years.

The World Bank says that volatile food prices are already "the new normal," and suggests that high food prices lead to poor families "pulling their children out of school and eating cheaper, less nutritious food. This can have severe life-long effects on the social, physical, and mental well-being of millions of young people."[6]

Water scarcity, meanwhile, has a direct effect on people's employment prospects. The United Nations estimates that almost 80 percent of the world's active workforce is in jobs either heavily water-dependent (such as agriculture, forestry, inland fisheries, food and power generation) or moderately water-dependent (such as construction, recreation, transportation, and manufacturing).[7]

For the Arab region, water scarcity has a particular impact in rural areas, where the depletion of groundwater resources is one factor contributing to falling income levels. Water scarcity is also cited, alongside poor agricultural productivity and low levels of irrigation efficiency, as having a direct effect on job creation and retention in the region's rural areas.[8]

No Time for Complacency

It is arguable that the urgency and scale of the problems presented by water scarcity and food security are yet to receive full public discussion. Neither issue has entered mainstream discourse in the same way that climate change has, for example. For a significant number of the world's population, these are underappreciated challenges. However, they are not problems that can be ignored.

Attempts have been made to address the issues, however, the turnaround has been delivered by building energy-intensive desalination plants. So rather than depleting its freshwater reserves, the country is now consuming increased levels of fossil fuels to secure its water supply – which is clearly not a long-term answer.

Addressing these pressing problems requires an altogether different approach; one that combines world-class research and innovation with global investment and implementation.

Investing in Sustainable Future Success

In 2014, Mohammed Abdul Latif Jameel established the Abdul Latif Jameel World Water and Food Security Lab (J-WAFS) with a major endowment at the Massachusetts Institute of Technology (MIT) in the United States, and in 2015 Community Jameel (the sustainable social enterprise arm of Abdul Latif Jameel) made another substantial award to launch the J-WAFS Solutions Program.

J-WAFS harnesses the knowledge and experience of some of the world's leading experts and innovators to research, develop, and commercialize the next generation of technologies to tackle water supply and food security issues.

J-WAFS is aligned with the rather unique Community Jameel vision to "help communities help themselves" by striving to address societal issues at their source rather than simply alleviate the symptoms. J-WAFS is honored to have the support of Mohammed Jameel, himself a noted MIT alumnus. Thanks to his vision and backing, the lab is able to bring together faculty and students across a range of disciplines including engineering, science, urban planning, management, and social science. The lab provides funding for faculty, postdocs, and

[1] www.un.org
[2] www.nationalgeographic.com
[3] www.un.org
[4] unwater.org
[5] worldbank.org
[6] worldbank.org
[7] unesdoc.unesco.org
[8] unesdoc.unesco.org

students, to advance new technologies to the point where they are positioned to attract venture funding and form the basis for new companies. The lab will also pursue international partnerships.

J-WAFS awards seed grants of US$ 100,000 per year for up to two years for innovative research that has the potential to have significant impact on issues of water and food supply. Seventeen projects are currently active, addressing issues ranging from electro-chemical separation process for contaminated water, to using fungal yeasts to convert waste to food.

With the additional support from Community Jameel in 2015, the reach of J-WAFS was extended further with the launch of the J-WAFS Solutions program. Managed through a partnership with the MIT Deshpande Center for Technological Innovation, the J-WAFS Solutions program aims to help MIT faculty and students commercialize breakthrough technologies by transforming promising ideas into innovative products and cutting-edge spinout companies.

J-WAFS Solutions has the mission of moving water and food technologies from labs at MIT into the commercial world, to help improve the productivity, accessibility, and sustainability of the world's water and food systems.

J-WAFS Solutions provides grants annually to MIT teams through a competitive application process with a focus on technologies that can address major food and water problems. To date, six projects have been funded and one spinout company is already being launched. Developing technologies as varied as inexpensive water filters for rural India and sensors that can detect bacterial contaminants in meat, these projects aim to improve lives across the world.

In the following paragraphs, we take a look at just a small selection of some of these initiatives.

Making Desalination Sustainable
The research projects and developments funded by J-WAFS Solutions are varied, but each aims to contribute to a shared goal.

A team lead by Gang Chen, Carl Richard Soderberg Professor in Power Engineering and head of the Department of Mechanical Engineering at MIT, for example, is aiming to develop an economical technology for desalination on a distributed scale.[9]

As freshwater reserves deplete around the world, several regions are increasingly relying on desalination to boost water supply. However, traditional desalination processes are both costly and energy intensive. Finding a clean, efficient way to conduct desalination is, therefore, of huge environmental and commercial interest, and Gang Chen's innovation offers significant hope.

The team is developing a special tarpaulin structure (a Wavelength-selective, Insulating-thermally, Solar-powered Still, or 'WISPS') that can float on the surface of oceans and lakes to generate freshwater onsite.

Easy to install and made with commercially available materials, the WISPS structure features several characteristics that can harness solar power to fuel the desalination process. By combining WISPS with a simple water condensation system, Chen's innovation has the potential to deliver clean water production from seawater at low capital costs and competitive production costs.

Reducing the Impact of Air Pollution on Crop Yields
Another vital J-WAFS project is researching the impact of air pollution on crop yields.[10]

The Earth's growing human population is exerting tremendous pressure on the global food supply. Environmental stresses put food security at even greater risk. Ozone air pollution is known to damage crops, costing the agricultural sector billions of dollars in lost yields. Yet our understanding of the impact of air pollution on food production is incomplete – a situation which this project seeks to address.

By modeling and measuring crop response to air pollutants, the researchers led by Colette Heald, associate professor in the Department of Civil & Environmental Engineering, aim to estimate the impact of particulate air pollution on both present-day and 2050, crop yields. The objective is to provide the first comprehensive estimate of the food production risks associated with air pollution. The resulting analysis will provide vital new insights into the food security risks associated with air pollution and the need for local scale crop adaptation.

Safer to Drink, Safer to Eat – Monitoring Food & Water-Borne Contaminants
At the other end of the chain from food production, is, of course, consumption.

Real-time monitoring of contaminants[11] has become a priority in meeting the need for clean water; similarly, the globalization of our food supply chains has driven the need for new detection platforms that can be employed at the point of consumption. A team led by Michael S. Strano, Carbon P. Dubbs Professor of Chemical Engineering; and Anthony J. Sinskey, Professor of Microbiology and Health Sciences & Technology conceived and developed an integrated platform that brings together many isolated individual contaminant detection techniques into a single portable point-of-consumption use that can simultaneously test for bacteria, heavy metals, and/or allergens.

Leading the Global Conversation
J-WAFS is not simply a vehicle to provide financial support to research projects, however. The lab is now a global leader in the field of water scarcity and food security, and

[9] jwafs.mit.edu
[10] jwafs.mit.edu
[11] jwafs.mit.edu

plays an active role in the academic and commercial community trying to tackle these challenges.

In October 2016, J-WAFS paired with the Global Clean Water Desalination Alliance (GCWDA) to host a low-carbon desalination expert workshop. Invited experts from 11 countries came to MIT to discuss the latest advances and best strategies for reducing the energy requirements and carbon footprint of desalination.

Maria Zuber, MIT's Vice-President for Research, addressed the workshop participants, noting that the work being done at the workshop was "crucially important." The attendees prepared a report[12] that was delivered during the 22nd session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP22), held in Marrakesh, Morocco, in November 2016.

J-WAFS's ability to support water and food research at MIT has recently been further advanced by the signing of its first corporate research affiliate agreement. Xylem Inc., a global water technology company with operations in more than 150 countries, will sponsor research projects over the duration of the three-year agreement with J-WAFS. Xylem will also support the MIT Water Club, a student network for water research and innovation actives. By partnering with Xylem, J-WAFS promotes meaningful collaborations around real-world challenges by bringing to MIT a partner with exceptional experience in the water sector.

Building a Better Future

Water scarcity and food security are without doubt two of the biggest challenges humankind has ever faced. Solving them will require investment and collaboration on a global scale. New technologies will need to be developed. Governments will need to collaborate with academia and the private sector with the understanding that the health, prosperity, and economic security of most of the world's people is at risk if solutions are not found.

Ban Ki-moon, former Secretary-General of the United Nations, said:

> "Water is essential to decent jobs and sustainable development. Now is the time to increase investments in protecting and rehabilitating water resources, including drinking water, as well as sanitation."[13]

His assessment is shared by all at Community Jameel and J-WAFS. We must work together to push forward with innovations and ideas to deliver safe and secure food and clean and renewable water supplies, both in the Middle East and in the wider world.

By doing so, we can help to develop the innovative technologies and partnerships necessary to secure the future of our communities, the sustainability of our cities, and the prosperity of our economies for decades to come.

[12] jwafs.mit.edu
[13] unesdoc.unesco.org

Next generation of Saudi entrepreneurs revealed

MIT Enterprise Forum (MITEF) Saudi Arabia has announced the winners of the prestigious MITEF Saudi Arabia competition for up-coming entrepreneurs.

The judging panel of business experts and academics from Saudi Arabia and beyond assessed entrants' business models according to criteria such as innovation, scalability and social impact.

In the Start-up category, the winner was Madad Services LLC, which received SAR 100,000; runner-up iBoat received SAR 25,000; and third place Nushmi Services received SAR 15,000.

In the Social Enterprise category, the winner, Tadweer, received SAR 100,000; runner-up Banafsajeel received SAR 25,000; and third place Ketaby Lak Application received SAR 15,000.

The final category was Ideas.
The winner was Aquaponica, which received SAR 20,000; runner-up Stitches False Wall, received SAR 15,000; and third place Packageha won SAR 10,000.

Selected from 2,200 entrants, all nine teams will now advance to the 10th MITEF Pan Arab competition, to be held in Bahrain in April 2017.

MITEF Saudi Arabia, established in 2015, is part of the MITEF Global network of chapters dedicated to promoting entrepreneurship and innovation worldwide. It also seeks to provide knowledge, communication, and training for entrepreneurs, enabling them to quickly turn ideas into world-changing companies.

Now in its second year, it is organized in partnership between Community Jameel's Bab Rizq Jameel initiative and Zain Saudi Arabia.

Dr. Sarah Ghaleb, Senior General Manager, Education and Entrepreneurship Initiatives at Community Jameel, and project manager of the program, praised the role of government organizations and private companies in accelerating development in entrepreneurship. She said: "The slogan of MITEF Saudi Arabia is 'You are Tomorrow' because when we create new entrepreneurs we contribute to developing the solid foundation for tomorrow's economy."

This year's contest culminated in agreements between Bab Rizq Jameel and some of the companies that are considered leaders in entrepreneurship; and between Bab Rizq Jameel and Prince Mohammed bin Salman College, through which scholarships and training will be provided for this year's winners.

Abdul Latif Jameel, Toyota and NICDP to study feasibility of automotive production in Saudi Arabia

The Saudi Arabian National Industrial Cluster Development Program (NICDP) and Toyota Motor Corporation (Toyota) have agreed to work together on a feasibility study for an industrial project to produce vehicles and parts in Saudi Arabia.

Abdul Latif Jameel, as the local distributor for Toyota, will also be taking part in the feasibility study.

H.E. Dr. Ibrahim Al-Assaf on behalf of H.E. Khalid Al-Falih, Minister of Energy, Industry and Mineral Resources, Chairman of the Board at NICDP, signed a memorandum of understanding (MoU) with Takeshi Uchiyamada, Chairman of the Board at Toyota, in Tokyo, as part of the Custodian of the Two Holy Mosques King Salman bin Abdulaziz Al Saud's recent visit to Japan.

Signing the MoU is part of NICDP plans for developing a globally competitive automotive industry in Saudi Arabia. It is one of several agreements between Saudi and Japanese businesses over the past few months, following the launch of the Saudi Japan Vision 2030 initiative, which aims to serve as a platform for increased cooperation and exchange among businesses from Saudi Arabia and Japan.

H.E Dr. Ibrahim Al-Assaf, Mr. Takeshi Uchiyamada, and Mr. Mohammed Abdul Latif Jameel

The NCDIP/Toyota study will include an evaluation of the potential to develop a local supply base using materials produced by major Saudi companies like Sabic, Maaden, Petro Rabigh, and other major industrial companies in the country. It will also study the development and attraction of a suitably skilled local workforce, include training programs.

Toyota remains the leader in the Saudi Arabian and GCC car markets with more than 500,000 units sold in GCC in 2016.

Saudi Japan VISION 2030
2030 الرؤية السعودية اليابانية

New Westinghouse distribution deal

Abdul Latif Jameel Electronics has been appointed as the distributor of Westinghouse commercial heating, ventilation and air-conditioning (HVAC) units in Saudi Arabia. The complements the existing portfolio of Abdul Latif Jameel Electronics bringing the very latest heating and ventilation technology solutions to Saudi businesses.

For more than 130 years, Westinghouse has been at the cutting edge of technology and innovation. Founder George Westinghouse was a prolific inventor. The company was responsible for the first self-defrosting refrigerator in the 1950s and the lunar camera that captured Neil Armstrong's first steps on the moon in 1969.

Swedish home appliances hit Saudi Arabia

Consumers across Saudi Arabia will soon be able to fill their homes with sleek Scandinavian design with Swedish home appliances, after Abdul Latif Jameel Electronics was appointed the country's official distributor of Electrolux electronics and home appliances.

Established in 1919, Electrolux is a global leader in home appliances, offering thoughtfully designed, innovative and sustainable solutions for households and businesses, with products such as refrigerators, dishwashers, washing machines, cookers, vacuum cleaners, air-conditioners and small domestic appliances to over 150 countries.

The first products will be made available in Abdul Latif Jameel Electronics' new Redsea branded showrooms, with more details about the agreement and an official grand launch of the new product range set to be revealed later in the year.

Abdul Latif Jameel Energy makes waves with launch of Almar Water Solutions

Abdul Latif Jameel Energy has continued its expansion and diversification strategy by establishing Almar Water Solutions, a provider of specialist expertise in water infrastructure development.

Mohammed Abdul Latif Jameel, Chairman and CEO of Abdul Latif Jameel, said:
"The establishment of Almar Water Solutions demonstrates our continued efforts to become the leading developer of sustainable energy and water solutions."

The announcement was made at the World Future Energy Summit (WFES) in Abu Dhabi in January. Almar Water Solutions aims to tackle the challenges of water scarcity and contamination. Its launch is a further development for Abdul Latif Jameel Energy's renewable energy portfolio, which already includes Fotowatio Renewable Ventures (FRV) – the largest GCC-based solar photovoltaic provider.

Roberto de Diego Arozamena, Chief Executive Officer of Abdul Latif Jameel Energy, said:
"Through the establishment of Almar Water Solutions, Abdul Latif Jameel Energy is uniquely positioned with both our renewable energy and water treatment solutions."

Leading Saudi Arabia's renewable energy revolution

As the global population grows and urbanization continues, Governments around the world are transforming their thinking on how best to meet their future energy needs.

According to the United Nations, the global population will reach 8.5 billion by 2030 – up 1.2 billion from 2015. This figure is predicted to increase to 9.7 billion by 2050 . At the same time, more people are living in urban areas. The United Nations Department of Economic and Social Affairs predicts that the proportion of urban population will increase to around 66 percent by 2050[1], up from 30 percent in 1950. In Saudi Arabia, the figure is dramatically higher, at just under 90 percent by 2050[2].

This high rate of population growth and urbanization inevitably poses big questions for the sustainability of our societies and the ability of our planet to support to such vast numbers of people living in close quarters. In particular, it creates unprecedented pressures on energy demand and supply.

Energy demand in the Middle East, North Africa and Turkey (MENAT) region is set to grow seven percent annually until at least 2020, while the Oxford Institute of Energy Studies expects energy consumption in Saudi Arabia to treble by 2030.

Not only is this growth unsustainable in terms of resources, it is generally accepted that emissions from fossil fuels like coal, oil and gas are material contributors to climate change and damaging to our natural environment.

Water security – an added complication
In the MENAT region, the problems are further complicated by the issue of water scarcity. More than half of the region's population live under conditions of 'water stress', where demand outstrips supply[3].

Saudi Arabia's Vision 2030 recognizes the importance of water scarcity, committing the country to promoting "the optimal use of our water resources by reducing consumption and utilizing treated and renewable water".

Historically, one of the key solutions to water scarcity has been desalination – facilities that turn sea water into drinking water. However, the current approach to desalination is not sustainable. It is energy intensive, relies on abundant oil, and comes at enormous environmental cost. Desalination plants worldwide emit an estimated 76 million tons of carbon dioxide per year, a figure that is expected to treble by 2040.

Renewables the answer?
Against this backdrop, Saudi Arabia is increasing its focus on renewable energy as a cornerstone in building the solution to the current unsustainable energy model. It is not hard to see why: Saudi's climate makes it an ideal location for both solar and wind energy projects, and this opens significant investment opportunities in the energy sector to power domestic economic and technology-skills development.

The Government set a target of delivering 9.5GW of renewable energy by 2030, as part of its Vision 2030 and 3.5GW by 2020[4] as a strategic objective of the National Transformation Plan[5] agenda, and is encouraging private sector investment to accelerate and underpin the achievement of this goal. The potential savings are significant, with research suggesting that fulfilment of these targets could cut power sector fossil fuel consumption by 25 percent by 2030[6].

Saudi Energy Minister H.E. Khalid Al Falih, speaking at the recent World Future Energy summit in Abu Dhabi in January 2017, raised the bar even higher, bringing forward the 9.5GW target date to 2023, via a combination of solar, wind and geothermal power projects.
The Government formally fired the starting gun on these plans last month, inviting bids for a new program to build wind and solar power plants aimed at generating 700MW of power.

Reduced costs, cleaner air, more jobs
As well as the potential to attract significant investment into Saudi Arabia, renewable energy could provide GCC countries with savings of up to US$ 87 billion and cut up to one gigaton of carbon emissions[7].

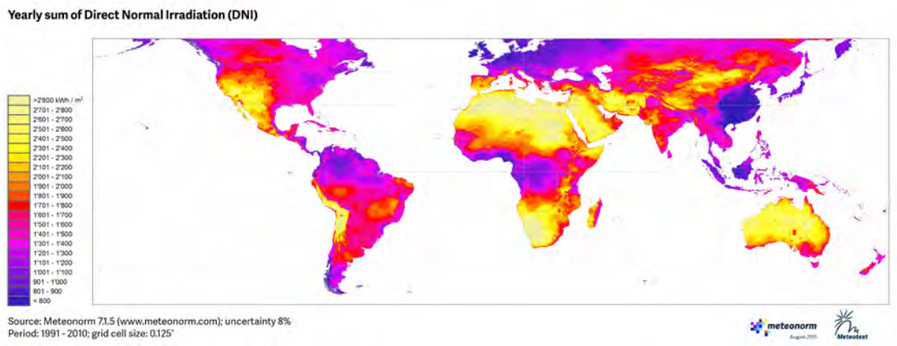
The expansion of the renewables sector should also have a positive impact on jobs, skills and training in the country. The number of jobs supported by the global renewable energy industry is set to triple by 2030, with a potential for up to 80,000 of those in Saudi Arabia alone[8].

Omar Al-Madhi, Senior Managing Director at Abdul Latif Jameel Investments and Chief Executive Officer at Abdul Latif Jameel Energy Saudi Arabia, one of Saudi Arabia and the GCC's leading renewable energy producers, believes the benefits of renewable energy are ever more compelling. **"Renewable energy presents the potential to create new jobs, new skills and new opportunities for the local population. By localizing technology and transferring knowledge, we can provide a strong foundation on which the Saudi renewables industry can thrive,"** he says.

Delivering sustainable desalination
Renewable energy could also be a major step towards developing sustainable desalination plants to help address the challenges of water security, by co-locating renewable energy power plants alongside desalination plants.

Although new technologies are making desalination more efficient, they are still at the early stages of development. Renewable technologies such as solar thermal, solar photovoltaics (PV), wind, and geothermal energy, however, can provide a much more immediate solution.

[1] World Population Prospects: 2015 Revision, Department of Economic and Social Affairs, United Nations.
[2] World Urbanization Prospects: 2014 Revision, Department of Economic and Social Affairs, United Nations.
[3] High and Dry: Climate Change, Water and the Economy, World Bank, May 2016.
[4] vision2030.gov
[5] vision2030.gov
[6] Renewable Energy Market Analysis: The GCC Region, International Renewable Energy Agency, 2016.
[7] Clean Energy in the GCC, Orient Planet Research, 2017.
[8] Renewable Energy Market Analysis: The GCC Region, International Renewable Energy Agency, 2016.



What are the best renewable energy opportunities for Saudi Arabia?
With its climate and topography, the three renewable energy technologies with the most potential to transform energy production in Saudi Arabia are:

- **Solar:** With its sunny climate and vast stretches of flat land, Saudi Arabia is an ideal location for solar power plants. It possesses one of the highest solar irradiation locations on Earth and it already has much of the expertise and infrastructure to connect solar power into the grid. As the technology behind solar panels develops and becomes more suitable to Saudi Arabia's environment, the country's potential is undoubtedly enormous.
- **Wind:** The country's wind energy potential is often underappreciated, but no less powerful. Three Saudi regions are particularly suitable for wind energy, which becomes economically viable at average wind speeds of six meters per second. In the country's northeast and central regions, as well as those near mountains in the west, average wind speeds are around eight meters per second.
- **Geothermal:** Saudi Arabia is home to at least ten hot springs suitable for geothermal power generation. They are mainly found in the country's western region. Al Khouba hot spring is considered the country's most important potential geothermal resource.

Global experience to power Saudi Arabia's renewable future
In response to this changing landscape of energy challenges and opportunities, Abdul Latif Jameel, one of the country's leading diversified mutilnationals, established Abdul Latif Jameel Energy in 2012, to support the Saudi Government in achieving its vision for a more sustainable future meeting the country's energy needs.

Through its solar and wind energy developer, FRV, which it acquired in 2015, Riyadh-based Abdul Latif Jameel Energy has gained over ten years of proven international capability in renewables from developing to mature renewables markets. It has a 4.8GW development portfolio in solar markets across the Middle East, Australia, Africa, and Latin America – enough to supply electricity to approximately 2.2 million homes and remove more than six million tons of CO^2 emissions.

As the Saudi Government's plans for renewables start to come to fruition, Abdul Latif Jameel Energy is ideally positioned to transfer its renewable energy experience to its home market, upskilling the population and taking advantage of the hard-won expertise it has gained through developing renewable energy projects across the world to offer a significant 'fast-start' in delivering the country's vision.

Omar Al-Madhi said: **"As an organisation, Abdul Latif Jameel Energy is in an advantageous position. We have the international know-how for solar and wind development because we have developed projects outside Saudi Arabia, extending as far as Uruguay in the west and Australia in the east. That allows us to use our experience to benchmark against best practices that are applied in different markets."**

"What also truly differentiates us against other developers is that we're a truly Saudi-centric organisation; Saudi Arabia is our home, this is where we began, and this is where we have built a reputation for operational excellence and outstanding customer service. When you combine our international experience, technical know-how and the values of Abdul Latif Jameel, you have a great formula for success."

Capitalising on its expertise in solar and wind power, in January 2017, Abdul Latif Jameel Energy announced the establishment of Almar Water Solutions. This leading-edge water developer and services provider specialises in water infrastructure development, addressing the water security needs of growing populations through a sustainable program of desalination, water and waste water treatment, and recycling and reuse initiatives.

Almar Water Solutions has already begun to explore co-located development of renewable power generation and reverse osmosis desalination to minimize the carbon footprint of the desalination process.

Experience where it matters
Abdul Latif Jameel Energy's expertise in the renewable energy sector is demonstrated by many landmark projects around the world.

Through FRV, it developed Uruguay's first large-scale solar power plant, La Jacinta. A key part of the Uruguayan government's policy to promote solar power, La Jacinta is one of the largest solar PV projects in Latin America. It supplies 64MW of power to the state-owned electricity company and its impact is considerable. Approximately 35,000 Uruguayan homes are now powered entirely by the solar energy harnessed at La Jacinta, while almost 75,000 tons of annual CO^2 emissions have been eliminated.

The company is also supporting Jordan's program of renewable energy expansion, fully developing two 65MW solar PV power plants in Mafraq and co-developing a third. The first plant, which is due to start operations in 2017, will represent one percent of Jordan's overall generation capacity and power more than 40,000 homes in the country. The carbon emissions it eliminates will be equivalent to removing approximately 17,000 cars from Jordan's roads.

In Australia, another landmark FRV project is Moree Solar Farm in New South Wales, which comprises 223,000 tracking solar PV modules and generates enough energy to supply roughly 24,000 homes. The project also provides a further example of the technological innovation that Abdul Latif Jameel Energy can bring to Saudi Arabia, with Moree Solar Farm being the first large-scale Australian solar project to use a single-axis tracking system. This system guarantees maximum efficiency in solar energy production by ensuring the PV modules follow the sun's path from east to west as the day progresses.

Abdul Latif Jameel Energy's track record for innovation is not confined to solar energy. Almar Water Solutions has pre-qualified for a number of major water projects across the MENAT region, including flagship projects at King Abdullah Economic City (KAEC) in Saudi Arabia and with the Federal Electricity and Water Authority (FEWA) in the United Arab Emirates.

Making it work in MENAT
By leveraging the potential knowledge transfer available from Abdul Latif Jameel Energy's experiences around the world, Saudi Arabia can cement a strong position in an ever-changing energy sector and continue to make strides in its bid to meet the ambitions laid out in Vision 2030.

The company has built-up a globally-proven skillset from both mature and developing renewable energy markets. Now, it is ideally placed to bring the best knowledge and experience from around the world to help drive the growth and development of Saudi Arabia's renewable energy sector.

Omar Al-Madhi says: **"What excites me most about the current renewable energy situation in Saudi Arabia, is that we have the opportunity to participate in the development of a significant new area of sustainability for our country."**

"We firmly believe Saudi Arabia can be a reliable and significant energy supplier to the world in the renewable energy era, just like it has been a reliable global supplier in the hydrocarbon era."

"We have the fundamental requirements for achieving a leadership role, whether that's location, an abundance of land, or irradiation numbers. By taking the best of proven technology and expertise from renewables projects across the globe, and combining them with vision, innovation and commitment, the renewable energy sector could be a platform for a more sustainable, more efficient and more secure future for Saudi Arabia."

Renewable energy: what are the options?

Solar power – Solar panels turn energy from the sun's rays into energy. There are two main types: solar thermal and photovoltaic (PV). Solar thermal panels use the sun's energy to heat water. PV panels turn the sun's energy directly into electricity.

Wind power – Generated by using the flow of air through wind turbines to mechanically power generators that create electric power, wind power is clean, uses little land and creates no greenhouse gas emissions.

Geothermal power – By using the heat energy stored in the Earth, geothermal power can be generated with only five percent of the greenhouse gas emissions of traditional coal-fired plants.

Abdul Latif Jameel Energy celebrates three solar achievements down under

Fotowatio Renewable Ventures (FRV), part of Abdul Latif Jameel Energy, is celebrating three significant successes in its operations across Australia.

In Queensland, FRV has signed a power purchase agreement (PPA) with Ergon Energy for the Lilyvale Solar Farm. The Queensland government-owned electricity retailer will purchase 100 percent of the electricity generated by the 100 MWac (125 MWdc) project.

The agreement will run until the end of the Renewable Energy Target (RET) scheme in 2030. Rafael Benjumea, CEO of FRV, said: **"By using commercially-proven, single axis tracking technology, FRV will provide Ergon with greater commercial value by maximizing electricity output over longer periods in the day."**

FRV has also secured a US$ 200 million funding agreement for the Clare Solar Farm. Construction is expected to be complete by early 2018, with the plant set to provide enough power for 42,000 homes. The funding agreement makes the project the first utility-scale facility in Australia to secure financing without an additional government grant.

Further south, in New South Wales, FRV has also officially opened the Moree Solar Farm. The Moree Solar Farm played an important role during the region's recent heat wave in February 2017, operating at close to 100 percent while electricity demand in New South Wales approached record highs.

Omar Al Madhi, CEO of Abdul Latif Jameel Energy Saudi Arabia, said: **"These successes show the competitiveness of solar power, and our expertise in this field. Expertise which we will bring to play in the rapid development of our home market as we continue pushing the boundaries of renewable technologies around the world."**

FRV, a global leader in photovoltaic energy, was acquired by Abdul Latif Jameel in 2015.

Hybrid vehicles set for a bright future across the MENAT region

The global market for hybrid vehicles is expected to grow 16 percent annually between 2017 and 2022[1]. The market was valued at almost US$ 103 billion in 2015. It is expected to be close to US$ 400 billion by 2024. The MENAT region, alongside Asia Pacific, Africa, and Latin America, is set to be key area for future growth and development in this exciting industry[2].

It is not hard to understand why the latest generation of hybrid vehicles is proving so attractive for consumers around the world, including in the Middle East, North Africa and Turkey (MENAT).

Hybrid vehicles reduce the cost of travel by combining electric motors with gasoline engines to produce enhanced fuel efficiency. They are an excellent way of countering rising energy prices, increasing levels of air pollution, and global warming. These benefits are already leading to a change in consumer attitudes, which is expected to accelerate in the coming years.

The Middle East's automotive market is ripe for the development and introduction of new 'clean vehicle' technologies, with several governments across the region launching policies and initiatives to encourage the use and production of hybrid cars.

In the UAE, for example, Dubai Electric and Water Authority has installed 100 electric-vehicle charging stations, while Toyota's Camry hybrid vehicles are already being used as taxis by several operators in both Dubai and Abu Dhabi. In fact, Dubai's Roads and Transport Authority has also announced ambitious plans for half of the emirate's cabs to be hybrid vehicles by 2021.

In Morocco, the government announced last autumn that it would remove customs duties for hybrid and electric vehicles, as part of a package of changes aimed at promoting eco-friendly cars. The ultimate aim is to reduce CO^2 emissions by 12 percent and allocate 10 percent of the automobile market to electric cars by 2030.

These ambitions received a boost in November 2016 when Toyota Du Maroc, part of Abdul Latif Jameel Motors, signed a three-year agreement with Wafa Assurance. Under the deal, Toyota will provide a hybrid vehicle as a replacement car to all Wafa customers whose car needs repairing after an accident. During COP22 earlier this year, the benefits of hybrid vehicles received another high-profile boost with the UberGREEN initiative, which saw 12,000 taxi trips taken in hybrid Toyota vehicles during the event.

Similarly in Turkey, where Abdul Latif Jameel has been operating since 1998, the government announced measures in September 2016 to reduce the tax on hybrid cars. Under the new regulations, hybrid cars can enjoy a tax reduction of up to 50 percent, depending on the engine capacity and power of the electric motor. The incentive is intended to increase the use and production of hybrid cars in the country.

Abdul Latif Jameel's Toyota operations have already achieved measurable success in bringing hybrid vehicles to the forefront of public life in Turkey. 11 Toyota Yaris hybrid cars are currently used for public transport by Tepebaşi, a municipality and district governorate in Eskişehir, the first time a municipality has chosen hybrid vehicles for public transportation. While in November 2016, Toyota's C-HR hybrid car entered production at its Sakarya plant, creating up to 1,000 jobs. The C-HR is the first hybrid car to be manufactured in Turkey.

The C-HR is not the only Toyota hybrid grabbing attention across the MENAT region. In December 2015, Abdul Latif Jameel launched the Toyota Prius in Saudi Arabia, aiming to build on the car's 3.5 million sales worldwide and help reduce emissions across the country.

Hassan Jameel, Deputy President and Vice Chairman of Abdul Latif Jameel, said: "Based on a heritage of more than 60 years of successful relations with Toyota Motor Corporation (TMC), we are proud to share TMC's lead in the innovative development of hybrid vehicles."

Abdul Latif Jameel also supported Lexus on a tour of universities in Saudi Arabia, aiming to raise awareness and change preconceptions of 'green cars', particularly at the luxury end of the market. More than one million hybrid Lexus cars have already been sold worldwide.

> "We fully expect the demand for hybrid cars to continue increasing across the MENAT region, just as it has in Europe and North America. It is not only because they are more fuel efficient and therefore reduce costs, but also due to the desire of drivers to be more environmentally responsible. Governments across the region are also helping to change attitudes with policies designed to increase the appeal of hybrid vehicles. Abdul Latif Jameel – with its longstanding relationships with Toyota and Lexus – is well placed to support these efforts and bring the benefits of hybrid technologies to a much wider audience."
> Hassan Jameel

[1] Global Micro-Hybrid Vehicles Market – Forecasts and Trends (2017-2022), Mordor Intelligence, March 2017
[2] Hybrid Vehicles Market - Global Industry Analysis, Market Size, Share, Growth, Trends and Forecast 2016–2024, Transparency Market Research, February 2017.

Global industry awards recognise customer-centric approach by ALJ Finansman Turkey

Abdul Latif Jameel is celebrating after its finance operation in Turkey, ALJ Finansman A.S., was recognized at the prestigious annual Global Banking and Finance Review Awards.

The Turkish finance company won the award for 'Best Automated Auto Financing Credit Management System in Turkey'. Representatives from the company were on hand at the glittering ceremony in London, UK, to collect the trophy in front of leading industry figures from around the world.

ALJ Finansman A.S. combines innovative processes, a strong technical infrastructure, expertise in automotive finance operations, customer-centric financing processes, robust risk management solutions, and an all-in-one credit platform.

The Global Banking and Finance Review Awards were launched in 2011.

Toyota Turkey receives automotive distribution association award

Toyota Turkey has been recognized for the success of its launch campaign for its new C-HR vehicle in Turkey.

The award was presented at the 7th Sales and Communication 'Gladiators Awards' of the Turkish Automotive Distribution Association (ODD). The event was held on January 5, in Istanbul, with 47 automotive brands in attendance.

Toyota Turkey won the award for its launch communication – 'Toyota C-HR, Love in every sight'. The campaign, across multiple media channels, focused on the design and driving performance of C-HR.

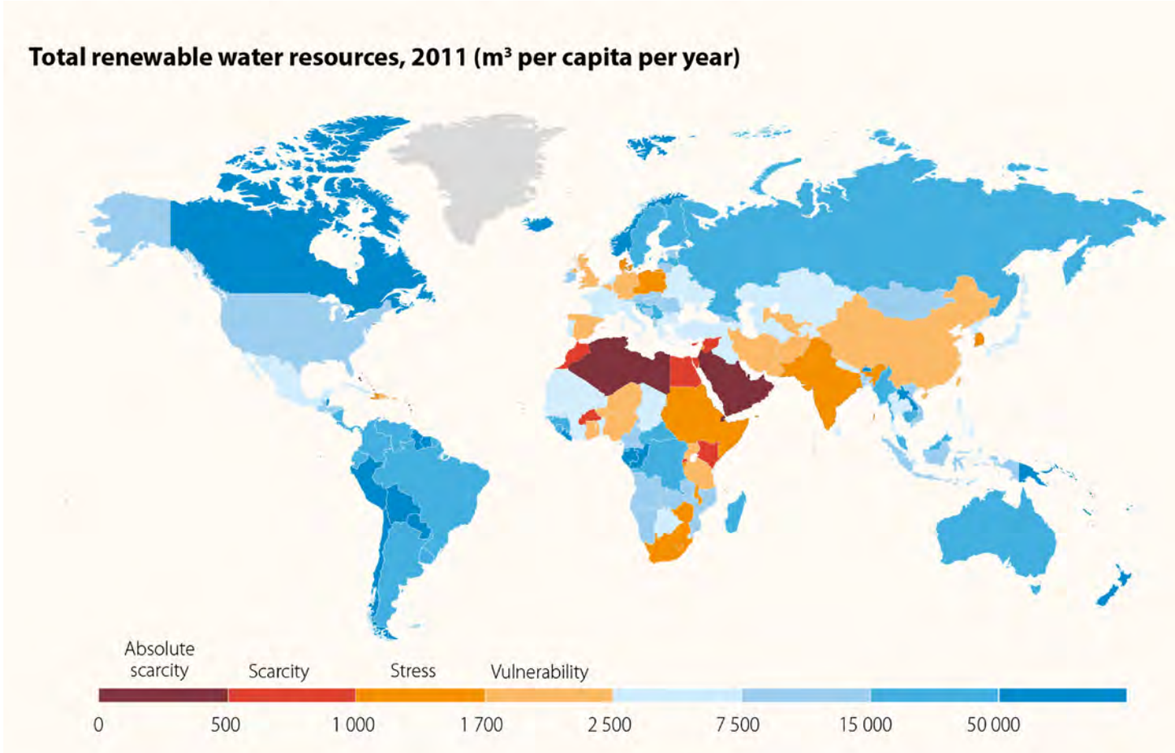
It was recognized by a panel of jurors, who made a comprehensive evaluation of the campaign, including the effect on, and response by, consumers.

Community Jameel gets recognition at PR Arabia National Auto Award ceremony

Community Jameel grabbed the Best Traffic Safety Program award at the recent PR Arabia National Auto Award 2016/2017 ceremony held in Jeddah. The ceremony's awards were presented by HH Prince Abdullah bin Saud bin Mohammed bin Abdul Aziz Al Saud, Chairman of the Tourism Committee in Jeddah, and head of Jeddah Chamber of Commerce and Industry. The award is received by Naif Abdulaziz, receiving it on behalf of Dr Osama Al Kurdi, Director of Road Safety Traffic program for Community Jameel

Water Scarcity:
Turning a regional challenge into a global opportunity

For much of 2016, the GCC has been pre-occupied by the economic impact of a liquid that comes out of the ground. Oil has long been the bedrock of regional economies. The revenues generated have built impressive cities, driven investment and modernization, and supported development across the region. However, if the GCC is to continue to grow and progress, there is another liquid to worry about – one far more important to the future of the region: water.



Source: WWAP, prepared with data from FAO AQUASTAT (aggregate data for all countries except Andorra and Serbia, external data) (website accessed Oct 2013), and using UN-Water category thresholds.

Matching Demand and Distribution

Water is fundamental to life, but ensuring a stable, sustainable supply remains a considerable challenge. Despite there being enough freshwater on Earth to support seven billion people an increasing number of regions are chronically short of water, due largely to its uneven distribution. The problem is exacerbated by hugely inefficient consumption patterns, with vast volumes of water wasted, polluted or unsustainably managed. Indeed, over the last century water use has been growing at more than twice the rate of population increase.

In the Middle East and North Africa (MENA) – the world's driest region – the problems are even more acute. More than half of the region's population live under conditions of 'water stress', where demand outstrips supply[1]. Although this is perhaps not surprising in an area containing 12 of the world's most water-scarce countries, the scale of the difference between supply and demand is alarming.

According to World Bank data, the MENA region contains 6 percent of the global population, but less than 2 percent of the world's renewable water supply[2]. It is not uncommon for the region's countries to generate renewable water per capita of less than 1,000 m^3 per year[3].

Research published by NASA and the University of California Irvine in 2013, revealed how the Middle East dramatically depleted its freshwater reserves between 2003 and 2009[4]. During this seven-year period, the volume of the region's freshwater reserves decreased by 143.6 cubic kilometers – among the largest liquid freshwater losses on the planet during this period and equivalent to almost the entire volume of the Dead Sea. In the UAE alone, the water table has dropped by around 1 metre per year over the last 30 years, and the country is projected to run out of natural freshwater resources in about 50 years[5].

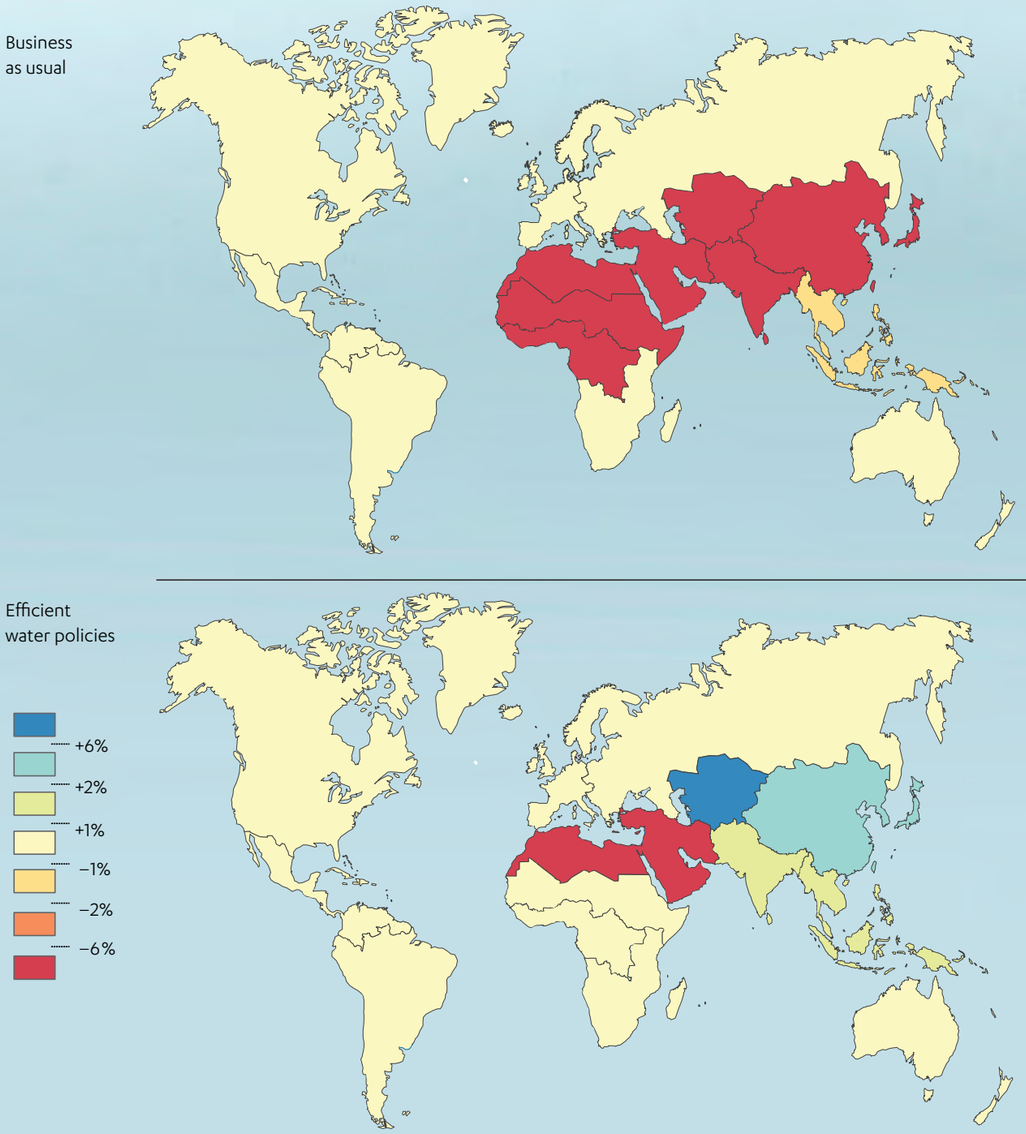
Consumption out of Control

These rapidly declining water reserves would be a serious challenge even if demand was contained. However, if we consider consumption the Middle East also has some of the world's highest rates of water consumption. Bahrain, for example, uses 220 percent of its available renewable water reserves every year, but this figure rises to 2,465 percent of renewable reserves in Kuwait[6]. In Saudi Arabia, the figure is 943 percent, with research from King Saud University estimating Saudi Arabia's daily average per capita consumption at 265 liters[7].

Water consumption is most significant in the agricultural sector, which

[1] High and Dry: Climate Change, Water and the Economy, World Bank, May 2016.
[2] blogs.worldbank.org
[3] waterworld.com
[4] blogs.worldbank.org
[5] blogs.worldbank.org
[6] blogs.worldbank.org
[7] www.arabnews.com

The Estimated Effects of Water Scarcity on GDP in Year 2050, under Two Policy Regimes



Source: World Bank calculations.
Note: The top map shows the estimated change in 2050 GDP due to water scarcity, under a business-as-usual policy regime. The bottom map shows the same estimate, under a policy regime that incentivizes more efficient allocation and use of water.

frequently accounts for 80 percent of annual demand in the region[8]. There are other factors at play, too. The growth in industrial use of water is tightening the squeeze, while urbanization and improving lifestyles continue to drive high water consumption among citizens going about their normal activities. Everyday tasks such as gardening and car washing are using considerable water resources.

The overall prognosis is not good, and it is getting worse. With the pressure on water supply set to increase yet further as population growth and the effects of global climate change take their toll, water availability per capita in the MENA region is expected to halve by 2050[9].

Commercial Impact of Water Scarcity

Water scarcity does not only have a societal impact, it also has a considerable commercial impact. It is one which is likely to increase and intensify if action is not taken.

According to the World Bank, water scarcity could cost some regions up to six percent of their GDP over the next 30 years[10]. It is also set to be a major driving force behind migration, increased food prices, and possible conflict.

The United Nations echoes these concerns. In its World Water Development Report 2016[11], it highlights its belief that reduced water availability will **"affect regional water, energy and food security, and potentially geopolitical security"**. It also cites threats to economic activity and the job market, as well as highlighting that **"the right to safe drinking water and sanitation is an internationally recognized human right... integral to the realization of other human rights"**.

A Huge Challenge – An Even Greater Opportunity

Producing enough water to support the Middle East's growing population needs huge investment in water production facilities and infrastructure, as well as the energy these processes demand.

For more than 50 years, many regional markets have relied on desalination. Around 70 percent of the world's current desalination capacity is in the Middle East, and it is growing. Saudi Arabia, for example, has earmarked US$ 24.3 billion of investment by 2020 to expand its desalination capacity.

However, the current desalination approach to water generation is simply not sustainable. It is energy intensive, relies on abundant oil, and comes at enormous environmental cost. Desalination plants worldwide emit an estimated 76 million tonnes of carbon dioxide per year. This is the equivalent of a country the size of Romania and, without substantial changes, it is expected to treble by 2040.

Finding a more sustainable approach to clean water production is therefore essential. This is not only a considerable challenge – but also a huge opportunity.

Research from the International Renewable Energy Agency (IRENA)[12] suggests that only one percent of the world's desalinated water is currently based on energy from renewable sources – an indication of the massive commercial potential for the GCC to become a world leader in this innovative technology.

Renewable Water: An Affordable Reality?

According to the International Desalination Association, the demand for desalinated water is growing by eight percent each year[13]. The cost of 'traditional' desalination is already affordable for middle-income regions and countries. The ongoing use of fossil fuels to provide the energy necessary to power traditional desalination plants, however, is simply replacing one environmental problem with another.

Instead, the focus must be on desalination powered by renewable energy. Some forward-looking global markets are already taking action in this regard. In Western Australia, for example, the state government requires all new desalination plants to use renewable energy[14] – with the result that the Perth Seawater Desalination Plant (SWRO) is powered by electricity generated by a wind farm north of Perth.

As the costs associated with renewable technologies continue to decrease, further advances in the technologies used both for generating renewable

[8] waterworld.com
[9] blogs.worldbank.org
[10] worldbank.org
[11] unesdoc.unesco.org
[12] Water Desalination Using Renewable Energy: Technology Brief, IRENA, March 2012.
[13] www.alj.com
[14] www.irena.org

energy and the process of desalination will combine to make renewable desalination much more accessible.

New technologies – including pre-treatment processes, nano-technology filtering processes, and electrochemical desalination – are also making desalination more efficient. They are still at the early stages of development, however. We must push forward both their progress and the advancement of renewable technologies suited to desalination, such as solar thermal, solar photovoltaics (PV), wind, and geothermal energy. When those advances are harnessed together, we can make a real impact on the availability of renewable water not only in the Middle East, but across the globe.

The UAE has already recognized the potential of these commercial opportunities. Last year, during Abu Dhabi Sustainability Week, an agency of the Abu Dhabi government was instrumental in launching an initiative to explore ways to reduce the carbon footprint of desalination. It was also a key player in the launch of the Global Clean Water Desalination Alliance (GCWDA). There are already reasons to be encouraged. In just five years, Abdul Latif Jameel Energy has become the largest GCC-based solar energy developer and one of the world's leading solar energy solutions developers. It has invested and grown to develop a global and diversified renewable energy offering, with a presence in more than 15 countries.

This success story, and others like it, can help transform the water industry, too, a sector where Abdul Latif Jameel Energy is actively expanding its capabilities in the drive to create more sustainable water production that meets the population's needs.

A Combined Approach

While desalination based on renewable energy is a clear route forward, this transformation cannot be done in isolation. There remains a need to continuously develop new and innovative approaches to confront the world's water challenge, with governments, industry, science and society all playing their part.

Efficiency must be one pillar in this strategy. Heavily-subsidized water rates across the GCC have created a culture where water is recklessly wasted. Increases in water tariffs are being advocated in Abu Dhabi, while the Environmental Agency Abu Dhabi (EAD) has also installed flow restrictors in 55,000 households and 5,000 public buildings[15]. A combination of practical and policy measures need to be fully considered in all countries facing 'water stress'.

Scientific development is also key. Fostering partnerships between industry and academia, through initiatives such as the Abdul Latif Jameel World Water and Food Security (J-WAFS) Lab at MIT, is crucial to help translate pioneering research into practical solutions for communities around the world.

More than US$ 2 million was invested through J-WAFS Solutions in 2016 alone. Seed grant funding of US$ 1.3 million was awarded in May 2016, followed by five further grants of US$ 150,000 each in August 2016. There are currently 17 active J-WAFS projects addressing issues ranging from electro-chemical separation process for contaminated water, to using fungal yeasts to convert waste to food. Every cent of that money is helping to tackle the major problems facing mankind over the next 50 years.

[15] www.waterworld.com
[16] www.pub.gov.sg
[17] www.waterworld.com

Governments, too, must be active in confronting a shared and pressing problem. The Middle East is already making good progress in this area. Saudi Arabia's Vision 2030 national development strategy is explicit in recognizing the importance of water scarcity, committing the country to promoting **"the optimal use of our water resources by reducing consumption and utilizing treated and renewable water"**. It adds: **"... the use of water in agriculture will be prioritized for those areas with natural and renewable water sources. We will also continue to collaborate with consumers, food manufacturers and distributors to reduce any resource wastage."**

At a regional level, the GCC is exploring the possibility of a cross-border water grid to enable water to be moved from areas of relative oversupply to those facing shortages. Sustainable 'smart' cities, at the heart of development strategies across the region, will also help communities understand and manage water consumption like never before.

Global Progress

Although there are encouraging signs across the GCC, water scarcity is a global issue and technological progress is being made around the world. It is up to GCC countries not only to keep the pace but to lead it.

Commercial opportunities are certainly available, as evidenced by Singapore's successful development of NEWater – a high-grade reclaimed water process that now forms a key part of the country's water sustainability strategy[16] . Since 2000, treated used water has gone through a three-step process, built on advanced membrane technologies, that results in ultra-clean reclaimed water. It currently provides 30 percent of Singapore's water needs, and is expected to serve 55 percent of the nation's demand by 2060.

Similarly, in 2014 the Alto da Boa Vista drinking water plant in São Paulo, Brazil, installed and launched the first ultrafiltration drinking water system in South America. The system uses high-flow membranes from Koch Membrane Systems Inc. to double the treatment capacity of the plant and enable it to handle the high algae content of water drawn from the local reservoir and clarifiers during the dry season[17].

In Baja California Sur, Mexico, Sisyan LLC is investing in photovoltaic reverse osmosis plants that provide renewable desalination[18]. And in Melbourne, Australia, a 600 m^3/day sewer-mining scheme delivered by Arup provides recycled water to three sporting venues – "making use of water that would otherwise be flushed away"[19].

It's Time to Act

The MENAT region cannot afford to be left behind by such initiatives to combat water scarcity. We have the skills and knowledge to be a global pioneer in this exciting field and benefit from the huge commercial opportunities it presents. Underlining our own commitment to becoming a global leader in the water solutions sector, Abdul Latif Jameel Energy announced the expansion of its capabilities with the establishment of Almar Water Solutions at the World Future Energy Summit 2017 held in Abu Dhabi in January. Almar Water Solutions, a provider of specialist expertise in water infrastructure development addressing the water security needs of our region's and the world's growing population through a sustainable program of desalination, water and waste water treatment and recycling and reuse initiatives. We are also exploring co-located development of renewable power generation and reverse osmosis desalination together to minimize the energy used in production and the carbon footprint of the desalination process. With an initial focus on water projects in Latin America, the Middle East, and Africa, the team has proven experience in numerous international markets. Already, Almar Water Solutions is being considered for major infrastructure projects across the MENAT region, having recently pre-qualified for flagship opportunities, including those at King Abdullah Economic City (KAEC) in Saudi Arabia and with the Federal Electricity and Water Authority (FEWA) in the United Arab Emirates.

Between 2007 and 2030, desalination capacity across the MENA region is predicted to expand from 21 million m^3 per day to almost 110 million m^3 per day. In turn, that will triple electricity demand for desalination to 122 TWh by 2030[20]. So, the potential available to those who can lead the development of renewable desalination is clear.

However, it is imperative that further rapid progress is made. By meeting the water challenge head on, and encouraging investment, innovation and partnerships across society, the GCC can put itself at the forefront of a fast-growing, innovative industry that will become increasingly vital to global development in the coming years.

[18] renewabledesalination.com
[19] arup.com
[20] irena.org

Keeping it real: alaslia.com brings more 'Genuine' choice to Saudi consumers

A new web portal providing next day delivery of genuine Toyota and Lexus parts and accessories has been launched by Abdul Latif Jameel Aftermarket Operations and Abdul Latif Jameel Toyota Saudi Arabia. The service means that Saudi motorists can be sure that they have genuine factory parts to keep their car in the optimum condition and avoid counterfeit replacements.

LEXUS GENUINE PARTS

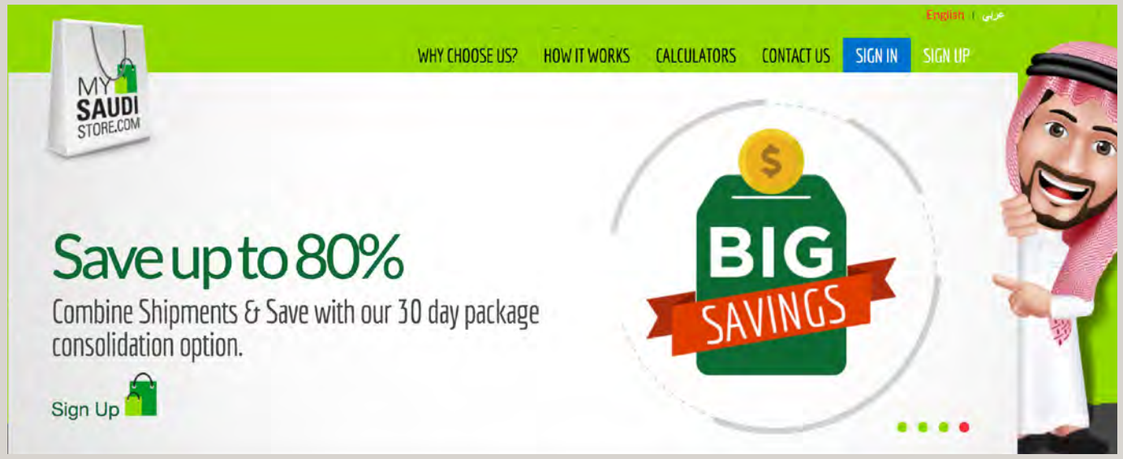
TOYOTA GENUINE PARTS

Alaslia.com means that customers are now just a few clicks away from the entire Abdul Latif Jameel Motors' Toyota and Lexus parts stock. Orders can be placed 24/7 for next day delivery across Saudi Arabia. Every product is captured in high resolution, 360-degree photographs on the site, so customers can see exactly what they are buying before placing an order.

Innovatively, Alaslia.com aims to overcome the preference for cash-on-delivery transactions in Saudi Arabia by offering a simple no-quibble returns policy, even automatically arranging the courier pick-up of returned goods. It also provides a toll-free customer service number and on-line chat, enabling it to respond promptly to customer queries and helping to build trust.

'Al Aslia' which means 'the original' in Arabic, allows stock from any Abdul Latif Jameel location to be listed and sold to customers across the country. At the same time, Alaslia.com can gain valuable insights into consumer habits and demands, including lost sales opportunities and product range refinement, allowing it to tailor its offering even more closely to customer needs.

alaslia.com



MySaudiStore.com brings US shopping convenience to Saudi Arabian consumers

The use of online shopping and e-commerce portals is one of the fastest growing retail sectors and now Saudi consumers can enjoy the convenience of shopping for big name U.S. brands hassle-free with the launch of MySaudiStore.com.

The online service, provides registered users with a U.S. mailing address, enabling buyers to shop from thousands of online American retailers. Goods are then sent to the U.S. postal address before being shipped – either individually or combined with the user's other purchases from the last 30 days – to the FedEx branch closest to the user's home in Saudi Arabia.

The launch of the service means major U.S. retailers like Target, Amazon, Sears and Best Buy are now available to Saudi Arabia's growing number of online shoppers.

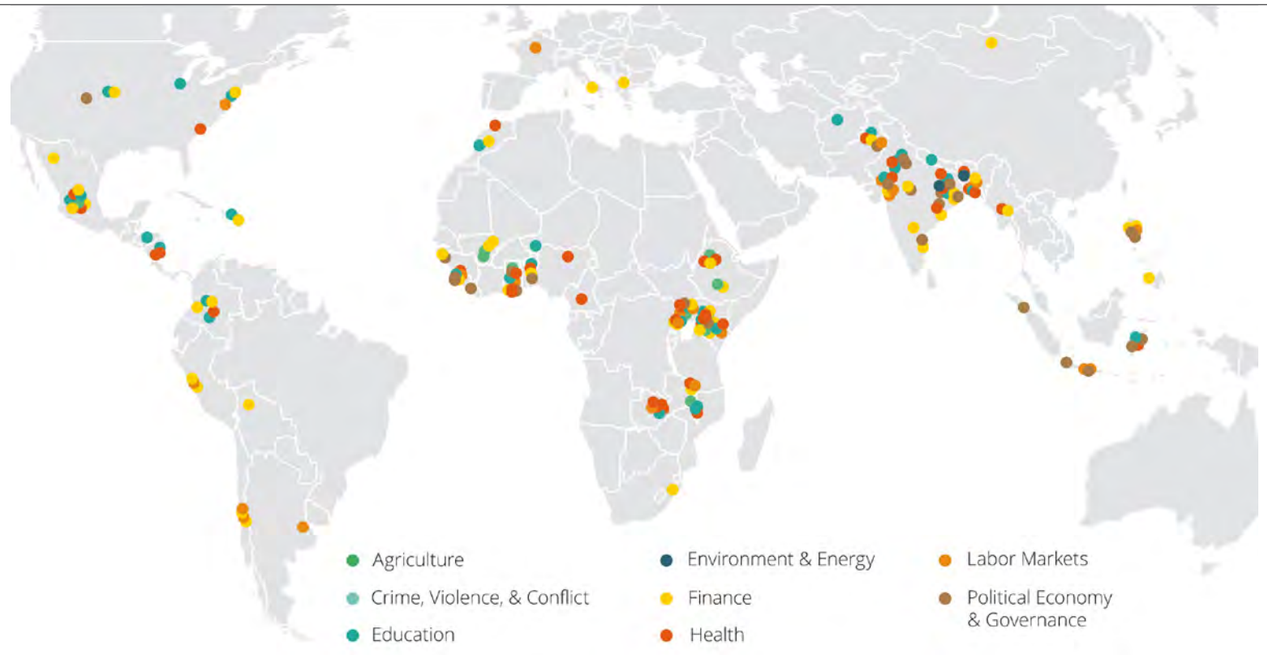
With a focus on valuing its customers – as would be expected from Abdul Latif Jameel - MySaudiStore.com offers a highly competitive and customer service

experience through partnering with a US based company to manage all the logistical and warehousing requirements in the states while managing the clearance and last mile deliveries themselves within Saudi Arabia.

In less than three months since launch, MySaudiStore.com has already firmly established itself in the market with membership subscriptions and shipments well above expected levels. It has also seen a considerable following in social media with over 15,000 followers on Twitter and more than 18,000 likes on Facebook from a standing start.

J-PAL showcases evidence on women's empowerment and poverty reduction

J-PAL
ABDUL LATIF JAMEEL POVERTY ACTION LAB



J-Pal affiliated professors' evaluations on gender equality and empowerment

Abdul Latif Jameel Poverty Action Lab (J-PAL) professors have been working to unearth the policies and programs with the biggest potential positive impact on women and girls across the globe.

The ongoing work, which was showcased as part of International Women's Day celebrations in March, looked at a wide range of initiatives. They include efforts to prevent teenage marriage and pregnancy, improve access to high-quality education, jobs for financial independence and leadership opportunities, and strengthen decision-making power in families and communities.

So far, J-PAL affiliates have conducted more than 140 evaluations in 39 countries. They looked at seven different sectors: agriculture, finance, labor markets, health, political economy and governance, environment and energy, and education.

Promoting gender equity and empowering women and girls also contributes to poverty reduction. J-PAL affiliate professor Rohini Pande (Harvard; co-director, Evidence for Policy Design) said: **"If we, as a society, can empower women politically – as leaders, as informed voters, and as active citizens – we enable them to take control of their own economic lives. This helps ensure that their economic contributions are reflected in the benefits they receive from their country's growth."**

Affiliate professor Erica Field (Duke) added: **"Over the last decade, researchers have generated a body of evidence on the impact of women's economic and social empowerment, as well as the differential effects that social policies and programs can have on women. It is critical to understand and quantify these impacts in order to design development programs that enhance the well-being of both women and men."**

A number of these evaluations are featured as case studies on the Abdul Latif Jameel Poverty Action Lab website.

J-PAL is a network of 146 affiliated professors from 49 universities. Its mission is to reduce poverty by ensuring that policy is informed by scientific evidence. It does this through research, policy outreach, and training across six regional offices worldwide.

Community Jameel
Massachusetts Institute of Technology

Jameel Arts Centre - Dubai, Northside View, from the Creek, © Serie Architects

Art Jameel set for continued growth in 2017

Art Jameel has revealed plans to launch a 10,000 square meter arts center in Dubai. The new center is part of its ongoing development program to enrich the thriving cultural scene in the region, building upon its strong history of exhibitions, educational initiatives, institutional partnerships and community outreach.

The Jameel Arts Centre Dubai will be a new not-for-profit contemporary arts institution. The three-story space, which will be designed by UK firm Serie Architects, will present curated exhibitions from the Jameel Art Collection. It will also host regional and international solo and group shows, and is expected to act as a hub for education and research initiatives.

Art Jameel is also developing its presence on the global stage, strengthening its successful relationship with New York's Metropolitan Museum of Art. A new partnership between the two organizations will enable the museum to acquire works by modern and contemporary artists from the Middle East.

Through the Jameel Fund, the Metropolitan Museum of Art has recently acquired two new works by Egyptian artist Maha Maamoun – 2026 and Domestic Tourism I.

"We are delighted to be embarking on a new phase of development for Art Jameel – strengthening our programmes in Saudi Arabia, across the Arab world and internationally, as well as founding our first permanent space, the Jameel Arts Centre Dubai."

"Establishing a partnership with the Metropolitan Museum of Art, one of the world's most-visited, encyclopaedic museums, allows us to further support contemporary artists from the region and share their work with a broad international public. We are proud to work closely with a number of partners to fulfil this important vision."

Fady Mohammed Jameel, President of Art Jameel

Art Jameel will also push ahead with other existing partnerships during 2017. Its endowment to the Victoria & Albert Museum in London, UK, supports the Jameel Gallery of Islamic Art and the prestigious biannual Jameel Prize, while the long-standing partnership with the Prince's School of Traditional Arts has resulted in the establishment and development of co-managed heritage arts schools in Cairo, Jeddah and – opening 2019 – a major new centre on the Dumfries House estate in Scotland.

Antonia Carver, Director of Art Jameel, said, **"This is an exciting moment for Art Jameel, as we embark on a dynamic period of growth and renewal, expanding programmes and developing new partnerships."**

Antonia Carver addresses more that 45 international journalists from the art world at the Art Jameel announcement

Real people, real stories – Embracing change

"Working at Abdul Latif Jameel has given me opportunities to do so much of what I love to do. I love to be a part of energetic teams . . . and that's all about Abdul Latif Jameel."

Complacency can be an easy habit to fall into, but employees at Abdul Latif Jameel are challenged on a daily basis to avoid this common pitfall. Our fast-paced working environments provide the freedom and space for self-motivated employees to thrive.

"I've met people from around the world, worked in a dynamic environment, and been around colleagues who are determined to improve both themselves and the company every time they come into work."

Peter Aberle is Abdul Latif Jameel Motors' Senior Managing Director Vehicle Distribution Marketing & Logistics for Saudi Arabia, leading the future development of the Toyota and Lexus experience in the country. As well as his home country of Germany, Peter has previously worked in Greece, Russia and Chile, so he is used to adapting to new environments. Yet he still admits to being surprised at how easy he found adapting to life in Saudi Arabia.

He believes Abdul Latif Jameel provides the perfect opportunities for employees determined to play their part in dynamic teams striving for success.

"I split my time between Riyadh and Jeddah, which means I'm seeing two stunning parts of the world. For anyone who likes fresh air and beautiful weather, the Red Sea coast is a superb place."

"I came from South America to work in Saudi Arabia, and I would recommend the same switch to anyone interested in challenging themselves and learning. The opportunity is there, and I'm so pleased I made the move."

Saudi spinal patients to benefit from state-of-the-art technology

Saudi Arabian patients with traumatic spinal injuries look set to benefit from state-of-the-art technology after Abdul Latif Jameel signed a memorandum of understanding (MoU) with Japanese company, Cyberdyne Inc.

The MoU covers Cyberdyne's cybernics therapy and its Hybrid Assistive Limb (HAL) – a robotic technology that can improve, support and enhance patients' mobility. It was signed by Mohammed Abdul Latif Jameel, Chairman and CEO of Abdul Latif Jameel, and Dr. Yoshiyuki Sankai, President and CEO of Cyberdyne Inc.

Mohammed Abdul Latif Jameel said: **"Thanks to advances in medicine and technology, patients should be able to lead better quality lives after suffering major spinal injuries. Cyberdyne are at the forefront of developing highly advanced medical technology, and the MoU will bring this technology to patients in Saudi Arabia."**

Patients at Abdul Latif Jameel Hospital in Jeddah will be the first to have access to the technology. It is due to be rolled out across Saudi Arabia at a later date. In 2015, more than 13,000 people suffered traumatic spinal injuries in Saudi Arabia.

Jordan solar projects show FRV's commitment to region

Abdul Latif Jameel Energy is one-step closer to powering 80,000 homes in Jordan with clean energy, as its two solar PV projects in the country successfully achieved financial close.

Speaking during the visit of the Custodian of the Two Holy Mosques King Salman bin Abdulaziz Al Saud to Jordan in March 2017, Omar Al-Madhi, CEO of Abdul Latif Jameel Energy, Saudi Arabia, commented: **"Our projects around the region, including in Jordan, clearly exhibit the great potential for solar in the Middle East."**

"The electricity we are producing in Jordan is being generated at low cost – less than the average price of electricity in the country. It is financially viable, as well as having a positive impact on the environment. Such projects provide proof that solar can be the sustainable energy source for the region, including in Abdul Latif Jameel's home market of Saudi Arabia."

"With their development, we can contribute to the generation of clean and affordable energy, fostering the region's sustainable growth. That is why we remain committed to being the leading solar development company in the Middle East and beyond."

The solar plants, Mafraq I and II, represent a combined investment of US $180 million and will start construction shortly. They are being developed by Fotowatio Renewable Ventures (FRV), part of Abdul Latif Jameel Energy. Once they begin operations in 2018, the plants will generate 133.4 MWdc in total – approximately two percent of Jordan's total generation capacity and enough to supply more than 80,000 households.

Each project will avoid the emission of over 80,000 tons of CO^2 per year, equivalent to removing approximately 17,000 cars from the country's highways.

As part of its commitment to the social and economic development of the communities where it operates, FRV, together with IFC, EBRD and PROPARCO, signed two scholarship agreements with IE University in Madrid in relation to these projects.

The scholarships, called Young Talented Leaders, are intended to cover the training and accommodation expenses of two Jordanian students for the completion of bachelor's degree courses at IE University. One of them has been awarded to Sarah Riyad al Atiyat, who began her studies in September 2016. The second one will be awarded for this academic year, 2017-2018.

Road safety focus for new Community Jameel campaign

Community Jameel has launched a new campaign – "Your Belt, Your Safety" – as part of Abdul Latif Jameel's Road Safety Initiative.

The campaign, which encourages Saudi Arabian citizens to always use vehicle seatbelts, was introduced ahead of the 34th Gulf Traffic Week. A road safety exhibition featuring characters from Open Sesame was also held in the Red Sea Mall, Jeddah, encouraging road safety for children.

More than 1.3 million people are killed in traffic accidents every year worldwide, and a further 50 million seriously injured. Road traffic safety has been gaining political attention over the last few years with a growing recognition that deaths and injuries represent major health, social and economic concerns. The recent 'World Status Report; by the World Health Organization (2015), estimates that there are 27 road fatalities per 100,000 people per year in Saudi Arabia, indicating that the country has one of the highest death rates per head of population in the region. Many studies suggest that the majority of these are younger drivers aged 18-30, followed by children.

Hassan Mohammed Abdul Latif Jameel, President of Abdul Latif Jameel's Traffic Safety Committee, said: **"Traffic awareness campaigns are effective in motivating Saudi road users, supporting government efforts in raising public safety, and enabling the concerned institutions to collaborate across different fields."**

"Community Jameel's Road Safety Initiative pays particular attention to equipping children, as future road users, with the necessary skills and knowledge to keep them safe."

Community Jameel aims to help communities transform themselves and prevent problems. It focuses on areas including engineering, enforcement, emergency response, education and training. These are consistent with international best practice, as well as World Health Organization and United Nations recommendations that specifically target the reduction of deaths from road traffic collisions.

Abdul Latif Jameel Centre for Continuing Education, Abdul Latif Jameel Hospital, and several other Abdul Latif Jameel companies and departments also took part in Gulf Traffic Week.

Dr. Osama Al Kurdi Director of the Road Traffic Safety Initiative, commented that: **"Through strategically targeted activities and events, RTSI plays a key role in instituting strategic partnerships with concerned public and private agencies involved in managing road traffic safety. Through these strategic partnerships, road traffic safety campaigns aspire to the highest values and play a significant role in positively affecting road users' attitudes and behavior."**

Abdul Latif Jameel is also using its sponsorship of Saudi Arabia's domestic football league to promote road traffic safety. The 20th round of the Jameel League has been named the 'Buckle Up Round' to raise awareness of the importance of wearing seatbelts.

Abdul Latif Jameel