

# Opening doors

The Abdul Latif Jameel Magazine

Winter 2017/18

In this month's issue we talk about

A vision to become an investment powerhouse

Opening Doors speaks to H.E. Eng. Ibrahim Al-Omar, Governor of the Saudi Arabian General Investment Authority

Featured Articles

Renewable energy: An economic imperative

Saudi Arabia 2.0 – why the road to 2030 is green

A changing future: the economic role of women in Saudi Arabia

Hybrid technologies to power innovation in water desalination

**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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# A vision to become an investment powerhouse



His Excellency Eng. Ibrahim Al-Omar was appointed as the Governor of the Saudi Arabian General Investment Authority (SAGIA) in mid-2017, bringing with him a strong background in information communications technology, he brings over fifteen years of private sector experience and accomplishment to the organization at a time of significant change in the country.

**There is an unmistakable spirit captured in the much discussed Saudi Arabian Vision 2030, and announcements that point to its realization, such as the creation of a new US\$ 500 billion investment in a city on the Red Sea, 'NEOM' opening huge opportunities for investment in the country.**

Continuing our series of articles looking at Saudi Arabia as a globally attractive investment destination, Opening Doors spoke to the Governor of SAGIA about these opportunities and how Saudi Arabia will position itself for investors and growth into the future.

**Q: Over the past decade, we've heard a lot about the growth and potential of markets like, for example, the 'Asian Tigers', Brazil, Russia, India and China (BRIC) and now more recently Mexico, Indonesia, Nigeria, and Turkey (MINT) – why do you think Saudi Arabia's potential has been overlooked? How is this view changing?**

Traditionally, Saudi Arabia's economy was oil-driven. In the preceding decades, global energy needs brought significant attention and investment into the Saudi oil and gas sector and some associated upstream industries. Saudi Arabia's strengths elsewhere, however, were yet to become a part of the international conversation surrounding those economies with high potential.

Vision 2030 is rapidly changing this. As the Government moves to harness the Kingdom's full potential and proactively engage with the business community, we at SAGIA have witnessed a growing awareness and recognition among the businessmen, commentators, and analysts of the

advantages Saudi Arabia offers as a destination for investment.

As we continue to work to deliver on the promise of the Vision by driving reforms aimed at enhancing the ease of doing business in the Kingdom, and identifying and promoting investment opportunities, I expect Saudi Arabia will share a larger space on the world stage of recognized exciting places to do business.

**Q Do you think overseas investors have an accurate perception of Saudi Arabia? If not, why not?**

Whenever SAGIA meets with foreign investors unfamiliar with Saudi Arabia, they often leave surprised and impressed with what they see and hear when we discuss the on-going transformational changes under Vision 2030. Judging from their reactions, they perhaps came to Saudi Arabia with one perception, and left with another.



HE Eng. Ibrahim Al-Omar, Governor of the Saudi Arabian General Investment Authority

**Saudi Arabia provides a base for investors to reach 1.5 billion consumers within a 5 hour flight from Riyadh**

The Kingdom's investors have mainly associated Saudi Arabia solely with the oil and gas industry; however Saudi Arabia has in fact been blessed with many rich assets, making it an exciting and profitable place to do business.

While we are a country with a population of nearly 32 million, more than half of whom are under the age of 25, this population is growing at a rate of around 2.5% annually. This strong consumer-led market is driven by relatively high amounts of purchasing power compared to our regional peers.

Saudi Arabia also provides a base for investors to reach an even larger market

of approximately 1.5 billion consumers in some of the world's fastest growing markets, which are just a short five-hour flight from Riyadh.

**Q: What can be done/is being done to change this 'oil and gas' bias perception?**

This can be changed through proactive engagement with investors to spread the news of opportunities available to them under Vision 2030. We are reaching out to existing and potential investors representing various industries to raise awareness of the many changes underway, both in regard to the reforms we are making to enhance the ease of doing business, and investment opportunities. We are also communicating with different markets regionally and globally.

**Q: SAGIA says its mission is to develop and attract investment by improving**

**the investment environment in Saudi Arabia. How 'investment friendly' is the current environment in the country?**

We have already come a long way in enhancing the investment environment and ease of doing business in the Kingdom. We have a competitive tax environment; our corporate tax rate and VAT is considered amongst the lowest in the world. In most sectors, investors can own 100% of their business and are guaranteed full repatriation of capital, profits and dividends.

**"At the center of three continents – Europe, Asia and Africa, with more than 30% of the world's trade passing through the Red Sea"**

In addition the Kingdom enjoys a privileged geographic position at the center of three continents – Europe, Asia and Africa, with more than 30%

of the world's trade passing through the Red Sea. This, and the Kingdom's access to extensive natural resources make it an attractive location for the manufacturing and transit of goods. The Kingdom also benefits from a youthful and educated population ensuring a deep source of talent for investors – 80% of the labor force having an advanced education level (World Bank). The infrastructure of the Kingdom will be significantly enhanced via the Vision 2030 program, with major investment planned across Transport, a national Logistics Hub, Healthcare and other sectors, as well as the creation of Industrial Clusters and Special Economic Zones.

To facilitate investment and lower barriers to entry, there is also a range of incentives investors can enjoy. The Saudi Government offers tax credits on R&D investments, as well as tax exemptions on exports. We have a number of initiatives that offer both foreign and local access to capital. For example, investors can acquire low cost loans from the Saudi Industrial Development Fund (SIDF), or they can choose to receive financial support from the training and employment of Saudi Arabian nationals through the Human Resource Development Fund (HRDF).

**Q: Can you identify some of the key measures that have been introduced to improve the investment environment/ regime for foreign investors?**

The Kingdom is always exploring ways to make the investment journeys of our partners easier and more profitable. Under the 'Tayseer' program, we are working on 297 reforms to enhance the ease of doing business in Saudi Arabia.

**'Under the 'Tayseer' program, we are working on 297 reforms to enhance the ease of doing business in Saudi Arabia.'**

Over the past 18 months, we have

completed approximately 45% of these reforms. So far, the Kingdom has accelerated import and export procedures; we have successfully launched a program in Jeddah port to enable shipping containers to clear customs in one day while the average time a container staying in the port decreased to 8 days. Based on a 2017 Maersk 'Port Productivity' index released August 2017, the Jeddah Red Sea Gateway Terminal ranked 4th among other global ports and we are now rolling out similar procedures to other ports across the kingdom.

Moreover, we have streamlined the processes for the issuance of new business licenses and visas; we have opened new centers designed specifically for commercial arbitration; and we have introduced a new companies law that has risen Saudi Arabia's ranking in the World Bank's 'Protecting Minority Investors' index to the 10th place globally.

A critical part of this process has been our consultation with local and foreign investors to ensure our reforms will have the greatest possible impact on the business environment.

**Q: Are these measures working?**

We are witnessing positive effects due to these measures; overall investment values are increasing, transparency of laws and regulations is being promoted and starting a business was never done this easily.

Improvement is an ongoing process and we will continue to develop programs that will further provide even greater opportunities for local and foreign investors in the Kingdom.

**Q: How can SAGIA support this and help to deliver the ambitious vision for the country's future set out in Vision 2030?**

SAGIA has large role to play in helping

the country reach the future set out for it by Vision 2030. One of the main pillars of the Vision is for Saudi Arabia to become an investment powerhouse – this will happen partly through increasing FDI share of GDP to 5.7%.

To meet this goal, we are seeking to enhance our engagements with both existing investors and potential investors encouraging them to increase their investments, or to take the first step of their investment journey in Saudi Arabia. For those already in the Kingdom, we have appointed SAGIA key account managers for strategic investors to guide, consult, and support them in every aspect of their business.

For new investors, we will continue our outreach program to raise awareness of the available opportunities under Vision 2030. We will also work closely with these investors as they move closer towards setting up in the Kingdom to ensure they have all the necessary support to have a seamless experience.

**Q: Which industries and sectors have the most potential, or are attracting the most interest, from overseas investors?**

We have identified the primary priority sectors based on their high potential for development and their alignment with Vision 2030's objectives. These include: Healthcare, Transportation, Tourism, Entertainment, Housing, ICT, Energy and Renewable Energy and manufacturing are among the top sectors which have some huge potential for attracting investors.

**Q: What are the key challenges you foresee in attracting investment and how can you overcome them?**

We need to keep communicating with potential investors to ensure that they have all of the right information needed to make the decision to invest. We will continue to inform them about the many opportunities and the on-going

improvements to the investment environment which makes it easier to do business in the Kingdom.

## INVEST SAUDI

We are in the process of developing an online platform called 'The Investment Atlas' that will promote all investment opportunities available in the Kingdom. It will provide investors with a central source for all the information they need to seize the opportunity to invest in Saudi Arabia.

**Q: What are the regional implications of a more economically diverse, foreign-investment-friendly Saudi Arabia?**

I sincerely believe that when one country in the region does well, its neighbors also stand to benefit from their success. With Vision 2030, Saudi Arabia is uniquely positioned to enhance regional prosperity and growth, particularly as we continue to move closer to making Saudi Arabia a logistics hub. Doing so will contribute in expanding transport and infrastructure links to neighboring countries in order to build a network of commerce across the Arabian Peninsula while connecting North Africa as we have planned to do so by the causeway we will build between Egypt and Saudi Arabia.

**Q: In addition to foreign investment, how important is it to also increase domestic investment?**

The local investors are as just as important as the foreign investor. Both have a major role to play in contributing to the growth and diversification of the Saudi Arabian economy to fulfil the promise of Vision 2030. Other than their contribution to GDP and raise in market competitiveness, local investors can provide great partnerships and joint-venture opportunities for foreign



Riyadh – the bustling capital of Saudi Arabia

investors who have limited knowledge of the Saudi market, economy, and rules and regulations.

**Q: How hard is it to balance the needs of overseas investors with domestic investors?**

Foreign investors' needs tend to be more than local investors'. After all, local investors already know their country's laws and regulations and have a sense of its economy and marketplace. Foreign investors on the other hand can have false assumptions, ambiguity or lack of information about Saudi Arabia.

SAGIA's role to these overseas prospects

is not only limited to the provision of investment-related services but the promotion of the country and its laws and regulations as well. In terms of trusting SAGIA and perceiving it as a reliable partner, local investors are familiar with our work and have heard about our achievements, but foreign investors may not have thought about Saudi Arabia as an investment destination and partnering with SAGIA might require us to offer many incentives for them to be interested.

In regards to the business environment however, many of the improvements we are currently making will benefit both local and foreign investors equally.

**Q: How does the Saudization program affect this?**

Saudi Arabia is blessed with abundant human resources, and we believe in the talents and the skills of our people. This provides investors with a great opportunity to utilize this considerable talent pool – which creates success for those local and international investors that commit to hiring, training, and more importantly adopting Saudi Arabian nationals into their corporate culture.

The Saudization plan is connected to the country's overall economic growth and development. The HRDF provides many opportunities to motivate the private

sector to employ Saudis after they have been put through a training program funded by HRDF.

At SAGIA, we hear frequently from our investors who have invested time in their Saudi Arabian staff and that they are enormously pleased with their performance. A 2015 Jadwa report found the increase in Saudi employment and Saudization plan in the private sector was associated with growth and labor productivity. Moreover, many Saudi Arabian nationals are equipped with good educational backgrounds supported by the know-how in terms of understanding the local culture which can be an added-value to the company.

**Q: How important is it for Saudi Arabia to work with other countries in the region, or globally, to achieve its ambitions?**

In this era, no country can succeed without having healthy partnerships with other countries. We have forged strong relationships with many countries across the world and we will develop new relationships with countries in previously unexplored areas of cooperation.

For more information on investing in Saudi Arabia visit the SAGIA website [here](#).



## FRV secures hybrid energy contract in Chile

Fotowatio Renewable Ventures (FRV), part of Abdul Latif Jameel Energy, has been awarded a groundbreaking 540GWh hybrid solar-wind energy contract in Chile, reflecting its commitment to providing citizens around the world with clean energy.

The project, which is the Company's first hybrid wind-solar project, and also its first development in Chile, will combine photovoltaic solar and wind energy technologies. It will be FRV's third major site in Latin America, following its operations at La Jacinta solar plant in Uruguay and Potosí solar plant in Mexico.

Rafael Benjumea, CEO of FRV, said: "This award is great news for FRV's expansion plans, due to Chile's economic and political stability, and the proven experience of the Chilean administration in initiatives of this magnitude.

"Our goal is to continue leading the renewable industry worldwide and to continue to grow in new

markets that offer future development opportunities in our sector."

Since 2006, FRV has completed the construction, operation, maintenance, and financing of more than 780 MWdc of photovoltaic and CSP solar energy plants – representing more than US\$ 2.5 billion in total project financing.

Andrea Fontana, Managing Director of FRV's Wind Energy division, said: "Solar and wind technologies have many similarities and a high degree of maturity, which is allowing us to lead the transition to clean energy throughout the world.

"At FRV, we understand wind power as the natural progression of our consolidated experience in the solar energy sector, and we will continue to bet on it."

See more in the article on [hybrid technologies](#).

## Solving challenges in governance, crime and conflict, and peace and recovery - J-PAL to benefit from US\$ 16 million grant



One of the funded projects will examine earthquake resettlement in Nepal. Photo: Thomas Chupein | J-PAL

**Two major initiatives from the Abdul Latif Jameel Poverty Action Lab (J-PAL) are set to receive significant financial support after J-PAL and another research center, Innovations for Poverty Action (IPA), were jointly awarded a multi-million-dollar grant from the UK government.**

The two organizations received US\$ 16 million from the UK Department for International Development to contribute towards three research programs on effective policies to promote peace and good governance, reduce crime, and support individuals and communities recovering from conflict.

The programs include J-PAL's new Crime and Violence Initiative, which funds randomized evaluations relating to crime and social and political violence. J-PAL's Governance Initiative, which among others aims to identify effective approaches to increasing citizen participation and political accountability, will also benefit.

Chris Blattman, co-chair of J-PAL's Crime and Violence Initiative, said: "This grant sends an important message that investing in rigorous research is critical to finding solutions to challenges of governance, crime, and conflict. Without such research, policymakers are only guessing what works."

"Now, we can generate high-quality evidence – and, in doing so, help governments and civil society improve the effectiveness of their programs."

Studies in Bangladesh, Brazil, Nepal, Pakistan, Peru, Uganda and the Democratic Republic of Congo are among those to be funded by the grant.

For more information about J-PAL, visit [www.povertyactionlab.org](http://www.povertyactionlab.org).





The new 2018 Toyota Prius Hybrid Electric Car

# Driving for success in Saudi Arabia and across the Middle East's rapidly developing automotive markets

Despite a period of relative turbulence in the GCC automotive market over the past two years, which saw new car sales decline across the board, one segment of the market showed promising signs of growth: hybrid electric vehicles.

The global demand in hybrid electric vehicles is expected to grow 16% every year between 2017 and 2022<sup>1</sup>. This growth is being powered both by changing attitudes, about the need to move away from traditional hydrocarbon fuels, along with an increasing regulatory focus to encourage the take-up of alternative fuel technologies, such as hybrid electric vehicles.

Hassan Jameel, Deputy President and Vice Chairman of Abdul Latif Jameel, says: "We fully expect the demand for hybrid electric vehicles to continue increasing across the MENAT region. 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 electric vehicles."

Saudi Arabia's government is among those who have been keenest to

respond to the growing demand for cleaner vehicles. In 2016, the country's Corporate Average Fuel Economy (CAFE) standard was introduced, with the objective of improving the fuel economy average of light vehicles by 58%, from 12km per liter of fuel to 19km, by 2025<sup>2</sup>.

In February 2016, Abdul Latif Jameel launched Toyota Prius hybrid electric vehicle in Saudi Arabia.

As befits the manufacturer of the world's best-selling hybrid electric vehicle, Toyota itself has long been one of the brands at the forefront of the automotive market in the MENAT region.

Through its ongoing partnership with Abdul Latif Jameel, Toyota has had a successful presence in the region since 1955, leading the growth of the industry and driving many of the technological advances that have characterized the sector's recent development.

Opening Doors spoke to Takayuki Yoshitsugu, Chief Representative of the Middle East and North Africa Representative Office of Toyota Motor Corporation (TMC), about the economic potential of the region, the recipe for Toyota's success, and his expectations for the future.



<sup>1</sup> Global Micro-Hybrid Vehicles Market – Forecasts and Trends (2017-2022), Mordor Intelligence, March 2017  
<sup>2</sup> SASO sets standards for Cars, Arab News, 5 August 2015



Mr. Mazen Jameel (far-left) Mr Takayuki Yoshitsugu (left), celebrate the launch of the new Lexus LC500 in Saudi Arabia in May 2017.

**Q: Do you think the potential of the MENAT region has been overlooked, in comparison to the high-profile interest in markets like Brazil, Russia, India and China (the so-called 'BRIC' markets)?**

A: 'BRIC' was like a catchphrase that grabbed people's attention and garnered a lot of interest, but serious investors were not distracted by it. There is no doubt the development potential of the MENAT region is yet to be fully realized. However, I don't think the region has been ignored for its growth potential. The region is distinguished by its favorable geographic location, large population – especially the young generation – and an abundance of natural resources we are confident that the MENAT region has a very strong future.

**Q: Are people becoming more aware of the potential of Saudi Arabia in particular?**

A: Yes. We expect investor interest in Saudi Arabia to grow steadily, especially after the announcement of Saudi Arabia Vision 2030 initiatives that are

ambitious, passionate, and strong. As well as forward-looking government modernization policies, one of the great strengths of Saudi Arabia is its very young population. Its demographic is like a beautiful pyramid, with relatively few older people at the top and a much broader base of younger people towards the bottom.

**Q: How would you characterize the automotive market in the MENAT region?**

A: We see huge growth potential in the MENAT automotive market, mainly because of the large population (again especially the young generation), immense natural resources, economic growth, and the recent reforms in Saudi Arabia, such as permitting women to drive in 2018. Security, safety, and political stability are the basic catalysts for growth. Stable economic growth is also a key to growing the automotive potential. There are some common features across the different markets in the region, such as the high priority consumers place

on things like quality, durability and reliability – all core strengths for Toyota. But there are also many differences, both on the regulatory side, such as the CAFE regulations in Saudi Arabia and, also, in terms of mobility needs, purchasing power and lifestyle, among others. For example, many people in GCC prefer large off-road SUV, while for first-time buyers in other markets, smaller cars are increasingly popular. Pick-ups, too, continue to play a vital role as an essential 'workhorse' for many companies and smaller businesses.

**Q: How are consumer trends and preferences in the MENAT region different to other regions?**

A: There is a widespread demand for all types of vehicles in the MENAT region, from passenger vehicles to SUV, luxury cars, and commercial vehicles. This is predominantly driven by variety of demographics, culture, and the terrain in the region. It could be said, the ratio of people who love the SUV seems to be higher than other regions.

**Q: What is Toyota's approach to meeting the diverse needs of consumers in different MENAT markets?**

A: From its earliest days, TMC adopted a 'Customer Satisfaction approach to deliver quality products that exceed customer expectations. This philosophy defines the operating principles and approach of TMC and continues to drive our spirit today. We are always eager to listen to our customers through our distributors and dealers, and we try to integrate their feedback into our product development to provide ever-better cars and services that meet their demands and needs.

Some manufacturers take a "product out" approach in which introduction models are to be decided from manufacturing view point. Our customer satisfaction approach takes the opposite approach.

We focus on the customer and what kind of car they need year by year, country by country, area by area. We put the voice of the customer first to know how best to meet their needs.

Our distributors and dealers play an important role in this. Market conditions, regulations, and customer needs are different country to country. TMC is always hearing from our distributors about the trends and preferences they are seeing locally. It's about making sure we hear the voice of the customer, and customize our offer accordingly. This influences the model line-up we offer, the specification, and the way we market certain services. So the distributor role in TMC operations is very important.

**Q: Do you think it is necessary to work with locally-based partners to fully capitalize on the potential of the MENAT automotive market? If so, why?**

A: Of course, having a locally-based partner who knows the market very well helps us to offer the best sales and after-sales services, most suitable to our customers' needs, which we aim to constantly meet and add to.

Local partners help us to ensure we focus on the customer's voice. One of our ethos is to be the 'best in town outlet'. So we expect our dealers and distributors to be the best one in their town. To do that, they must always prioritize customer satisfaction by meeting customer needs. Our ultimate goal is to make our customers smile, ensure they are satisfied, through ever-better cars and superb after-sales services.

Maintaining a focus on details, looking for ways to continuously improve and making the customer smile at each and every one of these points inevitably builds to being the best in town.

**Q: How developed is the market for new technologies like hybrid electric**

**vehicles, electric vehicles and hydrogen fuel cells electric vehicles in the MENAT region?**

A: Compared to markets like the US or Japan, the number of hybrid electric vehicles on the roads in the MENAT region is relatively small as of now.

There are several reasons for this. In Japan, for example, fuel is relatively expensive and there are attractive financial incentives given by the government to choose alternative fuel technologies, like hybrid electric vehicles.

In the MENAT region, fuel is basically cheap and there are not the same financial incentives, so the interest in hybrid electric vehicles is lower. But that is changing. The government in Saudi Arabia, for example, has already introduced the CAFE regulations, and there are several initiatives in the UAE around clean air, such as its plan to make

**"Our ethos is to be the 'best in town outlet'. So we expect our dealers and distributors to be the best one in their town . . ."**  
- Takayuki Yoshitsugu

50% of the Dubai Taxi fleet environment friendly vehicles by 2020, so we do see a bright future for environment friendly vehicles such as hybrid electric vehicles in the region.

**Q: What does the future hold for TMC in the MENAT region, and for your relationship with Abdul Latif Jameel?**

A: We have a very positive outlook as there is considerable potential growth for TMC in the MENAT region. Our relationship with Abdul Latif Jameel is one of the most successful partnerships we have across the world and one we are truly proud of and deeply cherish. We look forward to many more years of success together.



The Toyota Mirai Fuel Cell Electric Vehicle seen here in Abu Dhabi, UAE





J-PAL's Dr. Abhijit Banerjee speaking at the American University in Cairo

## J-PAL's Middle East efforts highlighted in Cairo

Dr. Abhijit Banerjee, a co-director of the Abdul Latif Jameel Poverty Action Lab (J-PAL), highlighted the organization's determination to improve lives and alleviate poverty across the Middle East during a recent public lecture at one of Egypt's leading universities.

Dr. Banerjee spoke at the American University in Cairo at an event entitled Reducing Poverty and Promoting Social Development: How Evidence Can Inform Better Policy in MENA.

The event, which was jointly organized by J-PAL, the Economics Department of the American University, the Economic Research Forum, and the Sawiris Foundation for Social Development, emphasized J-PAL's evidence-based approach to informing effective social policies and programs.

It featured a recent study by Dr. Adam Osman, an affiliated professor in J-PAL's network, that

led to increased profits, higher productivity and improved product quality for several Egyptian rug manufacturers.

Dr. Banerjee said: "Our plan is to focus on the Middle East and North Africa [and] to play a key role in improving lives and alleviating poverty.

"We work closely with governments, donors, and NGOs to help design and evaluate innovative social programs, scale-up the most cost-effective interventions, and build a culture of policymaking informed by evidence."

Formed in 2003 to tackle the root causes of poverty, J-PAL's work frequently covers health, education, youth employment, and financial inclusion. To date, J-PAL affiliated researchers have conducted more than 860 evaluations in 80 countries, and more than 300 million people have been reached by programs tested and found to be effective through J-PAL evaluations.



Fady M. Jameel Deputy President and Vice Chairman of Abdul Latif Jameel and Seif Shieshakly, Managing Partner of Four Principles at the joint venture signing ceremony

## New joint venture to offer Lean Management expertise

**Governments and businesses across Saudi Arabia and the Middle East can now access specialist support to improve their efficiency – and profits – following the launch of a joint venture between Abdul Latif Jameel and Four Principles, a 'Lean Management' business consultancy.**

The new venture offers expertise, advice and implementation services modeled on the Lean Management approach, which has transformed the performance of businesses across Japan, North America and Europe in recent decades.

The Lean mindset, which questions every part of an organization's process in order to eliminate anything that does not add value, was developed by Toyota in the 1930s. Now organizations across the MENAT region can harness the new firm's knowledge of the 'kaizen' philosophy to improve their own operations.

The new venture will operate in financial services, government, heavy industry, construction, retail, healthcare, aviation, oil and gas, FMCG, food and beverages, and education. Services include advising on making improvements to areas such as research and development, manufacturing, procurement, supply chain and logistics, production facility layout, sales and after sales, supplier integration, and digitization.

The initiative builds on the longstanding relationship between Abdul Latif Jameel and Japan. It also follows the recent Saudi-Japan Vision 2030 agreement to have closer ties between the two countries.



"There is now a real opportunity to help deliver real, sustainable change in the Middle East. With a focus on increasing

productivity and tackling waste, Four Principles is well positioned to support national agendas through this joint venture with Abdul Latif Jameel."

Seif Shieshakly, Managing Partner of Four Principles

Read more [here](#)



# Realizing the potential of Lean Management across Saudi Arabia and the Middle East



Kiichiro Toyoda (1894-1952)



Taiichi Ohno (1912-1990)

**As Saudi Arabia and the Middle East accelerate into the 21st century, economies across the region are undergoing transformational change. Foreign investment is being encouraged, a strategic diversification away from reliance on traditional industries is helping to reshape the business landscape, and forward-looking government and commercial organizations are sensing the potential possibilities open to them.**

These changes create new pressures for the region's businesses, as they seek to increase performance, strengthen efficiency, develop their businesses, and provide better products and services to their customers and clients.

Successfully achieving these objectives requires more than just hard work and aspiration. It needs businesses to critically assess their current ways of working, their operational approach, and their culture, to identify where the bold changes required can be made.

One of the methodologies most commonly used to support and guide businesses on this journey is Lean Management, or 'kaizen', pioneered by Japanese corporations to boost efficiency and performance, eliminate waste and optimize the use of resources.

## What is Lean Management?

For more than 100 years, the concept of Lean Management has been one of the world's most prominent business methodologies. It takes a detailed, step-by-step approach to ensuring a business uses all its resources in the most efficient manner.

Lean businesses consider every action and activity, no matter how small, against one simple question: can it be improved to add more value to the product or customer? Any activities that fail that test are deemed waste – and reduced or removed from the organization's processes.

By eliminating waste and optimizing processes, lean businesses are better

able to withstand unexpected turbulence in either the market in which they operate, or the wider economy.



**"Lean management is the application of common sense to achieve efficiency and effectiveness."**

Patrick Wiebusch, co-founder of Lean Management consultancy Four Principles.

Henry Ford is credited with creating the first rudimentary lean manufacturing process, when he introduced a moving assembly line to his factories in 1913. However, it was the work of Kiichiro Toyoda, Taiichi Ohno and others at Toyota in the 1930s that refined and developed Ford's original idea to create a true Lean Management and manufacturing system.

Using Ford's methods as inspiration, they created the Toyota Production System – and sparked a revolution that, over the decades to come, transformed businesses in both Japan and the United States.

## 改善

Kai = Change Zen = Good

Kaizen, as the Japanese called this process of continuous improvement,

originated in manufacturing processes. However, it can be equally applied to service businesses. Organizations adopting Lean Management assess every action and activity for potential improvements, no matter how small. Those gains may be minor in isolation but, taken together, add up to significant improvements that drive positive change.

## What can Lean Management achieve?

The effect of Lean Management can be both dramatic and profitable. Companies around the world have experienced its advantages and re-shaped their entire internal systems along lean principles.

Perhaps one of the most widely recognized achievements in Lean Management is the rescue and rehabilitation of renowned sports car manufacturer, Porsche in the mid-1990s. When Wendelin Wiedeking was appointed chief executive in 1992, aged just 41, the company was making significant losses and faced a bleak future. His objective was simple – ensuring Porsche's survival – although achieving it was anything but.

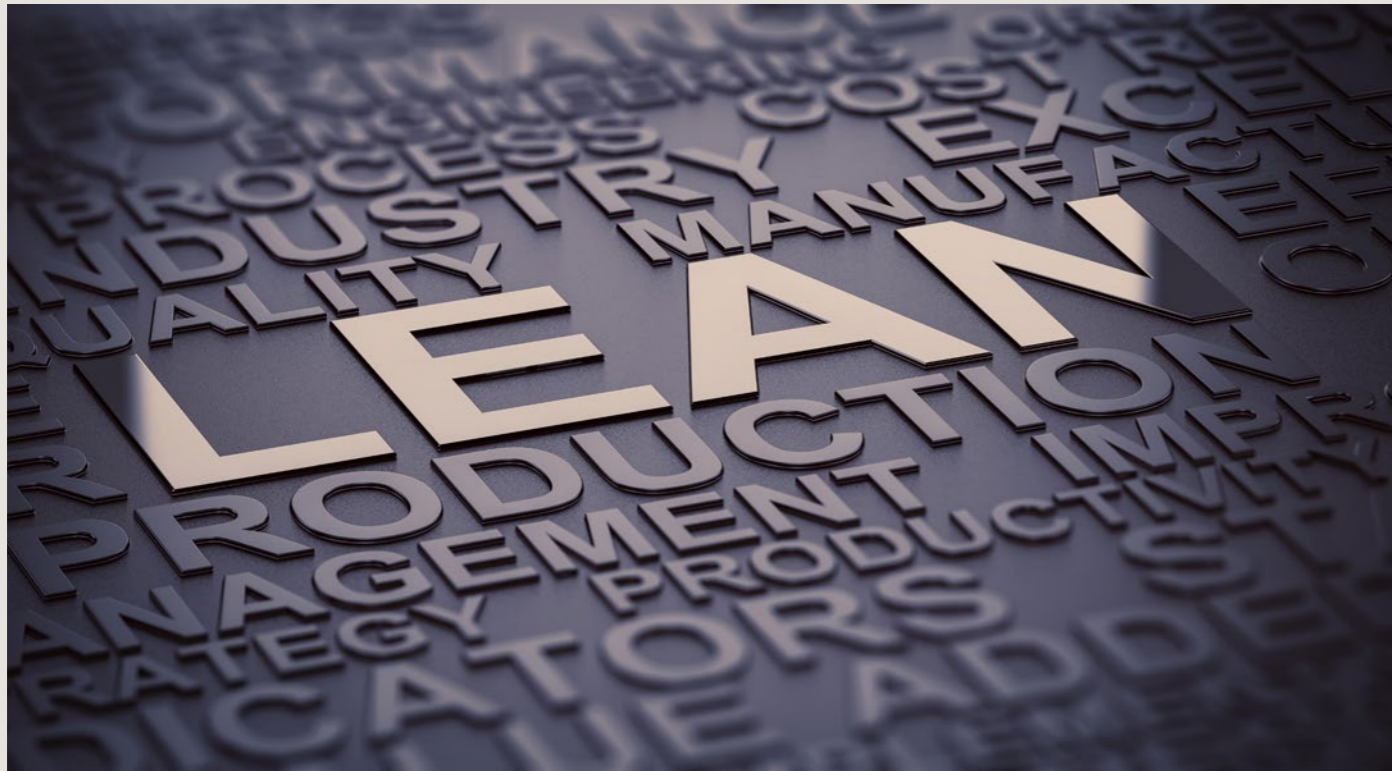
Wiedeking believed that only lean manufacturing could save the company from closure. He approached two of the world's leading Lean Management consultants, Yoshiki Iwata and Chihiro Nakao, both of whom had worked under Taiichi Ohno at Toyota. After declining his first two approaches, Iwata and

Nakao finally agreed to help Wiedeking transform the struggling German car maker.

Wiedeking's faith and persistence proved justified. Iwata and Nakao made huge changes to processes, procedures and policies across the Porsche factory. One of the most dramatic was to reduce the quantity of parts on site from enough for 28 days' production, to enough for just 30 minutes' production.

This change alone lowered overheads on everything from leasing facilities to store parts and components, through to security, as well as increasing Porsche's cash reserves and cutting lost time, as workers no longer needed to search through an overwhelming array of parts for the specific component they needed.

The headline accomplishments of this lean approach were even more eye-catching: after just one year, a Porsche Carrera could be produced in just two-thirds of its original time.



Even today, 25 years after Wiedeking introduced the Lean Management approach, and eight years after his departure, Porsche’s productivity continues to increase by an average of six per cent per annum – largely because of the now total commitment to lean operations.

**Powering the Middle East’s potential**  
From its Japanese roots, Lean Management has spread gradually across Western Europe and the United States over the past three decades. Now, forward-thinking businesses across the Middle East and North Africa are looking to Lean Management to help them drive the transformation necessary to continue to thrive into the 21st century.

Businesses are recognizing that, as economies develop and become more

open, challenger brands are creating a dynamic, fast-moving environment in which established enterprises will have to seek every possible efficiency to compete.

The potential for Lean Management to help businesses confront these challenges, and to catalyze business and economic development across the Middle East, is reflected in the announcement of a new joint venture between Abdul Latif Jameel and Lean Management consultancy, Four Principles.

The new company offers advisory and implementation services that will improve efficiency within governments and companies throughout the region. It will work across FMCG, construction, heavy industries, oil and gas, aviation, and several other sectors.

Seif Shieshakly, a co-founder and managing partner of Four Principles, believes some of the challenges facing companies in the Middle East are similar to those encountered by Toyota in the 1930s.



Seif Shieshakly, Co-founder and Managing Partner, Four Principles

**“They [Toyota] first got into this mindset because of the need to survive in a rapidly changing market,” says Shieshakly. “They knew they had to change. They didn’t want to, but they had to adopt a brand-new mindset and a whole new way of thinking.**

**“Now, with all the changes in the Middle East and North Africa, with reforms in the market and a push to reduce the dependency on oil, lots of companies are facing a similar situation – they have to change if they are to continue to succeed in the long term.”**

Having worked with organizations all around the world on Lean Management, Shieshakly and Wiebusch have identified several common challenges for businesses implementing Lean Management for the first time.

Employees can often be resistant to the level of change that is common with Lean Management, often due to a fear of losing their status or authority within the organization’s hierarchy.

Wiebusch says: “The challenge with Lean Management is in the implementation, not the understanding. Top management usually understand Lean Management, and operators on the shop floor also understand it very quickly. The problem is in the middle management, who often try to keep information to themselves. With lean operations, you create a fully transparent environment with KPIs and accountability that are measurable on a daily basis. So the middle management has most to lose, and often try to torpedo the whole change initiative. One bad apple can make the whole process stop, and that’s the challenging part.”

Shieshakly also points out that over-familiarity can lead to significant opportunities being missed. He said: “The issue you find in many companies is that they have their own internal operational excellence monitoring but, over time, vigilance diminishes as people settle into new routines and processes. They are so used to doing things in a certain way – even monitoring – that it’s hard to step back and see what other options are possible.”

He believes that Four Principles’ ability to spot potential improvements that have previously gone unnoticed, due to internal teams being too close to the existing system to be able to clearly identify its flaws, is a key factor in their ability to help businesses transform.

**Bringing new growth opportunities**  
Abdul Latif Jameel first adopted the kaizen culture when it began importing Toyota vehicles from Japan to Saudi Arabia over 60 years ago. It has since experienced at first-hand how Lean Management can ensure a business is strong enough to adapt and evolve in changing environments.

The diversified Saudi-owned family business’s investment in Four Principles reflects this long-standing relationship with Japan, and follows the recent Saudi-Japan Vision 2030 agreement to have closer ties between the two countries.

Fady M. Jameel, Deputy President and Vice Chairman of Abdul Latif Jameel says: “Abdul Latif Jameel and Four Principles share a commitment to delivering high quality, innovative solutions for clients. Across the private and public sector, organizations are looking to drive efficiency and improve effectiveness, and position themselves to make the most of the great opportunities in the region.

The new joint venture will meet that need, providing a strong offering in an in-demand market.”

The joint venture also follows Abdul Latif Jameel’s commitment to work with local and Japanese organizations to establish a kaizen company and training academy for the public and private sectors in Saudi Arabia.

Mohammed Abdul Latif Jameel, Chairman and CEO of Abdul Latif Jameel, said: “As governments across the Middle East deliver on their economic diversification plans, including Saudi Arabia’s ambitious Vision 2030, while private sector organizations are also looking to boost efficiency, the new company will contribute to improving overall performance and driving sustainability.”

In line with these objectives, Four Principles aims to inspire economic growth across Saudi Arabia and the wider region over the coming years, on both a micro and macro level.

Seif Shieshakly says: “Working with Abdul Latif Jameel, there is a real desire and passion to spread the lean way of thinking and, more importantly, its benefits and the actual result of implementation, to more companies in more sectors. Lean Management has the proven potential to benefit businesses across the region on a much bigger scale, benefiting more clients and more markets than we currently touch. We’re determined to help achieve this vision.”

To learn more about the origins of Lean Management, the principles behind its success, and what it could do for your organization, visit [www.fourprinciples.com](http://www.fourprinciples.com).

# Toyota's BT warehouse solutions products launched in Saudi Arabia

**BT, the warehouse equipment solutions brand of the Toyota Material Handling Group, manufactured in Sweden, has been launched in Saudi Arabia by Abdul Latif Jameel Machinery.**

Founded in Sweden 1946, BT has a strong presence all around the world through its manufacturing locations in Sweden and Italy, international sales and services companies, and independent distributors who not only sell equipment, but also provide full lifetime aftersales services and support.

Abbe Samih, regional manager of Toyota Material Handling International, said at the launch: "We at Toyota Material Handling Group are happy to have a presence in the Saudi market. We are determined to work hard with the team at Abdul Latif Jameel Machinery to make this strategic relationship succeed and to serve our customers and help them enhance their business in the logistics sector."

Abdul Latif Jameel Industrial Equipment, part of the renowned Abdul Latif Jameel Machinery brand, has been the distributor for Toyota Industrial Equipment and spare parts in Saudi Arabia for almost 50 years including gasoline,

diesel and electric forklift trucks and towing tractors. Their extensive range of product and service solutions today also includes Raymond, and Cascade brands and Godrej Racking, offering comprehensive solutions to meet materials handling and warehousing needs across the Saudi Arabian logistics sector.

Abdul Latif Jameel Industrial Equipment operates a network of sales and service centers across the country offering specialized consultancy for industries, such as transportation and distribution, construction, manufacturing, retail, mining, oil and gas, ports, and airport services.

Abdelrazig Eltayeb Yassin Elimam, head of Abdul Latif Jameel Industrial Equipment, said at the launch: "The launch of BT is in line with our strategy to provide materials handling and storage solutions to save our clients time by addressing all their warehouse needs with the highest level of efficiency and service."



The team from Abdul Latif Jameel Machinery and Toyota Materials Handling International AB at the BT launch event in Jeddah, Saudi Arabia



Mr. Samih Abbe, Regional Manager, Toyota Materials Handling International AB



Customers and media inspect the BT Warehouse Solutions products at the event



Abdelrazig Eltayeb Yassin Elimam  
Abdul Latif Jameel Industrial Equipment

# Renewable energy: An economic imperative



**Transforming Saudi Arabia's energy mix over the next decade is one of the key priorities outlined in Vision 2030, the government's development strategy for the nation.**

While, in the short-term at least, traditional fossil fuels will remain the country's dominant energy source, there is an increasing interest in – and momentum behind – the potential of renewable energy to help power future economic growth.

Over the next 20 years, Saudi Arabia's plans are nothing if not ambitious: 3.45GW of renewable energy by 2020<sup>1</sup>, 9.5GW by 2023<sup>2</sup>, and 54GW (41GW solar, 9GW wind, 3GW waste-to-energy and 1GW geothermal) by 2040<sup>3</sup>. If these targets are achieved, the country will not only have transformed its energy industry, it will also have succeeded in establishing a hitherto elusive economic stability, freed, at least partially, from the volatilities of global fluctuations in oil prices that have impacted the economy on the country and the Gulf region in recent years.

The recognition that renewable energy needs to be at the center of any sustainable vision for

economic growth is not limited to Saudi Arabia. According to the World Economic Forum (WEF), the Middle East and North Africa (MENA) region as a whole is “serving as an example for the rest of the world”<sup>4</sup>, due to the high-level commitment and resources being invested in strategic programs to reduce the use of fossil fuels. In 2016, US\$ 11 billion was invested in renewables across the MENA region, compared to US\$ 1.2 billion in 2008. This represents a nine-fold increase in only eight years<sup>5</sup>. And Saudi Arabia is leading the way.

However, while new technologies such as wind and solar power generation have grown, they have done so from a small base and there is still much work to do globally. The latest Global Tracking Framework report produced by the World Bank and the International Energy Agency<sup>7</sup>, for example, says more significant steps are needed if global renewable energy targets are to be reached. It argues that large, energy-intensive industries – such as heating and transport sectors – must now be encouraged to develop greater use of renewable energies.

**What factors are driving the investment in renewables?**

There are several factors behind Saudi Arabia's determination to grow its renewable energy base.

**1. Economic diversification.** As part of its Vision 2030 plan, the government is keen to change the country's energy mix and lower the dependence on traditional fossil fuels. Renewable energy, like the introduction of VAT scheduled for 2018, could provide a significant new revenue stream and reduce the subsidies for oil consumption<sup>6</sup>.

By establishing the Renewable Energy Project Development Office (REPDO) and the National Renewable Energy Program (NREP), Saudi Arabia has signaled its committed determination to achieve its stated ambitions. The NREP is working through the National Transformation Program (NTP) to ensure the country's 2023 targets are met, while REPDO is concentrating on fulfilling the targets outlined in Vision 2030.

<sup>1</sup> Saudi Arabia seeks \$30bn-\$50bn solar and wind energy investment, Financial Times, January 2017

<sup>2</sup> Potentially Game-Changing Saudi Arabian Government Restructuring Bolsters 9.5 GW Renewable Energy Target by 2023, Apricum Group, May 2016

<sup>3</sup> Renewable Energy Market Analysis: The GCC Region, International Renewable Energy Agency, 2016

<sup>4</sup> What an oil-rich region can teach the world about renewable energy, World Economic Forum, 8 November 2016

<sup>5</sup> International Renewable Energy Agency website, accessed November 2017.

<sup>6</sup> Low oil and growing demand for electricity drives Saudi Arabia's renewable plans, Moody's Investors Service, 5 April 2017



**2. Appropriate conditions.** Saudi Arabia's geographic positioning and climatic conditions endow it with the potential to secure a position as a world-leading force in the supply of renewable energy, mirroring its fossil fuel success. According to some studies, the MENA region receives "enough (solar) rays... to power the entire planet<sup>7</sup>." The country is blessed with high levels of sunlight, which make it an ideal location to harness large-scale solar photovoltaic (PV) plants, and it has huge swathes of empty land, on which construction could be quick and relatively straightforward.

As well as its huge solar energy potential, Saudi Arabia is also blessed with enviable resources for both wind and geothermal energy production. Three regions – in the northeast, the center, and near the mountains

in the west – have high enough average wind speeds to make wind energy economically viable, and there are at least 10 hot springs, of which Al Khouba is the most prominent, ideally suited for geothermal power generation.

**3. Surging demand.** Saudi Arabia's population continues to grow, to urbanize, and to acquire more disposable income. As it does so, domestic energy consumption is rising. At the same time, households are becoming ever-more connected with the latest technology, from smartphones to household appliances, which is also increasing the demand for electricity. Across the MENA region, the demand for power has risen by 5% each year since 2000<sup>8</sup> – a huge cumulative advance.

The energy requirements of the scores of "high energy-intensive industrialization programs" that are re-shaping the country's economy are also contributing to the unprecedented need for energy, according to Moody's Investors Service<sup>9</sup>.

**4. Employment opportunities.** Saudi Arabia's booming population, particularly the proportion of young people, is adding to pressure on the jobs market. Over half the country's population is aged 25 or under, and by 2030 the number of Saudis aged 15 years and over is predicted to increase by about six million<sup>10</sup>. Expanding the country's renewable energy industry is therefore seen as an opportunity to create much needed additional jobs, using skills and knowledge that are familiar to a nation steeped in the energy industry.

Around the world, renewable energy is already a major source of job creation. In the United States, for example, the number of people employed in the solar industry rose by 25% in 2016 and the industry's workforce has increased 17-fold since 2010, according to figures supported by the United States Department of Energy<sup>11</sup>.

With the NTP aiming for 4% of Saudi Arabia's energy usage being supplied by renewables by 2020<sup>12</sup>, the pace of expansion could deliver a range of jobs to the country's growing population. Indeed, by 2030 the GCC looks set to hold 207,000 jobs direct from renewable energy – of which almost 77,000 will be in Saudi Arabia<sup>13</sup>.

<sup>7</sup> [What an oil-rich region can teach the world about renewable energy](#), World Economic Forum, 8 November 2016

<sup>8</sup> [What an oil-rich region can teach the world about renewable energy](#), World Economic Forum, 8 November 2016

<sup>9</sup> [Low oil and growing demand for electricity drives Saudi Arabia's renewable plans](#), Moody's Investors Service, 5 April 2017

<sup>10</sup> [Saudi Arabia beyond oil: the investment and productivity transformation](#), McKinsey Global Institutes, December 2015.

<sup>11</sup> [The Solar Power Industry Keeps Add Jobs](#), Time, 7 February 2017

<sup>12</sup> [National Transformation Program 2020](#), Kingdom of Saudi Arabia, June 2016

<sup>13</sup> [Renewable Energy Market Analysis: The GCC Region](#), International Renewable Energy Agency, 2016.



### A changing economic landscape

Around the world, the switch to renewable energy is being driven above all by one issue that is impossible to ignore: it makes ever-increasing economic sense.

Over the past five years, global oil prices have halved, from an average of US\$ 110 per barrel to around US\$ 55-60 per barrel over the past few months. For countries that rely so heavily on oil for their income – as do many across the MENA region – this has led to enormous pressures on budgets and has focused minds on developing alternative revenue streams to fill the gap.

At the same time, renewable energy is becoming ever cheaper to deliver. Several recent auctions have seen world-record solar prices, with the MENA region leading the charge. According to IRENA, the region has “some of the lowest levelized costs for electricity from solar PV”<sup>14</sup>.

Recent landmarks include the 300MW Sakaka project in Saudi Arabia’s northern Al-Jouf region, part of the National Renewable Energy Program, where Masdar and EDF submitted the lowest ever bid of 1.79 US cents per kilowatt hour (kWh) in October 2017. According to REPDO, this was 24% cheaper than the second lowest bid, from Acwa Power.

The project is seen as “an important step on the way to diversifying Saudi Arabia’s domestic energy mix and building a cutting edge domestic renewable energy sector,” Energy Minister Khalid al-Falih said at the ceremony to open bidding for the project. The previous two lowest global solar power bids also related to projects in the MENA region, albeit in neighboring UAE. In March 2017, the 1.17 GW Sweihan project in Abu Dhabi saw a winning bid of 2.42 US cents per kWh. The winning bidders were Japan’s Marubeni and Chinese energy company

Jinko Solar, which will each take a 20% stake in the plant, with ADWEA, the Abu Dhabi Water Authority, retaining the remaining 60%. The new plant, 100 km south west of Abu Dhabi, is due to come on stream by April 2019, producing enough electricity to power about 200,000 homes.

This Sweihan bid was, on the face of it, some 50 cents per kWh cheaper than the previous record low bid of 2.99 US cents per kWh in June 2016, for the 800 MW phase 3 of the Mohammed bin Rashid Al Maktoum solar park in Dubai for Dubai Electricity & Water Authority (DEWA); however, we should clarify that the underlying price is essentially the same as the DEWA project, on an ‘apples-to-apples’ comparison as energy produced in the summer months is paid at a premium, giving a base tariff announced of US\$ 0.042. The real underlying price is US\$ 0.0294.

The winning bidder here was a consortium led by Masdar and Fotowatio Renewable Ventures (FRV), part of Abdul Latif Jameel Energy<sup>15</sup>. The Mohammed bin Rashid Al Maktoum Park will be the largest single-site solar project in the world when complete by 2030, with a planned capacity of 5,000MW - enough to power 800,000 homes - and a total investment of AED 50 billion (US\$ 13.6 bn).

“Energy is an integral part of the social and economic development of all countries, and the transformation towards clean energy has positive environmental, social, and economic effects, making conventional energy less competitive and attractive for further investments. Clean energy is a great opportunity for the future as demand keeps rising around the world. Oil prices and improved technology have helped increase the share of renewable energy in the energy mix. This makes technology a key factor in the transformation towards clean energy,” said HE Saeed Mohammed Al Tayer, MD and CEO of Dubai Electricity and Water Authority (DEWA), announcing the winning bidders.

The costs associated with development are also falling. In the United States, the costs of constructing large-scale photovoltaic projects reduced by 57% between 2011 and 2016<sup>16</sup>. Globally, between 2009 and the end of 2015, the price of solar PV modules fell by roughly 80%<sup>17</sup>. As a result, the levelized cost of electricity (LCOE) of utility-scale solar plants, which indicates the average energy unit price a plant must receive to break even over its lifetime, fell by 50%.

In comparison to other energy sources, solar PV has never looked more attractive. IRENA estimates the LCOE of utility-scale solar PV electricity to be between US\$ 0.06 kWh to US\$ 0.10 kWh. It estimates the LCOE of electricity generated by oil to be US\$ 0.10 kWh to US\$ 0.16 kWh. While for coal, it is US\$ 0.13 kWh. Nuclear, too, is more expensive than solar PV, with an LCOE of US\$ 0.11 kWh<sup>18</sup>.

Those figures, combined with a commitment to enhance the communities in which it serves, indicate why Abdul Latif Jameel Energy is making sizable investments into renewable energy.



“Abdul Latif Jameel Energy has been leading the way on developing solar projects in the region... We remain committed to being the leading solar PV development company in the Middle East and beyond, while expanding into wind projects and contributing to the generation of clean and affordable energy.”

Roberto De Diego Arozamena  
Chief Executive Officer of Abdul Latif Jameel Energy

<sup>14</sup> Renewable Energy Market Analysis: The GCC Region, International Renewable Energy Agency, 2016

<sup>15</sup> FRV have since withdrawn from the consortium and been replaced by EDF

<sup>16</sup> 2017 Factbook: Sustainable Energy in America: Executive Summary, Bloomberg New Energy Finance, February 2017

<sup>17</sup> The Power to Change: Solar and Wind Cost Reduction Potential to 2025, IRENA, June 2016

<sup>18</sup> Renewable Energy Market Analysis: The GCC Region, International Renewable Energy Agency, 2016



The 46.20 ha FRV constructed solar farm in Trujillo (Extremadura) Spain, (now owned/operated by Vela Energy) with 11.55 MWp capacity and an annual production of 21,959 MWh/pa supplying 6,297 households and avoiding 7,153 tonnes of CO<sub>2</sub> annually.

### Building a new future

Throughout its history, Abdul Latif Jameel has consistently strived to deliver better living standards for citizens across Saudi Arabia and the wider MENAT region. With the advance of renewable energy and the prospect of better jobs, cleaner air, and reduced energy bills, this long-held ambition could be significantly realized.

Fotowatio Renewable Ventures (FRV) is part of Abdul Latif Jameel Energy. Through three solar PV projects in Jordan – Al-Safawi, Mafraq I and Mafraq II – it will soon supply 435 million kWh of electricity each year in Jordan, enough to power 120,000 homes with clean energy alone.

FRV is also involved in active projects in Mexico, Australia, and Uruguay, and with an historic track record in Europe, North and South America as well, is already the largest GCC-based solar PV developer – more recently FRV have stepped into wind power with over 1GW of potential under consideration

in the project pipeline across 20 markets. With these developments, FRV can bring world-leading knowledge to Saudi Arabia’s renewable energy infrastructure and upskill the country’s workforce with best-practice methods and insight.

Omar Al-Madhi, CEO of Abdul Latif Jameel Energy Saudi Arabia, said: “Renewable energy is a chance 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 added: “Shifting to renewables will help us, as a country, to secure the role we’ve always played in the global energy market: one where we have the additional spare capacity to help balance markets. It will also help us achieve more environmentally-friendly economic development goals, and ensure we become a better contributor to the world’s green movement.



““With the jobs, skills and opportunities available through renewable energy, there is a significant opportunity for Abdul Latif Jameel Energy to serve communities across the country in a positive and life-enhancing manner. It is an opportunity we are determined to grasp.””

Omar Al-Madhi  
CEO Abdul Latif Jameel Energy Saudi Arabia

To learn more about how Abdul Latif Jameel Energy is working to shape a better future for all in Saudi Arabia, visit [www.alj.com/energy](http://www.alj.com/energy).





## Real people, real stories – “Quality Before Everything”

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Being determined to succeed is crucial for any employee. However, at Abdul Latif Jameel, we also recognize and understand the importance of excellent teamwork in delivering true success to our customers. With our “Quality Before Everything” philosophy, we are committed to consistently providing the best environment in which teams can flourish, with supportive management and world-class facilities enabling individuals to achieve their full potential.

Awad Al Kareem Jaafar, Service Engineer at Abdul Latif Jameel Machinery, Komatsu, grew up

in Sudan. He joined Abdul Latif Jameel Machinery in 2012 and today still gets intense satisfaction from working with colleagues he likes and trusts, and seeing the customers’ reaction to our work.

In his spare time, Awad enjoys some of the many leisure pursuits available in Saudi Arabia. A keen reader, he loves to visit his local library, which has a diverse range of books. He also relaxes and keeps fit by swimming regularly, either in his accommodation’s swimming pool or in the sea.

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“I’m now in my fifth year at Abdul Latif Jameel and I’d recommend working here to anyone. I’m part of a very strong team and that gives enormous satisfaction. You can tell how good the team is by the fact that we are all good friends, not just good colleagues.

“The other satisfying part of the job is seeing the appreciation of our customers when we successfully repair their vehicles and machines. I’m responsible for transmissions, engine

overhauls and general engine troubleshooting, and we’ve got all the tools we need to offer excellent service.

“The management also provide a welcoming and supportive environment. They are always ready to listen to the team and regularly offer training opportunities. If you’re ambitious, there is a clear path for promotion – meaning morale and motivation are always high.”

# Saudi Arabia 2.0 – why the road to 2030 is green



**Electric, renewable, solar-powered, hybrid – sustainable energy can feel like an alien world, but it's now very real.**

We're staring at a future built on greener energy, a symptom of a global shift away from fossil fuels. With the impact of global warming becoming more apparent, the continued depletion of resources and high volatility in crude oil prices, it is prudent to be planning for a new day.

On the face of it, you might think oil's potential retreat threatens the very lifeblood of the major oil-producing nations whose economies have traditionally been built on this resource – including, of course, Saudi Arabia.

Yet against this background Saudi Arabia has decisively seized the initiative, realigning itself to reap rewards in a fast-changing renewable world; and setting out a vision for 2030 which looks increasingly green.

So what does this mean in practical terms, and what exactly is Saudi Arabia doing in its quest to become a regional leader in sustainability?

## Sustainable rebuilding

The European Union (EU) and the United Nations (UN) initially led the way in sustainable rebuilding initiatives. The EU Europe 2020 strategy<sup>1</sup> was adopted by the European Council on June 17, 2010, and has subsequently represented a common EU agenda for the current decade, challenging EU member states to lay the foundations for a more sustainable future – built on smart, sustainable and inclusive growth – and

to rethink their economic frameworks by aiming to phase out emission-heavy industries, infrastructures and practices.

Then in 2015 the UN issued its own blueprint, Transforming Our World: the 2030 Agenda for Sustainable Development<sup>2</sup> which included a number of vital strategic sustainability goals. These included Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all; and Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Finally of course, at national level, many countries are pursuing active sustainability agendas of their own, within and outside these wider initiatives. These include the UK<sup>3</sup>, Germany<sup>4</sup>, several Scandinavian nations (for example Sweden<sup>5</sup>), China<sup>6</sup> and India<sup>7</sup>, which was heavily involved in shaping the UN Sustainable Development Goals in the first place.

## Saudi Arabia's vision

In early 2016, Saudi Arabia followed suit. The country's Vision 2030 and National Transformation Plan 2020 laid out an ambitious reform program and a long-term road map to bolster the country's financial position by diversifying its economy.

However, it is much more than that. The vision is to reposition Saudi Arabia as 'the heart of the Arab and Islamic worlds, the investment powerhouse, and the hub connecting three continents.'<sup>8</sup> There have already been tangible steps on the path to change, including the recent royal proclamation to enable

women to drive, and an announcement by His Highness the Crown Prince Mohammed bin Salman, at a Future Investment Initiative<sup>9</sup> in Riyadh, that the kingdom would return to a more open and 'moderate Islam'. At the same time he announced plans for NEOM, a new economic zone that will stretch across Saudi Arabia's borders into neighboring Egypt and Jordan.

Vision 2030 is also set on providing international firms with solid investment options in non-oil sectors including tourism and other services. As well as opening up the country's equity market, the government will create several new industry clusters to stimulate the influx of foreign capital. As part of the gradual opening-up process, in June 2017 the Saudi Stock Exchange (Tadawul) announced<sup>10</sup> that it had been selected on the watch list for the influential MSCI Emerging Market Index, an important milestone in signaling to international investors that the country's capital market is now attaining maturity in terms of efficiency, governance and regulatory framework. Foreign capital currently makes up 4% of the Tadawul market, according to Mohammed Elkuwaiz, vice-chairman of the Saudi Capital Markets Authority, but that figure is expected to grow as the regulator looks to diversify the exchange's product range and attract a broader array of companies to list on it.

## Investment opportunities

Aside from the NEOM project, which is expected to attract private and government investment of more than US\$ 500 billion in the coming years, other major investment opportunities abound.

<sup>1</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>

<sup>2</sup> <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>

<sup>3</sup> <https://www.gov.uk/government/policies/sustainable-development>

<sup>4</sup> <https://sustainabledevelopment.un.org/memberstates/germany>

<sup>5</sup> <http://www.government.se/government-policy/the-global-goals-and-the-2030-Agenda-for-sustainable-development/>

<sup>6</sup> <https://sustainabledevelopment.un.org/memberstates/china>

<sup>7</sup> <https://sustainabledevelopment.un.org/memberstates/india>

<sup>8</sup> <http://vision2030.gov.sa/en>

<sup>9</sup> <http://futureinvestmentinitiative.com>

<sup>10</sup> <https://www.marketwatch.com/story/saudi-stock-exchange-named-to-watch-list-for-msci-emerging-market-index-2017-06-20-17203432>



Further projects include a major revamp of transport infrastructure between cities – such as the Haramain high-speed rail line between Makkah and Medina, and within the key hubs including a 10-year plan to boost metro lines and bus routes in Makkah, Jeddah, Dammam and Medina.

Also firmly on the agenda is the planned sale of part of the state-owned oil company Saudi Aramco, targeted for a potential international IPO in 2018, which could raise up to US\$ 100 billion, based on government valuation estimates. The proceeds from this planned sale have always been earmarked to support the investment programs associated with Vision 2030, so it is an important part of the funding plan for Saudi Arabia's sustainable development goals.

The message is clear. With a strategic partner on the ground, and the right stewardship, companies, entrepreneurs and investors can tap into the country's huge potential – and at the same time make a real difference in the new Saudi Arabia.

#### A change in philosophy

So, Saudi Arabia is forging towards a future no longer dependent on oil; but is this overhaul

being done through gritted teeth, or is there also a genuine desire to contribute to a greener world?

The evidence speaks for itself – and the commitment is clear. As far back as 2010, when the EU was issuing its Europe 2020 strategy, Saudi Arabia was establishing the Saudi Energy Efficiency Center (SEEC) to raise awareness of, and enhance, energy efficiency in the country. Then, in Vision 2030, the government backed up the SEEC by committing to a US\$ 1.33 billion atomic and renewable energy center for King Abdullah Economic City (KAEC), north of Jeddah.

Since then, progress has been rapid and consistent. The Energy, Industry and Mineral Resources Minister, Khalid Al-Falih, announced at the World Future Energy Summit in Abu Dhabi in January 2017, that Saudi Arabia would be launching a National Renewable Energy Program (NREP), which was expected to invest US\$ 30-50 billion in renewable energy programs by 2023. He also announced that the country was in the early stages of studying its first two commercial nuclear reactors, part of a planned significant investment in nuclear energy. The minister added that Saudi Arabia was working on ways to connect its renewable energy projects with Yemen, Jordan and

Egypt. Subsequently the energy ministry has announced tenders for 400 MW of wind power generating capacity in the Al Jouf region – the first utility-scale wind project within the NREP – and a 300-MW solar project in the same region. Minister Al-Falih added that round two of the NREP would be launched before the end of 2017, "keeping us firmly on track to deliver 9.5GW of renewable energy by 2023."

Meanwhile, the promise to upgrade bus, train and metro links will no doubt persuade some motorists to leave the car at home – and reduce pollution in the process – although this may be offset by an expected boost in car sales to new women drivers.

Although there is no wider policy-driven shift to alternative energy vehicles just yet, the prospect could be lucrative. Which leads us to the question: where is Saudi Arabia when it comes to electric vehicles (EV)?

#### Turning the roads green

As things stand today, changes in consumer behavior and perceptions are being spearheaded mainly through hybrid technology, including the advanced hybrid vehicles available from Toyota and Lexus through Abdul Latif Jameel Motors' comprehensive network – bringing world-leading innovation to the Saudi Arabian motorist.

At present, the country has little-to-no infrastructure for full EV, but that could actually work to its advantage. If Saudi Arabia decides to promote greener vehicle use as a matter of policy, the benefits could be considerable – with many profitable opportunities.

While the challenges are not unique to the Gulf region, Saudi Arabia is in a strong position to look at how the rest of the world is implementing EV infrastructure and, frankly, do it better.

In the early adopter EV nations there are three main reasons why EV adoption has been sluggish: range, cost versus benefit, and infrastructure. Saudi Arabia's relatively late transition to EV could actually work to its advantage in mitigating all three.

**Range:** The term 'range anxiety' stems from EV drivers' fear of running out of power too quickly and too far away from assistance. To address this, EV manufacturers have had to step up. Data published in Motoring Research earlier this year included range estimates from New European Driving Cycle (NEDC) testing of a number of battery-only EV; revealing that numerous marques are now boasting battery ranges of over 160 km (100 miles) per charge<sup>11</sup>. The Nissan Leaf (the world's best-selling EV, with 280,000 vehicles sold worldwide up to July 2017 according to a recent Bloomberg article) includes several models with ranges of over 100 km, including the 24kWh and the 30kWh; while at the higher end of the battery and price range, the top-performing Tesla models can exceed 480 km (300 miles) per charge. These include the Tesla Model 3 Long Range, which can go nearly 500 km (310 miles) on a single charge, according to a recent BBC Top Gear consumer review.

The legacy of range anxiety is still a problem in Europe. However in new and developing markets, intensive consumer education programs are helping to fill in knowledge gaps. China, for example, is a relative latecomer to the EV market, yet range anxiety hasn't impacted sales there, and it continues to be a significant market for manufacturers of New Energy Vehicles (NEV, as they are known in China) despite reductions in local and central subsidies which have kicked in this year. The total NEV share of passenger car sales in China reached a new high in June, at 2.5%, in an otherwise sluggish overall car market, and overall sales in 2017 are expected to reach 530,000. What's more NEV passenger car sales in China are growing 20 times faster than the car market as a whole<sup>12</sup>.

These figures suggest China is a model that Saudi Arabia can look to when planning its EV program – starting with clear, comprehensive information.

**Cost/benefit:** Until recently, the argument went along the lines that although drivers might save on fuel with an EV, the cars themselves were still significantly more expensive (and troublesome) than their internal combustion engine (ICE) equivalents. Today manufacturers are working hard to carve out a solid EV business model, and UBS research published in May 2017<sup>13</sup> found that, by 2018, EV and ICE cars will finally see price parity. By the time Saudi Arabia is fully in this race, EV will be ever more competitive in terms of price.

**Infrastructure:** Notwithstanding these concerns, probably the biggest issue hampering EV breakthrough in Europe has been infrastructure. Take Germany as an example. In mid-2015, the country had just 2,500 scattered publicly accessible charging stations available for around 38,000 German EV. Keep in mind that the average charge time for an EV is, depending on the connector, anything between 30 minutes (the BMW i3) and 30 hours (the Ford Focus Electric). Most EVs are responsive to fast-charging, so there has been a race to install speedy chargers, but – again using Germany as the example – just 100 publicly accessible fast-charging stations were available as of 2015<sup>14</sup>. Building infrastructure first seems the way to go, and Saudi Arabia has a clean slate available on which to do just that.

Still, there will be practical challenges implementing EV architecture in such a huge and sparsely-populated land mass. The sheer distances involved as a result of the country's geography raise range considerations right to the top of the list. Against this, research is starting to emerge which investigates the possibility of charging EV batteries using solar energy. A paper<sup>15</sup> published in April 2016 in Science Direct assessed data from the Dutch Meteorological Institute against EV charging profiles, with a view to considering the feasibility of solar EV charging based on two scenarios: weekday-only and daily charging. It certainly appears that this is a live area for research and potentially feasible.

<sup>11</sup> <https://www.motoringresearch.com/advice/electric-hybrid/going-the-distance-electric-car-range-from-shortest-to-longest/>

<sup>12</sup> <http://www.ev-volumes.com/country/china/>

<sup>13</sup> [http://www.advantagelithium.com/\\_resources/pdf/UBS-Article.pdf](http://www.advantagelithium.com/_resources/pdf/UBS-Article.pdf)

<sup>14</sup> [http://nationale-plattform-elektromobilitaet.de/fileadmin/user\\_upload/Redaktion/AG3-Statusbericht\\_LIS\\_2015\\_engl\\_klein\\_bf.pdf](http://nationale-plattform-elektromobilitaet.de/fileadmin/user_upload/Redaktion/AG3-Statusbericht_LIS_2015_engl_klein_bf.pdf)

<sup>15</sup> <http://www.sciencedirect.com/science/article/pii/S0306261916300988>

### A blank canvas

The standard industry view is that it is challenging to retrofit infrastructure to cope with active demand for EV, and that this has had a limiting effect on growth in most of Europe, with one or two notable exceptions such as Norway.

Today, Toyota Motor Corporation sells 37 models of electrified cars in 90 countries at a rate of over 1.5 million a year<sup>16</sup>. This approximates to 43% of the entire global electrified vehicle market according to IHS-Global Insight data.

This seems to have been less of an issue in other early EV adopter nations such as Japan, Korea and the USA. Still, the blank canvas works best. Creating clean vehicle initiatives – including education and training programs – before laying down a charging infrastructure should help usher in a more seamless EV switchover. What's more, where you have EV you also get dealerships/stores, service centers, battery manufacturers and charger-makers: all growth industries in themselves. Not to mention software experts, already prominent in car manufacture with the rise of the 'connected car' irrespective of whether the car is an ICE, hybrid or EV. Even if they're not on the ground, these ancillary and supply-chain players will at least push up import and tax revenues.

Also, a green transport ecosystem in Saudi Arabia is more likely to appeal to companies where a social enterprise philosophy drives their commercial approach. That can only serve to further diversify social and economic life in a country previously most well known for its oil and gas businesses.

### Progress to date in GCC

Amongst Gulf Cooperation Council (GCC) countries, only the UAE has so far invested in a full EV charging infrastructure (as part of the 'Smart Dubai' initiative), using public and private money and expertise. Tesla has now launched a bricks-and-mortar store in UAE, and is reported to be looking at expanding into Bahrain, Oman and Saudi Arabia. Still, it remains to be seen whether Saudi Arabia has the appetite for EV supercars, like the BMW i8 and the Porsche EV under development, and it is more likely that hybrid vehicles and more affordable EV models will prove more popular in the emergent stages of the country's move towards personal transport electrification. It's certainly a nice thought, for a country that made its name in oil, that one day its vehicles could be largely or entirely green.

To this end, in February 2016, Abdul Latif Jameel Motors launched the new Toyota Prius in Saudi Arabia, the first time the world's most successful and popular hybrid vehicle – with worldwide sales of 3.5 million up to 2016 – had been launched in a GCC country. Abdul Latif Jameel Motors provides support for Toyota users across Saudi Arabia through a network of nearly 300 strategically placed sales and service centers, providing happy motoring and peace of mind to drivers wherever they might be.

Looking further ahead, Reuters reported in July 2017, that Toyota Motor Corporation is working on an electric car powered by a new all-solid-state battery that significantly increases driving range and recharges in just a

few minutes. Toyota is reported to be looking to sell the new model in Japan as soon as 2022, a date which happens to align neatly with Saudi Arabia's strategy, falling between the 2020 National Transformation Plan and the ultimate Vision 2030.

### The producer side of the equation

EV are powered by chargeable batteries. Chargeable batteries need electricity. That electricity needs to be derived from sustainable sources or the whole EV configuration is not viable. As described earlier, in recent years there have been significant moves in Saudi Arabia on the producer side of the EV equation.

The scale of investment required for these initiatives – and the clear commitment to solar and wind power development that they represent – demonstrate the government's ongoing determination to make progress on the producer side of the EV/sustainable transport revolution. Inevitably, too, incoming investors will soon start to clock on to the emerging opportunities.

### Towards 2030

With Saudi Arabia's new vision for diversifying its economy and expanding its cultural horizons we could be looking at a very different country by 2030.

So as we work towards a land of sustainable social enterprise, efficient industry hubs, green travel and renewable power, it's worth remembering that companies that invest in this infrastructure will be the ones benefiting both themselves and the country as a whole.

Saudi Arabia is making big changes, and they are the kind of sweeping changes that will drive improvements in the quality of life both for the kingdom's citizens and the broader population. Sustainable transport is part of it; sustainable development more broadly is the real underlying aim; ultimate survival might be the achievement.



The new valet electric car charging station at the Mall of The Emirates, Dubai UAE



<sup>16</sup> Tokyo Motor Show: Toyota press conference presentation by Didier Leroy, Exec. VP, Toyota Motor Corporation.

# Trainees set to accelerate at Abdul Latif Jameel Motors



**Young men and women across Saudi Arabia are being given the opportunity to accelerate their careers and fulfil their potential after Abdul Latif Jameel Motors reopened its management trainee program.**

Over the last 20 years, 215 people have graduated from the scheme and held senior managerial positions in different departments across the organization. This year's intake will be the first to include women.

The program is a unique chance for trainees to get the skills they need to play a full and meaningful role in Saudi Arabia's growing economy as the country plots its course to the vibrant future outlined in Saudi Arabia Vision 2030.

As well as spending time at the Abdul Latif Jameel Academy, each student learns about the different

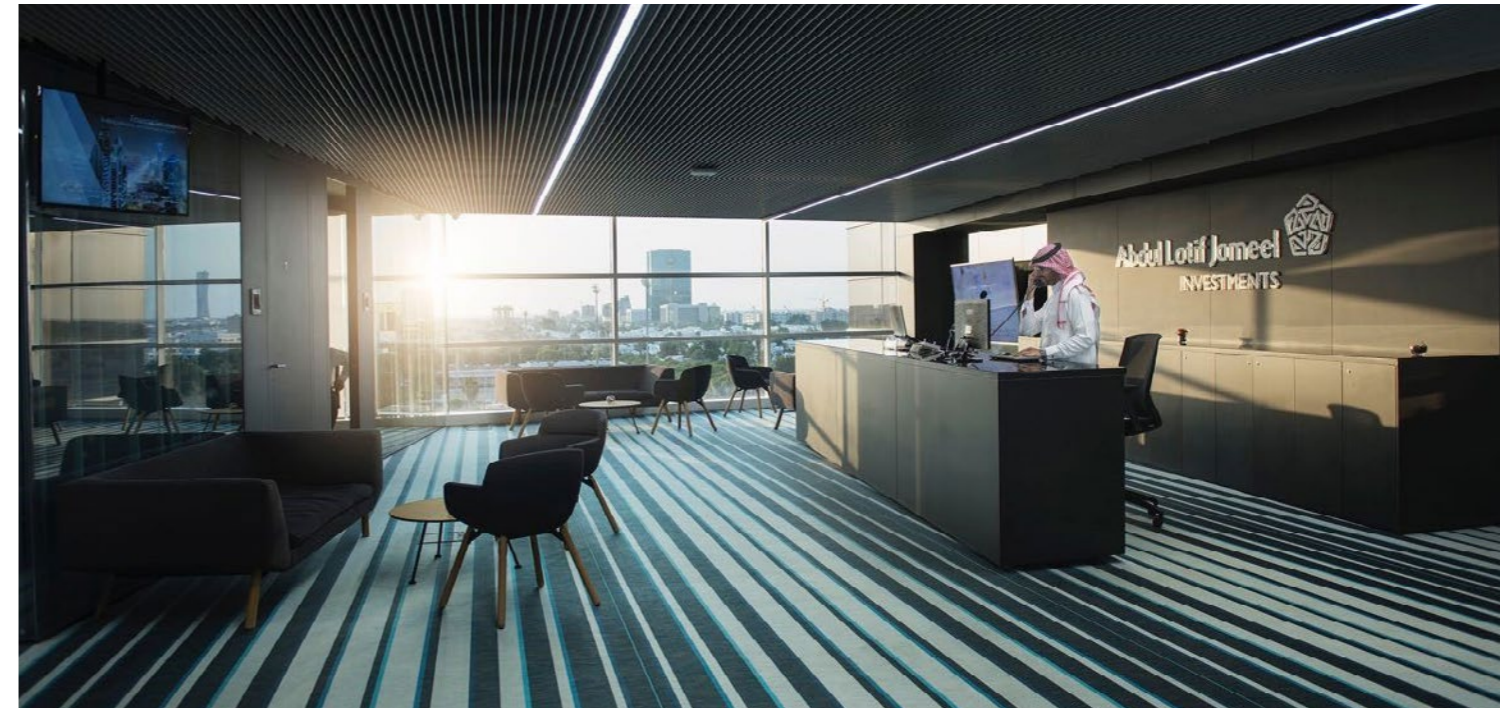
departments of Abdul Latif Jameel Motors, including retail, vehicle logistics and guest services. They also share their experiences and meet with former trainees, before facing an extensive evaluation of their performance in planning, decision-making and interpersonal behavior.

**"The program takes a tailored, unique approach to recruit distinguished Saudi Arabian men and women with bachelor's and master's degrees who have displayed leadership skills and ambition."**

**"Abdul Latif Jameel Motors provides those individuals with training that puts them on the path towards taking on senior roles in our businesses across Saudi Arabia."**

**Khalid Al Qarni**

Executive Director of HR Operations and Recruitment at Abdul Latif Jameel Motors



# Abdul Latif Jameel scoops triple recognition

**Abdul Latif Jameel has been recognized by a series of global awards that reflect the company's growing status both across the MENAT region and around the world.**

Abdul Latif Jameel Motors, the authorised distributor of Toyota vehicles in Saudi Arabia, won the MENA Effie Award for cars, in a ceremony held in Armani Hotel Dubai. Abdul Latif Jameel Motors was awarded for its production of the animation-series "Khebayyes & Abu Hurayyes" which was shown on **Toyota Service Saudi** channel on YouTube. Munir Khoja, director of marketing communications at Abdul Latif Jameel Motors, expressed great pride at receiving the award "That initiative was developed to shed light on what constitutes proper and responsible road behaviour. The show represents an important shift in targeted Internet visual content, and it is a unique product in the aftersales services market in the Saudi automotive sector" he added.

In early December, the offices of Abdul Latif Jameel Investments, in Jeddah, were honored at Interior Design Magazine's Best of Year 2017 awards at the IAC Building in New York. The premises, which were designed by **Innocad Architecture**, were among four buildings acknowledged in the 'Mid-Size Corporate Office' category. Earlier in the year, they were also shortlisted for the INDEX Design Series Awards 2017 in Dubai.

Abdul Latif Jameel has also received the prestigious Prima Duta Award from Consul General of Indonesia Mohammed Hery Saripudin, on behalf of Indonesian President Joko Widodo, in recognition of our efforts importing Indonesian products into Saudi Arabia in the manufacturing sector. Abdul Latif Jameel will continue to work closely with Indonesian businesses and government as part of our efforts to support the economic diversification plans outlined in Vision 2030.



Khebayyes & Abu Hurayyes

## J-WAFS in Action: Quenching world thirst - Producing water out of thin air



Mircea Dincă  
Associate Professor  
Department of Chemistry at MIT



**Mircea Dincă, Associate Professor, Department of Chemistry at MIT and Evelyn Wang, Gail E. Kendall Associate Professor in the Department of Mechanical Engineering, are researching a cutting-edge technology to harvest water from the air. Funded by the Abdul Latif Jameel Water and Food Security Lab (J-WAFS) at MIT, the project has potentially huge implications for regions of water scarcity, like the Middle East and North Africa.**

Opening Doors spoke to Professors Dincă and Wang about the project and its aims.

**Q: What is the main issue you are seeking to address with this research project?**

Access to clean water is one of the biggest challenges we face in the world today. While a substantial amount of water is available in the form of vapor in the atmosphere, current techniques such as dewing and fog capture are limited in terms of their efficiency and energy requirements.

We're proposing to develop a water harvesting technology that will be well-suited for

producing water in remote or water-stressed areas like the Middle East. Our approach harvests water from ambient air through special materials called Metal Organic Framework (MOF) materials.

**Q: In simple terms, can you briefly describe your proposed solution and how it works?**

MOFs are very dense powdery materials that look a bit like sugar, and they have very strong adsorption qualities. We incorporate the MOFs into a device, which looks a bit like a clear-sided box that allows them to be exposed to the air. We don't just put the MOFs in the box, though. First, we need to incorporate them into some sort of hard matrix, such as carbon salt, because the powder itself does not have very good thermal activity.

The MOFs capture the water vapor from the air and store it, like tiny sponges, through adsorption. To release the adsorbed water, the device is heated via a low-grade heat source, such as sunlight, the water condenses and it can then be collected. People would simply turn on a tap on the side of the device to extract the

water, which would be good enough to drink or use for other household jobs.

**Q: What advantages do MOF have over techniques such as dewing and fog capture?**

Dewing and fog capture techniques are only suitable for conditions of high relative humidity. In environments of low relative humidity, like the Middle East, North Africa and other regions of water scarcity, dewing and fog capture are exceptionally energy intensive and not commercially viable. So there is a significant opportunity for our research to make a huge difference to arid regions where dewing and fog capture are out of the question.

**Q: Why have the water adsorption properties of MOF remained relatively unexplored?**

MOFs are a class of materials that have been around for about 40 years. People knew they had very strong adsorption qualities, but the focus was on gases. Water can be quite corrosive and reactive when it comes into contact with MOFs, so a big recent challenge has been to develop MOFs that are stable to use with water.

One of our breakthroughs has been to develop materials that are in the same class as these well-known MOFs, but which differentiate themselves from other MOFs by the fact they are very water stable and have exceptional water adsorption qualities.

A single gram of our material can adsorb more water than any other compound in the same class or, in fact, any other material.

**Q: What are the key challenges you need to address in this project?**

We're always looking at how to improve the water adsorption capacity and the cycling of the material. That is, how many times it can be re-used. Obviously, the more cycles you can have using the same material, the better, be it a thousand or ten thousand. This type of experiment hasn't been done yet simply because it is time consuming.

We also need to scale-up the device. Right now, we can create prototypes on a small scale, but ultimately, we want to be able to develop larger devices that deliver enough water for, say, a typical family. So that means developing devices that can produce 12-15 liters of water per day.

**Q: Are the potential production costs of these 'super sponges' low enough to make it a mainstream solution?**

Yes, we have looked at the costs quite extensively and made comparisons with similar materials. Our projections put the cost at somewhere between the

US \$10 - 25 per kilogram, and we estimate each device would require around 5kg to 10kg of material, so the materials cost is low enough to make our solution commercially viable.

**Q: What could this mean for areas living under severe water stress? How big a difference could it make?**

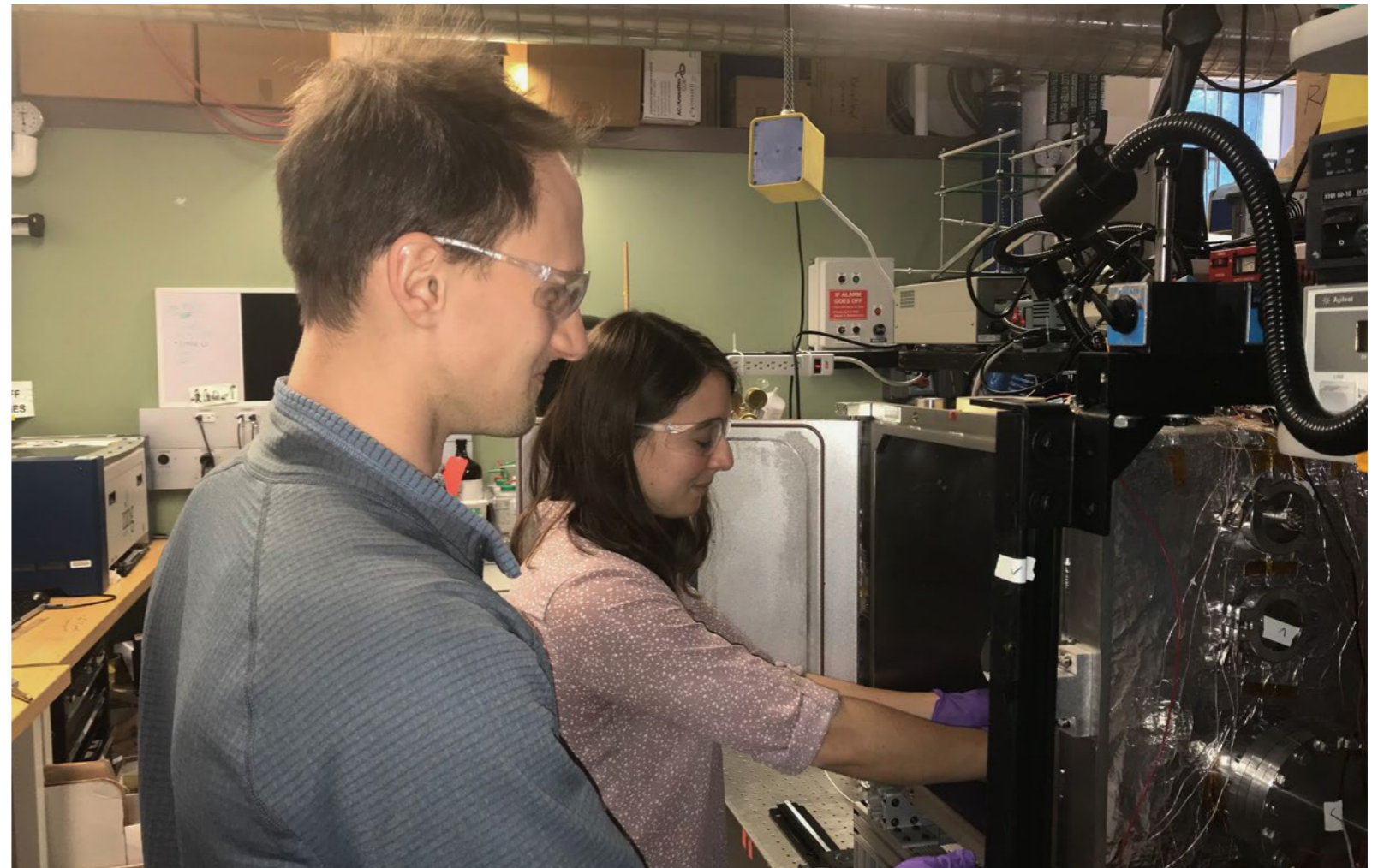
There is enormous potential for this technology to make a big difference in water scarce regions like the Middle East and North Africa.

Many people are aware of the energy challenges facing our societies, and the need to focus on more sustainable sources of energy. Fewer people are aware of the challenges around water scarcity and water stress that face many regions of the world; challenges that are only going to get more and more serious.

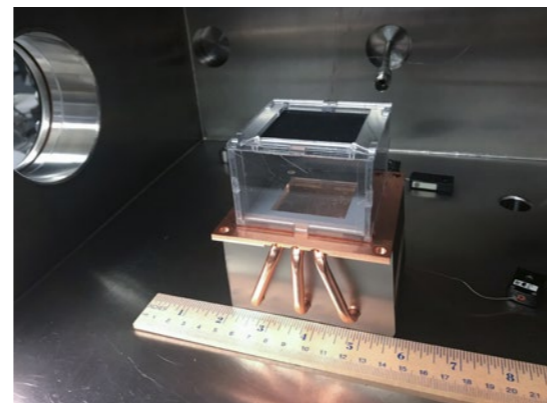
It is projected that in a few years over 30% of the world's population will not have access to a sustainable source of fresh water. So being able to address this, especially in remote areas that other infrastructure cannot easily reach, could be a game-changer.

**Q: Your J-WAFS funding is for two years, until August 2019. Will your research be complete by then?**

We think this stage will be complete, yes. We should have a viable, proven prototype by then. The next stage would be to keep refining and improving it, and to explore the potential to commercialize it, probably with external industry partners.



MIT students Adam Rieth and Alina LaPotin working together in the J-WAFS lab funded by the project



Prototype for testing in an environmental chamber

# Hybrid technologies to power innovation in water desalination



Roberto De Diego Arozamena  
Chief Executive Officer of Abdul Latif Jameel Energy



**Roberto De Diego Arozamena – Chief Executive Officer, Abdul Latif Jameel Energy talks to the organizers of the World Future Energy Summit (WFES) 2018.**

As one of the leading renewable energy companies in the Middle East, North Africa and Turkey (MENAT), Abdul Latif Jameel Energy is proud once again to sponsor the World Future Energy Summit 2018.

With power demand in the MENAT region set to grow by 7% annually until 2020, Abdul Latif Jameel Energy has endeavored to match demand with supply to become the largest GCC-based solar PV developer, and a world leader in the sector, through our renewable energy company, Fotowatio Renewable Ventures (FRV), a developer of large-scale solar power plants with over ten years of proven worldwide track record.

Abdul Latif Jameel Energy combines wide-ranging international energy expertise with

deep knowledge, experience and commitment to local markets and sustainability. We are committed to Saudi Arabia and the wider MENAT region, and at the same time have consolidated our global reach with a presence in more than 15 countries.

During 2017, we achieved several notable landmarks in our continued development. At the start of the year, we began construction on two of the largest solar PV projects in Jordan, while also securing a third in the country. In total, we expect to be powering more than 120,000 homes in Jordan once all these projects are complete.

[Watch video here](#)

VIDEO



We also started construction of the Clare solar farm, a development for which we already have a buyer, finalized funding for another Australian solar farm, at Lilyvale, and inaugurated a third,

the Moree solar farm. By the time Lilyvale begins operations at the end of 2018, FRV will have installed over one million panels in Australia alone.

Another landmark was reached with the sale of the 65 MWdc La Jacinta solar plant in Uruguay, the first large-scale solar plant in Uruguay and one of the largest in South America.

Building on our success in solar power, Abdul Latif Jameel Energy has continued to invest and grow, building partnerships and



The 65 MWdc La Jacinta solar farm, Uruguay



expertise to develop a global and diversified renewable energy offering. This now includes hybrid solar-wind and, recognizing the growing global challenges of water scarcity, also provides water desalination and water treatment solutions.

#### Focused on the Middle East

Through our international experience, we are exposed to different regulatory regimes, different organizational and operating structures, and different financial models and market conditions, right across the renewable energy and water industries. These inputs afford Abdul Latif Jameel Energy a global perspective and understanding that very few companies have. These insights and best practices from across the world can be adapted and applied to the rapidly expanding sector in our home region to truly make the most of opportunities and potential here in the Middle East.

We launched Almar Water Solutions, a desalination and water treatment plant developer, early in 2017. Together with

its partners, Almar is already working on water projects with the Dubai Electricity and Water Authority (DEWA) and has pre-qualified for the Rabigh project in Saudi Arabia, to develop one of the largest desalination plants in the world.

We believe this combination of deep expertise in both renewable energy and water solutions enables us to offer a unique proposition to the market and play a leading role in addressing the energy and water challenges facing our societies, and to use that expertise to benefit communities across the MENAT region.

#### Green energy 24/7

We are therefore hugely proud to announce that FRV has been awarded its first hybrid wind-solar project, reflecting our commitment to providing a diverse portfolio of renewable energy solutions.

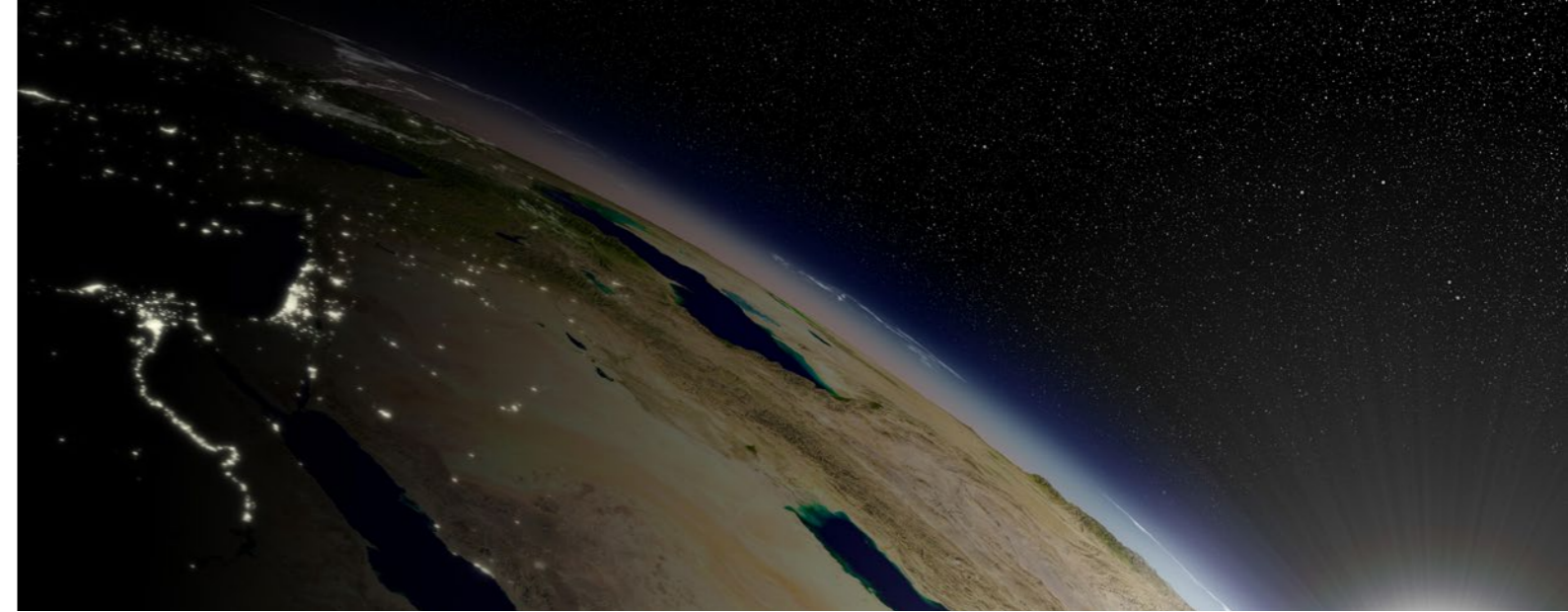
The 540 GWh development in Chile will combine photovoltaic and wind energy technologies, plus battery storage, to provide 24/7 renewable power, irrespective

of the weather, wind speeds or daylight. When the sun is shining, or the wind is blowing, the photovoltaic and wind plants – located several kilometers apart - will generate renewable energy to feed into the grid and charge the batteries. When the conditions are not suitable for solar or wind power generation, the batteries automatically step in and maintain an uninterrupted supply of renewable energy into the network at all times.

This innovative aggregation of renewable energy and battery storage holds enormous potential for one of the Middle East's highest priority sectors: water desalination.

#### Pioneering carbon-neutral water desalination

Conventional thermal desalination plants consume substantial energy. Most of this today supplied by traditional power plants, which leads to high carbon emissions. Even if renewable energy solutions, like solar or wind power, are used, these power sources do not operate 24 hours a day, 7 days a week,



so oil or gas-based turbines are still required to plug the gaps in the renewable energy supply, generating a large carbon footprint.

The new generation of reverse osmosis desalination plants are considerably more energy efficient than thermal plants, as much as ten times more efficient in fact, but the lack of a 24/7 renewable energy source remained a problem. Until now.

With a combined hybrid solar/wind renewable energy and battery storage

solution, like the one FRV is pioneering in Chile, it will be possible to power the desalination plant with uninterrupted renewable energy at any time of day or night.

Not only would this make the desalination process carbon neutral, it would also free up vast quantities of oil, previously used to power these desalination plants, for export and hence actively contribute to the economy.

A renewable energy solution would also offer more flexibility in terms of

locating the desalination plant. Plants would no longer need to be located close to traditional power stations. The desalination plant could be located closer to the towns and cities where the water is actually needed which in turn reduces the cost of distribution and risk of waste through leakage.

#### Seizing the opportunity for GCC

Between 2007 and 2030, desalination capacity across the MENAT region is predicted to expand from 21 million m<sup>3</sup> per day to almost 110 million m<sup>3</sup> per day. This, in turn, will triple electricity demand for desalination to 122 TWh by 2030<sup>1</sup>. So the potential is clear for those who can drive the development of renewable energy-powered desalination.

We believe the GCC region has an opportunity to lead the world in this fast-developing field. By making the most of new technologies, and encouraging investment and innovation across the industry, the GCC can not only address its own water scarcity challenges, but also put itself at the forefront of a fast-growing, innovative sector that will become increasingly vital to global development in the coming years.



The Santiago skyline Chile

Watch video here

VIDEO



<sup>1</sup> <https://www.irena.org/DocumentDownloads/Publications/IRENA-ETSAP%20Tech%20Brief%2012%20Water-Desalination.pdf>



Alanoud Alhejailan  
Chief Engagement Officer, Abdul Latif Jameel Insurance

Lucky to be  
part of this  
'once-in-a-  
lifetime' change

**With the recent government announcements and rising importance of women in the Saudi Arabian economy, Abdul Latif Jameel Opening Doors speaks to Alanoud Alhejailan, Chief Engagement Officer, Abdul Latif Jameel Insurance, about the changes in Saudi Arabian society, her working role and the future for women in the workforce in Saudi Arabia.**

**1. You've previously studied and worked in the UK and the United States. What were the biggest differences you noticed when you returned to Saudi Arabia to work?**

I did my legal training in London. The UK has a very old and well-established legal system, which is based on precedent. It was therefore fairly easy to locate all the different sources of law, whether through books or online resources. The legal system in Saudi Arabia is considered quite new and ever-changing, which makes it a much more challenging environment to work in, and forces you to be more resourceful.

However, this also means that there are more opportunities available in Saudi Arabia, since we are still in the phase of "creation" and "innovation". We have a lot to learn, but also a lot to create. New laws are enacted, new systems and regulations are put into place, cities are being built and expanded, the opportunities are endless, and we are lucky to be part of this 'once-in-a-lifetime' change.

**2. How have you seen the role of women in Saudi Arabia develop in the past decade?**

I lived abroad for 11 years. When I returned, I was stunned by the number of highly educated and highly qualified women. Most young women nowadays are quite ambitious and very interested in pursuing a career. The government has also opened many doors for women and encouraged this development. In short, it is the right time to be a woman in Saudi Arabia.

**3. How excited are you by the country's commitment to maximising female potential, as outlined in Vision 2030?**

I think the government initiatives are great, and the changes that have already taken place

are quite promising. I would like to see more women in high governmental positions, such as ambassadorial posts for example, because I believe there are many highly capable Saudi women who can play a significant role in our country's development.

**4. In a country with such a youthful population, are you seeing a change in attitude and belief among Saudi Arabia's young women?**

Women of the younger generation believe that anything is possible. They are strong, ambitious, and motivated. However, this is not totally new. Women in older generations have already accomplished a lot in the fields of biotechnology, physics, and business, among others. I believe the younger generation will continue to be as accomplished, if not more so, due to the fact that more support is available to them.

**5. Are women themselves eager to play more of a public role in Saudi society, and in the economy?**

Yes, I believe so, and this has already become apparent in traditional and social media. Women are breaking away from traditional norms where one was shielded from society, and have become more comfortable in taking on public roles.

**6. What will be the big benefits for Saudi Arabia as the Government works towards its female-related Vision 2030 goals over the next decade?**

Encouraging females to enter the workforce will empower women and boost the economy. Encouraging more independence will breed a new generation of strong, self-reliant and capable women. This will reduce the pressure on male breadwinners and be especially beneficial for single or widowed mothers.

**7. As a woman, what is it like to work at Abdul Latif Jameel? How is the Government's modern approach reflected in the working environment and the approach to women at Abdul Latif Jameel?**

Abdul Latif Jameel has traditionally been a male-dominated industry because of the nature of its core business. Nonetheless,

Abdul Latif Jameel has still managed to be a pioneer in employing, training and creating jobs for women. Furthermore, after having branched into new sectors, Abdul Latif Jameel has made it a priority to employ more women at all levels, including senior positions. This, coupled with the government's 2030 vision for females in the workplace, has created a supportive environment for female employees.

**8. Does the company represent a model for other Saudi Arabian businesses to follow?**

It certainly does. As a SAMA regulated entity, our aim at Abdul Latif Jameel Insurance is to be very compliant by being ethical and transparent in everything we do. Rather than being a "transactional" broker, we would like to be perceived as consultants and advisors that encourage entrepreneurship, growth and innovation. We believe in providing our clients with the highest quality of service and do not shy away from giving advice on non-traditional risks. We also seek to create awareness in the market by engaging with all the relevant stakeholders.

**9. Do you see more women getting involved at Abdul Latif Jameel Insurance, and what are their prospects for career progression within the organisation?**

Abdul Latif Jameel Insurance is very keen on hiring Saudi women at different levels in the organization. We are currently seeking women in different positions, from secretarial posts to compliance and marketing, for example.

**10. Do you intend to apply for a driving licence next year, following the Government's recent announcement with regard to female drivers?**

I currently have a UK and Emirati driver's license, and have driven in the US, the UK, and the UAE. So I am definitely planning on applying for a Saudi license as well. I believe the choice of being able to drive is crucial for women as it will empower them, and make them less reliant.

# A changing future: the economic role of women in Saudi Arabia



**Among the many bold ambitions outlined in Vision 2030<sup>1</sup>, Saudi Arabia's blueprint for developing its economy over the next decade and beyond, is a determination to strengthen the contribution of women to society and to the economy:**

"Our economy will provide opportunities for everyone – men and women, young and old - so they may contribute to the best of their abilities . . . Saudi women are yet another great asset. With over 50 percent of our university graduates being female, we will continue to develop their talents, invest in their productive capabilities and enable them to strengthen their future and contribute to the development of our society and economy."

– Saudi Arabia Vision 2030

In September 2017, the Government announced that, from July 2018, women will be allowed to drive in Saudi Arabia for the first time<sup>2</sup>. It was followed, a month later, by the announcement that women will also be allowed to watch live sport at the three main national stadiums in Riyadh, Jeddah and Dammam<sup>3</sup>.

Although seemingly relatively small changes in themselves, the

ambition reflected in these two decisions to embrace the potential of Saudi Arabia's women has been seen as a powerful indication that the country's commitment to strengthening the economic involvement and contribution of women is much more than just warm words.

With Saudi Arabia remodeling its economy away from a dependence on traditional hydrocarbon-based industries, enabling women to play a freer, more independent role in society is seen as "an economic bet that is sure to pay off"<sup>4</sup>.

#### A continuing process

The recent announcements regarding women being allowed to drive and to enter the three main national stadia reflect an on-going transformation in the role and contribution of women in societies across the MENAT region over the past few years. Traditional societal boundaries are changing in line with the belief that a more inclusive attitude will benefit overall economic progress.

The gap between girls and boys in terms of access to education and healthcare, for example, has been all but eradicated. According to a World Bank report, almost all young girls in the region attend school and more women than men are enrolled in university. Over the past 20 years, maternal mortality in the MENA region has declined 60%, the largest decrease in the world<sup>5</sup>.

In 2015, women in Saudi Arabia were able to both vote and run in municipal elections for the first time<sup>6</sup>, while in December 2017, it was announced that

cinemas would once again be allowed to open in the country, after an absence of over 35 years<sup>7</sup>.

In addition, in September 2017, Saudi Arabia's National Day celebrations included women at a range of events including concerts, laser shows, and plays<sup>8</sup>, organized by the General Entertainment Authority as part of its responsibility to grow the entertainment sector (also outlined in Vision 2030). In a precursor to the Government's subsequent announcement, women were allowed to enter the King Fahd International Stadium for the first time<sup>9</sup> to watch the festivities. Crown Prince Mohamed bin Salman said: "We see our country, thanks be to God, as an active member of the G20, a group that comprises the world's strongest economies. With tremendous ambition, we look forward to the Kingdom becoming a pioneering model in all respects, relying on the roles played by our young male and female citizens, as we strive to achieve the goals of the Kingdom's Vision 2030."

In a society known for its conservative values, there is emerging evidence of attitudinal shifts among working women, too. Saudi Arabia still operates a male guardianship system in which females must gain permission to travel or speak with members of the opposite sex. However, when asked about their comfort in working in mixed-sex environments, 73% of employed women said they were either "extremely comfortable" or "comfortable to some extent". Only a combined 9% reported being "uncomfortable to some extent" or "not at all comfortable."<sup>10</sup>

<sup>1</sup> Vision 2030, Kingdom of Saudi Arabia, April 2017

<sup>2</sup> Saudi Arabia driving ban on women to be lifted, BBC News, 27 September 2017

<sup>3</sup> Saudi Arabia to allow women into sports stadiums, BBC News, 29 October 2017

<sup>4</sup> Women Can Drive Now in Saudi Arabia. Here's What They Still Can't Do, Fortune, 28 September 2017

<sup>5</sup> Opening Doors: Gender Equality and Development in the Middle East and North Africa, The World Bank, 2013

<sup>6</sup> Saudi Arabia to allow women into sports stadiums as reform push intensifies, The Guardian, 30 October 2017

<sup>7</sup> Saudi Arabia allows cinemas for first time in over 35 years, Center for International Communication, Ministry of Culture and Information, Saudi Arabia, 11 December 2017

<sup>8</sup> Saudi Arabia Marks 87th National Day With Series of Concerts, Plays and Entertainment Events, Business Wire, 24 September 2017

<sup>9</sup> Saudi Arabia Marks 87th National Day With Series of Concerts, Plays and Entertainment Events, Business Wire, 24 September 2017

<sup>10</sup> The Bayt.com Status of Working Women in the Middle East Survey, Bayt and YouGov, November 2014

### Employment opportunities

Until recently, the progress achieved with regards to women's roles in cultural and social life, and in areas like health and education, was not reflected in their economic contribution to the country's development.

As a World Bank report outlined: **"Although, most MENA countries have made admirable progress in closing their gender gaps in education and health outcomes, these investments in human development have not yet translated into commensurately higher rates of female participation in economic and political life."**

That, too, is now changing, however, and an increasing number of Saudi women are entering the employment market. Although the public sector remains the biggest female employer, the number of women working in the private sector increased by 130% between 2012 and 2016, from 215,000 in 2012 to 496,000 in 2016, according to data published by the Ministry of Labor and Social Development in March 2017<sup>12</sup>.

Women now represent 30% of the total Saudi work force in the private sector, up from just 12% in 2011.

In the first seven months of 2017 alone, over 500,000 Saudi women entered the labor market across both public and private sectors, according to figures released by the General Organization Social Insurance. While in November 2017, a new transportation program, Wusool, set up specifically for working women, saw over 3,100 registrations in its first three weeks from Saudi women employed in the private sector. The majority of private sector jobs for

women are in the retail, hospitality, and construction sectors. The first two sectors in particular have been the focus of major government Saudization and feminization campaigns aimed at encouraging women to enter the workforce.

According to the Ministry of Labor's statistics, the number of women working in retail has seen a particularly large increase, rising 12-fold from about 10,000 in 2010 to 122,000 in 2014. This followed a decision in 2011 by the Ministry of Labor that shops specializing in cosmetics and women's clothing, together with the women's sections of department stores, should employ all-female Saudi Arabian sales staff<sup>13</sup>.

The first Saudi Arabian female lawyers were also granted their practicing certificates in late 2013<sup>14</sup>.

### Driving economic growth

By providing women with more freedom and more opportunity to contribute economically, Saudi Arabia is taking strategic and proactive action to deliver two of its major goals outlined in Vision 2030: first, to lower the country's unemployment rate from 11.6% to 7%, and second, to increase women's participation in the workforce to 30%<sup>15</sup> by 2030, with the Ministry of Labor and Social Development working towards an interim target of 28% by 2020<sup>16</sup>.

The current proportion of Saudi women with jobs is around 15% and according to the World Bank, the MENA region contains 13 of the 15 countries with the lowest rates of women participating in the labor force.<sup>17</sup> This compares to a global figure (in 2016) of 39.39% of the workforce.<sup>18</sup> In several high GDP

territories, the figure is even higher: France (47.2%), Germany (46.2%), Japan (42.7%), South Korea (41.4%) and Norway (47.0%).

Research from the McKinsey Global Institute finds an enormous commercial benefit to increasing the female participation rates in MENA workforces. If until 2025, each country in the region was to match the momentum of the country with the fastest-growing increase in the percentage of females in the workforce, McKinsey estimates it would add US\$ 600 billion each year to the MENA economy.<sup>19</sup>

These figures indicate the huge untapped economic potential among the female workforce. Potential that now, through small but significant policy changes, the Government has reaffirmed its determination to unleash.

Allowing women to drive is predicted to have a sizable impact on Saudi Arabia's economy. Indeed, some estimates put the value of the economic impact at US\$ 90 billion by 2030<sup>20</sup> – suggesting a potential rise in the country's GDP by 0.4%-0.9% each year until then.

By reducing the female population's dependency on drivers, who are often foreign members of the workforce, there will also be "more money 'staying home' to circulate in the economy"<sup>21</sup>. An estimated 800,000 men currently work as drivers for women in Saudi Arabia – and one-in-five households have a hired driver for that purpose<sup>22</sup> – at a total cost of US\$ 5.1 billion per year.<sup>23</sup> This could save families upwards of US\$ 400 per month that had previously been spent on drivers – providing a substantial increase in their spending power.<sup>24</sup>

### Auto industry certain to benefit

Issuing female driving licenses should certainly have a direct impact on the automotive industry. According to a survey published by Ipsos in December 2017, most women (70%) say they are likely to drive after the ban is lifted. A majority also reported that they will likely purchase a new car, while one-in-two households with a driver will release the driver and use that car<sup>25</sup>.

The number of drivers on Saudi Arabia's roads is expected to almost double, with supply chains across the automotive industry set to profit from increased demand in accessories, servicing, car wash facilities, and insurance.<sup>26</sup> Over the next decade, car numbers are expected to grow by an additional 20% as a direct result of the decree<sup>27</sup> - with insurers and manufacturers as the most obvious winners.

The reaction to the decree from leading automotive manufacturers was both swift and revealing. Ford and Volkswagen quickly released adverts congratulating women<sup>28</sup>, and it appears likely that Saudi Arabia will now witness an increase in both female-focused marketing campaigns and the number of two-car families.

However, the decree will also have an adverse effect on some businesses. Uber, for example, has revealed that more than 80% of its Saudi Arabian passengers are female<sup>29</sup>. It seems logical that this demand will fall from summer 2018. Careem drivers are likely to be adversely affected, too. There are also more than 100,000 "official" taxis in Saudi Arabia<sup>30</sup>, for whom demand could also fall as increasing numbers of

women move to secure their personal driving licenses.

### Indirect benefits

On a macroeconomic level, significant increases in the number of women working in Saudi Arabia would be a major national success. As well as a substantial direct economic impact, it would also transform the lives of Saudi Arabia's women, families and children in a variety of ways – ranging from mental wellbeing and satisfaction through to alleviating large-scale poverty and enhancing the educational prospects of Saudi Arabia's future generations.

According to a YouGov survey of working women in the Middle East<sup>31</sup>, the top three motivations for securing and maintaining employment are:

1. "To become financially independent;
2. To be able to support / financially contribute to the household, and;
3. To broaden my perspectives on life."

The decree to allow women to drive helps to facilitate all three of these aspirations and the real-world impacts should not be underestimated. According to the World Bank, "women's employment can significantly improve household income – by as much as 25% - and lead many families out of poverty."<sup>32</sup> In turn, this could secure major advantages for the next generation.

Alia Moubayed, the Director of Geo-economics and Strategy at the International Institute for Strategic Studies, highlights the tendency for women to invest larger portions of their income into the education of their children. She believes that a higher percentage of women in the

Saudi Arabian workforce would power higher school enrolment rates for girls. This, she says, is a "critical factor (in) helping to reduce poverty and lifting (the) standard of living."<sup>33</sup>

### Working towards a brighter future in Saudi Arabia...

Abdul Latif Jameel has always recognized the talents, skills and endeavor of Saudi Arabia's female citizens. For many decades it has worked tirelessly to promote the environment and wellbeing of all citizens across Saudi Arabia and the wider MENAT region.

In 2015, Bab Rizq Jameel – a Community Jameel cornerstone initiative that offers education, training and employment opportunities to Saudi Arabia's youth – launched the Bab Rizq Jameel Female Recruitment Company at an event in Jeddah. In the first half of that year



Community Jameel's Bab Rizq Jameel Female Employment initiative helped create and find jobs for 26,634 women in Saudi Arabia last year.

The 2016 figure takes the total number of jobs created by BRJ Female Employment since 2007 to 121,529, with projects and initiatives undertaken in 96 cities and villages.

<sup>11</sup> *Opening Doors: Gender Equality and Development in the Middle East and North Africa*, The World Bank, 2013

<sup>12</sup> *130% spike in Saudi women joining workforce; 11.1 million expats in private sector*, Gulf News, 4 July 2017

<sup>13</sup> *Saudi Arabia Beyond Oil: The investment and productivity transformation*, McKinsey Global Institute, December 2015

<sup>14</sup> *Keys to The Kingdom: The slow rise of Saudi women*, BBC, 9 April 2015

<sup>15</sup> *Vision 2030*, Kingdom of Saudi Arabia, April 2017

<sup>16</sup> *130% spike in Saudi women joining workforce; 11.1 million expats in private sector*, Gulf News, 4 July 2017

<sup>17</sup> *Despite high education levels, Arab women still don't have jobs*, The World Bank, 3 September 2016

<sup>18</sup> *Labor force, female (% of total labor force)*, The World Bank, accessed November 2017

<sup>19</sup> *How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015

<sup>20</sup> *How Female Drivers Can Spur Growth in Saudi Arabia*, Bloomberg, 27 September 2017

<sup>21</sup> *How Female Drivers Can Spur Growth in Saudi Arabia*, Bloomberg, 27 September 2017

<sup>22</sup> *Driving ban survey Saudi Arabia*, Ipsos, December 2017

<sup>23</sup> *Saudi Royal decree will help families save money currently spent on private drivers*, Arab News, 27 September 2017

<sup>24</sup> *Saudi Royal decree will help families save money currently spent on private drivers*, Arab News, 27 September 2017

<sup>25</sup> *Driving ban survey Saudi Arabia*, Ipsos, December 2017

<sup>26</sup> *The real winner from Saudi's new stance on women drivers*, The National, 22 October 2017

<sup>27</sup> *The real winner from Saudi's new stance on women drivers*, The National, 22 October 2017

<sup>28</sup> *Saudi Arabia wants to revitalize its economy. Letting women drive will be part of that*, The Washington Post, 29 September 2017

<sup>29</sup> *Saudi Arabia bought a huge stake in Uber. What does that mean for female drivers?*

The Washington Post, 2 June 2016

<sup>30</sup> *Women allowed to drive in the Kingdom of Saudi Arabia from 2018: Will this reshape mobility patterns?* New Mobility, 3 October 2017

<sup>31</sup> *The Bayt.com Status of Working Women in the Middle East Survey*, Bayt and YouGov, November 2014

<sup>32</sup> *The Status and Progress of Women in the Middle East and North Africa*, The World Bank, accessed November 2017

<sup>33</sup> *How Female Drivers Can Spur Growth in Saudi Arabia*, Bloomberg, 27 September 2017

alone, Bab Rizq Jameel helped create 18,015 jobs for women<sup>34</sup>. Rola Basamad, the Senior General Manager of the Bab Rizq Jameel Female Recruitment Company, highlighted the group's "core belief in gender equality, and the critical role of women in building a productive society and a thriving economy" while outlining the company's ambition to "provide women in Saudi Arabia with a platform to build their skills and further their standing in the local job market<sup>35</sup>."

By 2016, Bab Rizq Jameel had partnered with almost 1,400 private-sector companies and helped to create more than 100,000 jobs for women in Saudi Arabia<sup>36</sup>. "We are committed to... investing in the development of emerging young talents and instilling a sense of pride in the women of Saudi Arabia," said Basamad.



Supporting Saudi Arabian women to enter the job market, the Nafisa Shams Academy for Arts & Crafts was established in 2006 (named after the late wife of Abdul Latif Jameel). Since inception, the Academy has provided training for over 7,000 women.

Other organizations across Abdul Latif Jameel businesses have also invested significant time, energy and resources into helping the government achieve its ambitions around female contributions to the economy.

#### ...and worldwide

This focus is not only confined to Saudi Arabia. The Abdul Latif Jameel Poverty Action Lab (J-PAL), based at the Massachusetts Institute of Technology (MIT) in the United States, continues to assess the scientific evidence surrounding potential national, regional and global policies that could reduce poverty. Enabling women to make a greater economic contribution could play a key role in potential solutions to help alleviate poverty.

"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,"<sup>37</sup> said J-PAL affiliate Rohini Pande in March 2017, at an event to mark International Women's Day. This was also featured in the Spring 2017 edition of Opening Doors, read more [here](#).

J-PAL affiliate Erica Field 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."

To date, J-PAL affiliates have conducted over 140 evaluations in 39 countries that focus on impacts of policies and

programs on women and girls. These include efforts to prevent teen marriage and pregnancy; improve access to high-quality education, good jobs, and leadership opportunities; strengthen decision-making power in their families and communities; and more.

Through its support of globally significant research programs like J-PAL, together with its efforts to economically empower women and help them to access employment opportunities, Abdul Latif Jameel will continue to promote an environment in which every Saudi Arabian citizen can fulfil their potential – contributing to the greater good and helping to ensure the country achieves the ambitious reforms and far-reaching objectives laid out in Vision 2030.

<sup>34</sup> Bab Rizq Jameel launches a company for female recruitment in Saudi Arabia, Abdul Latif Jameel, 15 September 2015

<sup>35</sup> Bab Rizq Jameel launches a company for female recruitment in Saudi Arabia, Abdul Latif Jameel, 15 September 2015

<sup>36</sup> Bab Rizq Jameel enables more women to enter the workforce in Saudi Arabia by helping generate thousands of employment opportunities, Abdul Latif Jameel, 20 June 2016

<sup>37</sup> Celebrating International Women's Day, Abdul Latif Jameel Poverty Action Lab, 8 March 2017



## Abdul Latif Jameel Land completes two new developments

**Abdul Latif Jameel Land has opened two new state-of-the-art Toyota and Lexus facilities at key sites in Saudi Arabia. The new showrooms in Hofuf and Makkah Alomra' have been developed for Abdul Latif Jameel Motors to offer sales, service and spare parts, as well as display approved used cars.**

Built on the principles of Abdul Latif Jameel's 'Guest First' approach, the showrooms will provide a world-class customer experience.

The Hofuf development stretches across 11,931m<sup>2</sup>. It includes a 12-car showroom, 34 work bays, a service reception, warehouse, workshop, parts retail, and an external car lot suitable for 22 Toyota and Lexus models.

The 14-car showroom in Makkah covers 15,900m<sup>2</sup>. It benefits from 54 work bays, a 707m<sup>2</sup> delivery building, a service reception, warehouse, workshop, parts retail, and an external car lot suitable for 54 Toyota and Lexus models.

"Abdul Latif Jameel Land continues to develop high quality sites and facilities, further enhancing our model of efficient construction, design and value to commercial developments across the country.

"The high-quality facilities at Hofuf and Makkah are a testament to the strength and diversity of the Abdul Latif Jameel business, and reflect our commitment to end-to-end delivery on both a commercial and consumer scale."

Fady Mohammed Jameel  
Deputy President and Vice Chairman of Abdul Latif Jameel



## Abdul Latif Jameel Energy secures financing for Mexican solar farm that will power 150,000 homes

**Fotowatio Renewable Ventures (FRV), part of Abdul Latif Jameel Energy, has secured a financing deal to develop a 342 MW dc solar farm in Mexico.**

Potosí Solar Farm is Abdul Latif Jameel Energy's first project in the country and adds to a growing list of renewable energy projects it has delivered across Latin America, including Uruguay and Chile.

The solar farm will generate 800,000 MWh per year, enough clean energy to power around 150,000 homes and

reduce greenhouse gas emissions by approximately 600,000 tons of CO<sub>2</sub> annually. Construction is due to begin in early 2018.

Roberto de Diego Arozamena, Chief Executive Officer of Abdul Latif Jameel Energy, said: "Over the past week, we have announced we will power nearly 400,000 homes in Chile and Mexico with clean energy. That's why countries such as Saudi Arabia are right to be bringing forward initiatives such as the National

Renewable Energy Program as there is huge potential in renewable energy.

"Building on our growing footprint in Latin America, this particular project will capitalize on the considerable opportunity for renewables in Mexico and we look forward to driving clean energy in the country."

Abdul Latif Jameel Energy, through FRV, closed the financing agreement with KfW (Kreditanstalt für Wiederaufbau), Bancomext and ING.



## Events round-up

Here's a brief round-up of some of the main business events in the region recently.



**Zayed Future Energy Prize Awards Ceremony ADNEC Abu Dhabi, United Arab Emirates**

January 15, 2018  
<http://www.zayedfutureenergyprize.com/en/>



**World Future Energy Summit ADNEC Abu Dhabi, United Arab Emirates**

January 15-18, 2018  
<https://www.worldfutureenergysummit.com/>  
Once again Abdul Latif Jameel Energy is a Platinum Sponsor of this annual event the biggest of its kind in the region. Executives from Abdul Latif Jameel Energy, FRV and Almar Water Solutions will be attending. Look forward to a feature review in the next Opening Doors.



**World Economic Forum Annual Meeting Davos-Klosters, Switzerland**

January 23-26, 2018  
<https://www.weforum.org/events/world-economic-forum-annual-meeting-2018>



**Saudi Renewable Energy Conference Riyadh, Saudi Arabia**

February 14-15, 2018  
<https://renewableenergyksa.com/>

Abdul Latif Jameel 